INDUSTRIAL DEVELOPMENT ZONES AS A POLICY INSTRUMENT IN SOUTH AFRICA

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Abstract

The objective of this study is to evaluate the potential of Industrial Development Zones, as a selective industrial policy measure, to improve the international competitiveness of South African manufacturing.

Manufacturing is the single largest sector in the South African economy. It contributes 33 per cent to the country's Gross Domestic Product (GDP) and 17 per cent to total employment. It is thus a valid cause of concern that globalisation and trade liberalisation are inc reasingly putting significant pressures to bear on South Africa's manufacturing firms. Therefore it is argued in this study that South African manufacturing firms need to become more internationally competitive through increased exports and foreign direct investment (FDI).

An evaluation has been done using a literature study into the international experience with Export Processing Zones (EPZ) as well as using a case study of the IDZ application of Mafikeng International Airport (MIA). Industrial Development Zones (IDZs) can be seen as a South African variant of an Export Processing Zone (EPZ).

It was found that due to the criticisms expressed against the EPZ concept, South Africa will introduce IDZ instead to attract FDI and to increase manufacturing firms' competitiveness through providing a special package of incentives to investors. Mafikeng International Airport (MIA) could serve as an important trade hub serving Namibia and Botswana due to its close proximity and available infrastructure. It was argued that a lack of supportive industries and its location in relation to the rest of the North West province could cause matters of concern and the North West Provincial government should look into these issues.

Keywords: Export Processing Zones, manufacturing, free trade, exports, industrial policy, trade policy, competitiveness and Spatial Development Initiatives.

Opsomming

Die doel van hierdie studie is om die potensiële bydrae van Industriële Ontwikkelingsones te evalueer, as 'n selektiewe industriële beleidsmaatstaf, om die internasionale mededingendheid van Suid-Afrikaanse vervaardiging te verbeter

Vervaardiging is die grootste sektor in die Suid -Afrikaanse ekonomie. Dit dra 33 persent by tot die land se Bruto Binnelandse Produk (BBP) en verteenwoor dig 17 persent van die totale indiensname. Dit is dus 'n geldige argument dat globalisering en handel liberalisasie toenemende druk uitoefen op die Suid -Afrikaanse vervaardigings-ondernemings. Daarom argumenteer die studie dat die Suid - Afrikaanse vervaardigings ondernemings meer internasionaal mededingend moet word deur toenames in uitvoere en direkte buitelandse investerings.

'n Literatuurstudie gebaseer op die internasionale ervaring van uitvoersones so wel as 'n gevalle studie oor die aansoek van die Mafikeng Internasional Lughawe as 'n moonlike ontwikkelingsone is gevolglik in die studie vervat. Ontwikkelingsones kan gesien word as 'n Suid-Afrikaanse variant van 'n tradisionele uitvoersone.

Die studie het bevind dat weens die verskeie kritiek teenoor oor die uitvoersone konsep, Suid-Afrika sal eerder ontwikkelingsones gebruik om buitelandse investering te betrek en deur gebruik te maak van spesiale voordeelpakkette om investeerders te lok en sodoende die internasionale mededingendheid van die Suid -Afrikaanse vervaardigings-ondernemings te verbeter. Die Mafikeng Internasionale Lughawe kan as 'n belangrike handels-middelpunt dien deur lande soos Botswana en Namibië te bedien as gevolg van sy ligging en beskikbare infrastruktuur. Die studie argumenteer ook dat 'n gebrek aan ondersteunende industrieë en die ligging van die lughawe in verhouding tot die res van die Noord-Wes Provinsie probleme kan veroorsaak en die studie het voorgestel dat die Noord-Wes se provinsiale regering aandag hieraan sal moet gee.

Sleutelwoorde: uitvoersones, vervaardiging, vry handel, uitvoere, industriële beleid, handelsbeleid, mededingendheid en ontwikkelings insentiewe.

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ARC	:	Airport Redeployment Consortium
COSATU	:	Congress of South African Trade Unions
CSBP	:	Centre for Small Business Promotion
CSIR	:	Council for Scientific and Industrial Research
DBSA	:	Development Bank of South Africa
DTI	:	Department of Trade and Industry
EMIA	:	Export Marketing and Investment Assistance
EPU	:	Export Processing Unit
EPZ	:	Export Processing Zone
EU	:	European Union
FDI	:	Foreign Direct Investment
FIZ	:	Free Industrial Zone
FP	:	Free Port
FRIDGE	:	Fund for Research into Development, Growth and Equity
FTA	:	Free Trade Area
FTZ	:	Free Trade Zone
GATT	:	General Agreement on Trade and Tariffs
GDP	:	Gross Domestic Product
GEAR	:	Growth, Employment and Redistribution
GEIS	:	General Export Incentive Scheme
GGP	:	Gross Geographic Product
GTP	:	Global Transpark
HEI	:	Higher Education Institution
ICAO	:	International Civil Aviation Organisation

IDC	:	Industrial Development Corporation
IDZ	:	Industrial Development Zone
IS	:	Import Substitution
ISE	:	Innovation Support for Electronics
ITRISA	:	International Trade Institute of Southern Africa
JGF	:	Japanese Grant Fund
KZN	:	Kwazulu-Natal
LDCs	:	Less Developed Countries
MIA	:	Mafikeng International Airport
MNE	:	Multinational Enterprise
NEDLAC	:	National Economic Development and Labour Council
NICs	:	Newly Industrial Countries
NSBC	:	National Small Business Council
NSI	:	National System of Innovation
ODC	:	Offshore Development Company
OFZ	:	Open Free Zone
RIDP	:	Regional Industrial Development Program
SAAATI	:	South African Aviation Academy and Training Institute
SADC	:	Southern Africa Development Community
SADCC	:	Southern Africa Development Co-ordination Conference
SBDC	:	Small Business Development Centre
SDI	:	Spatial Development Initiative
SETS	:	Science, Engineering and Technology Institutions
SEZ	:	Special Economic Zone

SFS	:	Support for Feasibility Studies
SPII	:	Support Programme for Industrial Innovation
SPF	:	Sectoral Partnership Fund
SMME	:	Small Micro Medium Enterprise
TIPTOP	:	Technology Innovation Promotion through the Transfer of People
THIRP	:	Technology and Human Resources for Industry Programme
TNC	:	Transnational Corporation
UNCTAD	:	United Nations Conference on Trade and Development
UNIDO	:	United Nations Industrial Development Organisation
WBEPZMC	:	Walvis Bay Export Processing Zone Management Company
WTO	:	World Trade Organisation

CHAPTER 1:
INTRODUCTION

1.1 Problem Statement

Manufacturing is the single largest sector in the South African economy. It contributes 33 per cent to the country's Gross Domestic Product (GDP) and 17 per cent to total employment (RSA, 1998:24). It is thus a valid cause of concern that globalisation and trade liberalisation are increasingly putting significant pressures to bear on South Africa's manufacturing firms. In the past, these firms had been enjoying protection from a wide range of import tariffs and quotas. In South Africa, a develo pment strategy based on import substitution has been followed since the 1920's (IMF, 1992; World Bank, 1993).

According to Scheepers (1982:13) the benefits of such a development strategy were probably exhausted by the 1970's. Political imperatives, sanctions and lobbying kept the previous government from adopting an outward-oriented development strategy. In addition, it had become accepted wisdom in international economics that open economies tend to perform better than closed economies. According to Sule man (1998:273), countries best placed to benefit from the new opportunities offered by globalisation are those that are rapidly transforming their policies and structures to support outward-oriented growth-adopting trade, investment, and exchange rate policies conducive to greater openness and competitiveness, and underpinning these reforms with a stable macroeconomic foundation.

After the new South African government became a signatory to the Marrakesh-agreement of the World Trade Organisation (WTO), a pr ogramme of trade liberalisation was followed. Coetzee, et al. (1997) discusses this programme that was introduced in January 1995, which entails the reduction and restructuring of the tariff structure, the abolition of surcharges and the scrapping of the General Export Incentive Scheme.

As a result many local manufacturing firms have been put under pressure to be increasingly internationally competitive. Usually, small markets such as South Africa's are often more concentrated and thus less competitive tha n large markets. Through opening itself up to international competition, South Africa could make significant steps in making the domestic market more competitive – not just in terms of lower market concentration, but also enhanced contestability, increased product differentiation and dynamic changes such as the rate of innovation (Hanival and Hirsch, 1998:87).

Suleman (1998:25) identified the need for special measures to assist the manufacturing firms to adapt to this pressure and stated that "The shift aw ay from import substitution towards export promotion and international competitiveness necessitates that measures be identified that can assist domestic manufacturers to compete in international markets".

The question that arises is what the government's involvement should be to help industrial development in South Africa to be more competitive. Bloch and Lewis (1998:740) argued that the government's role should be more than just providing physical infrastructure and setting the rules of the game. They referred to the intervention by governments in East Asia and Latin America that could be argued had contributed to their relative industrial success in the early 1970's and in the late 1980's.

The importance of ensuring that the South African manufacturing sector becomes more internationally competitive is due to the fact that growth of the manufacturing sector is necessary if the serious challenges facing the South African economy - such as unemployment, poverty and inequality – are to be addressed (Republic of South Africa, 1996). The key arguments for manufacturing industry as an important element of growth in developing countries according to Hanival and Hirsch (1998:14) are the following. Firstly, they create economies of scale that increase productivit y and therefore wealth. Secondly, they contribute to economic growth through the positive external effects of manufacturing plants on each other and on the rest of the

economy, as well as through forward and backward linkages in the economy. Thirdly, manufacturing has a positive direct and indirect effect on employment creation.

In its macroeconomic strategy (GEAR) to address these challenges, the South African government has adopted a strategy that aims amongst others to increase the exports of manufacturing firms from the country, and to attract significant Foreign Direct Investment[1] (FDI) into the manufacturing sector.

In many other developing countries (Mauritius is a notable example) the drive towards improved international competitiveness of their manufacturing sector was supported by the creation of what is known as "Export Processing Zones" (EPZs). These have been adopted in many countries as a support measure for international competitiveness because of high wages and production costs firms had to face in their home countries, which eroded the competitiveness of manufacturing in industrial countries (Newman, 1998:42). An EPZ can be defined as an economic zone or area where the production of goods and services are mainly for exports (Newman, 1998:42). Ge (1999:1) further notes that an EPZ could be characterised as a geographic area within a country where various economic activities are promoted by a set of policy instruments that are not generally applicable to the rest of the country.

EPZs were initially formed in the 1960's to give maximum benefit to transnational corporations (TNCs) based in the United States and Europe. [2] According to Ge (1999:1) EPZs have gained a great significance over the past three decades with over 850 zones operating in several forms, compared to only a few in the 1960s. Most of the latecomers are less-developed countries

[1] Foreign Direct Investment (FDI) flowing to South Africa could contribute to the contestability of domestic markets. Especially in the case of multinational corporations may be better able than purely domestic firms to overcome some of the cost-related barriers to entry that limit the number of firms an industry (Hanival and Hirsch, 1998:88).

[2] The first zone was established at the Shannon Airport in Ireland in 1960.

(LDCs) and emerging economies. South Africa can be seen as being a latecomer in the use of these policies.

In practice, the types of EPZ activities vary fr om bonded warehouses; export processing and assembling, border or port trade, and high-tech R&D, to trade-related transportation or financial services. In spite of the diverse nature of the activities performed in the zones, export -oriented manufacturing a ctivities have shown dominance in most of these zones (Ge, 1999:1). Companies locating in the zones are prevailed upon by foreign companies, and to attract multinational companies various policy incentives have been offered by the host countries. These inc entives include duty -free status; tax holidays, exemption and reduction; and advantageous geographic location.

Foreign companies may prefer to locate in EPZs in order to gain lower production costs that could result into higher profits. The home country in return could benefit from job creation, improved capability of foreign exchange earnings, trade expansion, transfer of more advanced technologies and resulting productivity gains (Ge, 1999:2). Emerging and less -developed countries could be more competitive through exports leading to a higher level of integration into the world economy, and doing so in accordance with their comparative advantages. In spite of the reservations[3] (such as low wages and poor working conditions) expressed over the EPZ concept (Freund, 1992:8) it has been claimed that countries that have followed export -related policies have achieved greater economic success than those that have followed import substituting or capital goods oriented strategies (Griffen, 1989).

The designs of E PZs have mostly been chosen aiming at the promotion of freer trade and development in a step -by–step manner. Past experiences have shown distinct advantages over the so -called "shock-therapy", which calls for "do -it-all-at-once" when it comes to economic t ransition and liberalisation (Ge, 1999:21). As such, there have been increasing calls for

[3] Reservations refers to exploitative low wages, long hours of work and an attack on trade union rights that sometimes may be found in LDCs.

EPZs to be established in South Africa in order to mitigate the adjustment pressures faced by many manufacturing firms after 1995.

In order to assist firms, within the rule of the WTO, to be internationally competitive, the South African Department of Trade and Industry (DTI) outlined in 1998 an Industrial Development Zone (IDZ) programme (a variant of an export processing zone). IDZs will be purpose built industrial estates linked to an international port or airport, and designated for specialised industrial development focusing on new investment (RSA, 1999:1). This programme should be seen as part of a range of initiatives [4] to encourage international competitiveness of the South African manufacturing sector and is related to the so-called Spatial Development Initiatives (SDIs) (Republic of South Africa, 1999). According to Newman (1998) the difference between SDIs and IDZs is that "SDIs are broad geographical areas within which different economic activities can take place, while IDZs are specific, smaller areas, targeted for industrial export manufacturing."

Given the importance of manufactures for employment, the success of South Africa's IDZ programme becomes important. In light of this, the purpose of the present study is to critically evaluate the potential of the IDZ programme as proposed to improve the international competitiveness of South African manufacturing firms. The programme will be evaluated against the international experience with EPZs as well as through a practical case study of an IDZ application that was made in South Africa in 2000.

1.2 Objective of this Stud

The objective of this study is to evaluate the potential of Industrial Development Zones, as a selective industrial policy measure, to improve the international competitiveness of South African manufacturing. This evaluation will be done using a literature study into the international experience with Export Processing Zones (EPZ), as well as using a case study of the IDZ

[4] The most recent additional incentives were announced by the DTI on 6 September 2000.

application of Mafikeng International Airport (MIA). Industrial Development Zones (IDZs) can be seen as a South African variant of an Export Processing Zone (EPZ). It is part of the South African government's industrial polic ies to attract more Foreign Direct Investment (FDI) to South Africa, and to raise the level and quality of manufactured exports from South Africa.

1.3 Method

This study will rely on a literature study and a case study. A substantial literature has developed in recent years on the international experiences with EPZs and Free Trade Zones. This literature will be explored so as to categorise the South African IDZ programme, as well as to be able to gauge the likely success or failure of the South African IDZ programme.

For the case study the focus will be on the Mafikeng International Airport (MIA) in the North West Province of South Africa. It should be noted that as of present, there are no IDZs already in operation in South Africa; however, MIA has submitted a formal application to the South African DTI to be developed as an IDZ. Due to the underdeveloped nature of the MIA area, as well as its linkage to the Platinum SDI (where a substantial number of firms are facing severe adjustment pressures as outlined in section 1.2) the case study of MIA may provide an indication of the strengths and weaknesses of the IDZ programme.

Due to the newness of industrial development zones only starting in 1997, a lack of sufficient time series data precluded an econometr ic analysis. The period for research ended at the end of December 2000.

1.4 Description of the stud

The need for FDI and export promotion as necessity in South Africa to improve the international competitiveness of especially manufacturing firms is argued in chapter two. In chapter three, the policy response to achieve this,

namely Export Processing Zones (EPZs) and its variations, is critically examined. Chapter four outlines industrial policy responses in South Africa, given the need for international competitiveness and the concept of EPZ discussed in the previous chapters. Chapter five applies the insights gained to a case study on Mafikeng International Airport. Chapter six contains a summary, conclusions and a number of recommendations.

CHAPTER 2:
THE NEED FOR SELECTIVE INDUSTRIAL POLICY INTERVENTION IN THE SOUTH AFRICAN MANUFACTURING SECTOR

2.1 Introduction

In chapter one, it was pointed out that due to trade liberalisation and globalisation, most manufacturing firms in South Africa are subject to growing pressures to become more internationally competitive. In particular, it was argued that the South African manufacturing sector requires more FDI, and needs to generate more exports. In this chapter the need for selective industrial policy intervention, for instance in the form of EPZs, is argued.

Industrial policy can be defined as "policies directed specifically at promoting industrial development by diverting resource allocation from what the free markets forces would have done "(Lall and Wangwe, 1998). According to Lall and Wangwe (1998) and Oyejide (1998), there are two forms of industrial policies, namely functional and selective policies. Functional policies provide general support for production activities and improving markets in a g eneric sense (e.g., improving education, infrastructure or capital markets). Selective industrial policies on the other hand promote specific industries or economic agents. Selective policies in its extreme form are 'picking winners' at the level of specif ic technologies, education and training programs. Hence, the evaluation of EPZ/IDZ programmes will entail the evaluation of a selective industrial policy. It is argued in this chapter that such a selective industrial policy may be needed in South Africa's manufacturing sector to boost its exports and attract more FDI.

The layout of this chapter is as follows. In section 2.2 the profile and possible future prospects of the South African manufacturing sector is sketched because of its importance in employment generation. In section 2.3 the competitiveness of manufacturing sector is gauged with reference to definitions of international competitiveness. Section 2.4 considers the spatial spread of manufacturing in South Africa, since IDZs are a very location - specific industrial support policy. Section 2.5 discusses the need for more FDI in South Africa's manufacturing sector. Section 2.6 considers possible selective industrial policy responses to address manufacturing development. Section 2.7 concludes with a summary.

2.2 Manufacturing in South Africa

The manufacturing sector can be classified into 25 main sectors, using the International Standard Industrial Classification (ISIC) system. The respective contributions to South Africa's manufacturing output in 19 95 are contained in table 1 on the next page.

Table 1 shows that in terms of output, the largest manufacturing sectors in South Africa are food processing (16 per cent), other chemicals (13 per cent), motor vehicles (7.3 per cent), metal products (6.2 per cent), iron and steel (6.1 per cent), machinery (6.0 per cent) and industrial chemicals (6.1 per cent). All these sectors mentioned above account for approximately 62 per cent of South Africa's manufactured output.

In terms of employment five sectors account for 44 per cent of all employment in manufacturing, namely, food processing (12.5 per cent), other chemicals (5.9 per cent), metals (8.4 per cent), clothing (9.5 per cent) and electrical machinery (7.7 per cent). It is noticeable that the clothing se ctor, although accounting for only 2.2 per cent of the sector's output, provides 9.5 per cent of all employment opportunities in the sector, being a low -wage, low-skill and labour-intensive sector.

Table 1: South Africa's Manufacturing Sector: Structure and Growth

Sector	Output R millions	% Average growth 1985-95	Employment no.	% Average growth 1985-95	Output as % of total	Employment as % of total
Food	50 738	-3.16%	182 461	-0.28%	16.6%	12.5%
Beverages	13 150	3.53%	33 838	-0.63%	4.3%	2.3%
Tobacco	1 768	-2.65%	3 027	-5.37%	0.5%	0.2%
Textiles	9 597	-0.54%	68 546	-4.46%	3.1%	4.6%
Clothing	6 676	-0.04%	138 684	-0.30%	2.2%	9.5%
Leather	1 551	-0.16%	9 442	-0.65%	0.5%	0,6%
Footwear	2 113	-0.03%	28 819	-2.21%	0.6%	1.9%
Wood	4 039	-0.98%	65 180	0.92%	1.3%	4.4%
Furniture	3 634	-2.41%	47 697	2.32%	1.2%	3.3. %
Paper	17 307	-0.72%	52 203	2.23%	5.7%	3.6%
Printing & etc	10 522	1.77%	55 305	1.79%	3.4%	3.7%
Ind. Chem	18 995	-0.26%	30 904	-2.12%	6.1%	2.1%
Other chem	40 577	1.39%	87 435	-0.01%	13.3%	5.9%
Rubber	4 016	2.28%	17 966	-0.85%	1.3%	1.2%
Plastics	7 217	1.73%	50 295	4.46%	2.4%	3.4%
Pottery, etc	244	-3.04%	5 818	-2.04%	0.08%	0.45%
Glass	2 192	-0.08%	10 280	-1.52%	0.70%	0.7%
Non-met.min	6 797	-1.71%	61 464	-2.02%	2.22%	4.2%
Iron & Steel	18 623	0.66%	62 781	-3.31%	6.1%	4.3%
Non-fer.met	8 678	-1.29%	16 357	-3.74%	2.8%	1.1%
Metals	18 783	-0.12%	123 789	-1.04%	6.2%	8.4%
Machinery	18 421	-0.72%	75 942	-3.05%	6.0%	5.2%
Electrical	8 826	-5.60%	112 809	5.50%	2.9%	7.7%
Motor veh.	22 295	0.05%	82 757	-1.08%	7.3%	5.6%
Other transport	3 809	7.3%	11 398	-2.85%	1.2%	0.7%
	305 167	-0,56%	1 465 502	-0.45%	100%	100%

(Source: Anand, et al. 1999:71)

Table 1 also shows that most of the major producers and employers in the manufacturing sector experienced reductions in output and employment over the past decade. Between 1985 and 1995, sections such as the food

processing sector (-3.16 per cent), electrical machinery (-5.6 per cent), clothing (-0.04 per cent) and metals (-0.12 per cent) all experienced negative growth rates which reduced employment levels.

Sections like beverages, other transport equipment and rubber products, have shown significant growth during 1985 to 1995. The prospects for manufacturing development in South Africa until 2001 is likely to have a significant impact on the establishment of IDZ and their subsequent success. According to the Industrial Development Corporation (IDC) Industrial Prospects for the period 1997-2001, the following sections, 2.2.1 to 2.2.25, are the prospects for the sub-sectors that need to be taken into account in the evaluation of the potential of IDZs.

2.2.1 Food Processing

According to the IDC the average import growth during the forecast period (1997-2001) is likely to be maintained at 10 per cent p.a., although the sector's import penetration ratio could reach t he 15 per cent level by 2001. Import competition is unlikely to pose major threat to the local food processing industry as a whole (RSA, 1998:60).

The sector's export performance is also expected to improve with its export propensity anticipated to rise t o nearly 11 per cent by 2001. Prospects for sectors that have the ability to grab the opportunities presented by countries that offer access to South African, as well as those created by EU and SADC region look prosperous (RSA, 1998:60).

Since a sharp dec line in employment in the early nineties, employment has been stable and it is expected to increase by 1.2 per cent in 2001 (RSA, 1998:60).

Supply side improvements (productivity, technology and skills development) need to be improved to stay competitive locally and internationally (RSA, 1998:60).

2.2.2 Beverages

The beverages sector contributes 1.3 per cent to overall GDP, but employs less than 0.5 per cent of the total work force. Domestic production is expected to increase at an average rate of 4.5 pe r cent p.a. over the next five years (RSA, 1998:109).

The expected export growth for 1997 -2001 as a percentage of domestic production will remain well below the average of the economy (RSA, 1998:109).

Wine is by far the strongest export growth performer in the sector. While imports is expected to increase by 10 per cent p.a. between 1997 and 2001 (RSA, 1998:109).

2.2.3 Tobacco products

The tobacco products sector comprises the manufacture of all tobacco products. It also includes operations for prepari ng raw-leaf tobacco for manufacturing, such as stemming, stripping and re-drying (RSA, 1998:124).

Although consumption of tobacco products has declined sharply in Western countries, the smoking habit in the Far East, Middle East and Eastern Europe is increasing. This could also be contributed by the fact that there are not strong campaigns yet against smoking and advertising of tobacco products (RSA, 1998:124).

Moreover, growth in exports of tobacco products over the past couple of years indicate that the decline in the South African demand forced producers to expand their export markets. The decline in demand in South Africa since the early nineties could have been a result of anti -smoking campaigns and a sharp increase of 258 per cent in the excise duty on cigarettes (RSA, 1998:126).

2.2.4 Textiles

The textile manufacturing sector contributes 0.7 per cent to South Africa's GDP, 1.1 per cent to employment (employing 80 000 people). Textiles imports are 2.4 per cent of total imports. The largest sub -sectors are spinning, weaving and finishing of textiles (RSA, 1998:129).

A feature of the South African textile market is that the demand equals that of sophisticated first world markets, while the overall level of consumption is low at only 7 kilogram per capita (RSA, 1998:129).

The African market, especially SADC countries, is opening up to South African products, while potential markets in the northern hemisphere have also become more accessible due to the agreements regarding the easing of trade barriers. Export growth declined by 4.5 per cent p.a. between 1991 and 1996 (RSA, 1998:129).

The clothing industry, which is the main user of textiles, has increasingly turned to imports as a source of raw materials. Production levels in this sector decreased by 0 .8 per cent per year between 1991 and 1996 due to the opening up of South Africa to the global arena (RSA, 1998:129).

2.2.5 Clothing

The clothing sector covers the manufacture of all types of clothing such as fabrics, leather, fur, plastic, rubber and other material, but the manufacture of knitted products and footwear are excluded. Since the clothing industry is a very labour-intensive industry, it is responsible for almost 1.8 per cent (125 000 people) of employment in South Africa (RSA, 1998:163).

Historically, exports have been insignificant at less than 0.1 per cent of world exports and only 4 per cent of total production (RSA, 1998:163).

Major destinations of South Africa's clothing exports are the UK, USA and Mozambique. Clothing production contributes 0.8 per cent to South Africa's GDP but only 0.4 per cent to exports. Clothing imports are 0.4 per cent of total imports. Past policies have created an environment of import replacement and employment creation at almost all cost, resulting in a non -competitive environment (RSA, 1998:163).

Although clothing manufacturing is spread across the country, manufacturing activity in this sector is mostly concentrated in Kwazulu-Natal and the Western Cape. Growth of approximately 3 per cent p.a. is forecast for the 1997-2001 period (RSA, 1998:166).

2.2.6 Leather

The leather product sector is one of the smaller manufacturing sectors in the South African economy, contributing only 0.1 per cent to total value added and employment. This sector consists of two sub sectors, forming part of the leather products value chain: tanneries and leather finishing and leather products and substitutes (RSA, 1998:169).

Exports of leather from South Africa are mostly in the form of raw hides and semi-processed leather. The pe riod between 1991 and 1996 shows a high real growth rate of 13.2 per cent p.a. in exports with an even stronger expected increase in 1997 due to improved access to foreign markets and a favourable exchange rate position (RSA, 1998:169).

2.2.7 Footwear

This sector includes the manufacturing of all kinds of leggings, gaiters and footwear from leather, fabrics and other materials, excluding rubber or plastic (RSA, 1998:182).

Footwear production contributes 0,1 per cent to South Africa's GDP, 0.4 per cent to employment (26 000 people) and only 0,1 per cent to exports.

Footwear imports are high with a share of 0.6 per cent in total imports (RSA, 1998:182).

The domestic footwear industry sells over 95 per cent of its production locally, virtually all of this to households and only 5 per cent abroad. Footwear exports more than doubled between 1990 and 1996. Over the past four years the number of pairs of shoes exported increased from 1.5 million in 1992, to 2,8 million in 1996 (RSA, 1998:182).

Footwear manufacturing is concentrated in Kwazulu-Natal, the main footwear producing area in South Africa, followed by the Western Cape (RSA, 1998:182).

The footwear industry is an important employer with labour costs contributing more than 29 per cent to total cost and a relatively low R6 000 fixed investment per employee (RSA, 1998:183).

South African footwear manufactures have the potential to export footwear into niche markets, and markets that granted the South African exporters free access such as Norway, Switzerland and EU (Anand, et al. 1999:74).

2.2.8 Wood

A major portion of the sector's output is destined for intermediate demand in the housing, construction, furniture, mining and packaging industries. Local demand has been weak in recent years, in line with gen eral economic trends (RSA, 1998:188).

Considering the need for product differentiation and the general pursuit of international competitiveness, real investment is expected to grow at an average rate of 7.3 per cent p.a. over the period 1997 to 2001 (RSA, 1998:191).

While employment growth over the estimated period is projected at around 0,6 per cent per annum. Domestic industry will have to continue with the process of restructuring in order to optimally utilise available forest resources and produce the differentiated products that will enable manufactures to venture into new markets (RSA, 1998:191).

2.2.9 Furniture

This sector encompasses the manufacture of furniture and fixtures for household, office, public, building, professional and restaurant use, as well as the manufacture of curtains, bedding and upholstery (excluding steel furniture) (RSA, 1998:194).

The furniture industry consists numerous small producers, largely situated near the major metropolitan markets of Johannesburg, Pretoria, Durban , and Cape Town. However, with an increasing export -orientation and the introduction of flat -pack packaging, plant location relative to market is no longer a critical factor (RSA, 1998:194).

Total domestic demand is thus expected to grow at an average rat e of 2 per cent p.a. over the period 1997 to 2001, with an average annual growth rate of 10.5 per cent in import demand (RSA, 1998:197).

The sector's export performance is expected to rise by 16.8 per cent p.a. over the forecast period (RSA, 1998:197).

2.2.10 Pulp, paper and paper products

The pulp, paper and paper products sector contributed 1.3 per cent to GDP and 2.9 per cent to total exports in 1996, but accounted for only 0.7 per cent of overall employment. The sector sells 73 per cent of its outpu t to other industries for intermediate usage, 5 per cent to private household, and the remaining 22 per cent to export markets (RSA, 1998:200).

Sappi and Mondi are the largest companies in this sector, and the most paper mills are located in the vicinity of South Africa's forestry areas, particularly in Kwazulu Natal and Mpumalanga. The Gauteng province also has some mills, although these increasingly utilise recycled fibre and purchase pulp from other mills (RSA, 1998:201).

Domestic demand is set to increase at an average rate of 3.8 per cent p.a. during the period 1997 to 2001. However, domestic demand for paper, pulp and paperboard is expected to record a slightly higher average of growth due to favourable economic, socio-demographic and technological factors (RSA, 1998:203).

Although pulp, paper and paper operations are highly capital -intensive, the expected gradual upgrading of local productive capacity raises the prospects for some employment creation in the near future. Skills levels will have to be concurrently raised in order to ensure an optimal operation of new technologies (RSA, 1998:203).

2.2.11 Printing and publishing

The demand for printing is largely a derived demand, particularly through the demand for publishing material but also increasingly related to the packing sub-sector. Demand for daily and weekly publications, such as newspapers and magazines, form the largest portion of the publishing consumption market (RSA, 1998:220).

Demand for books are dominated by school requirements, followed by the academic, commercial, and the general book markets. The printing and publishing sector is closely linked to the economy as a whole. They supply mainly intermediate products to almost all economic sectors (intermediate consumption accounts for a pproximately 70 per cent of sales), whilst nearly one-quarter of sales are destined for household consumption (RSA, 1998:220).

The printing sub-sector does not focus on the export market, except through the export of packaging materials. Main players in the printing and publishing industry are Naspers, Independent Newspapers, Perskor, Omni Media and Times Media, which are mostly situated near the commercial centres of Johannesburg, Durban and Cape Town (RSA, 1998:221).

The sector is capital -intensive and continued technological advancement is absolutely essential. Despite an estimated 2 per cent decline in production in 1997, a growth rate of around 2.9 per cent is projected for 1998. Projected average growth rate in exports at 8.7 per cent between the periods 1997-2001 (RSA, 1998:223).

Printing and Publishing remains a high technology and capital-intensive sector that is characterised by a continuous demand for a skilled workforce. The tendency worldwide to adopt new technologies and raise employee skills in a quest for enhanced competitiveness will continue to depress the domestic sector's employment creating ability in the short term (RSA, 1998:223).

2.2.12 Chemical Products

The chemicals sector is the single largest sector of South African manufacturing, and represents almost 17 per cent of total manufacturing GDP and approximately 4 per cent of overall GDP (RSA, 1998:226).

The chemicals sector sells some 57 per cent of its production as intermediate inputs into a number of economic sectors, with agri culture, transport and mining being the largest consumers outside of the chemical sector itself. Household demand accounts for 28 per cent of total chemical sales and pertains largely to petroleum consumption (RSA, 1998:26).

Exports claim a 14.5 per cent share of total sales, with the sector's increased orientation towards global markets clearly reflected by an 8.6 per cent average annual rate of export growth over the period 1991 to 1996. The sub -

sectors producing petroleum products, basic chemicals and fertilisers account for 81 per cent of overall chemical exports (RSA, 1998:226).

The chemical sector provided employment to 117 000 workers, or 1.7 per cent of the national labour force (RSA, 1998:227).

Future prospects for this sector look very promising with domestic production forecast to grow at an average rate of 3.7 per cent p.a. over the period 1997 to 2001. An increased penetration of global markets will underpin much of the growth momentum, with sectoral exports expected to grow at a robust 9.2 per cent p.a. (RSA, 1998:229).

2.2.13 Rubber products

The production of rubber products contributes 0.3 per cent to South Africa's GDP and total employment, and 0.4 per cent to total exports (RSA, 1998:265).

Approximately 90 per cent of locally produced rubber products are sold to the domestic market, while the rest (10 per cent) is exported to, amongst others, Zimbabwe, The Netherlands, USA, Zambia and Germany (RSA, 1998:265).

Therefore the performance of the rubber industry has almost wholly and irreversibly been linked to the performance of the automotive sector, the largest user of rubber, including tyres. Growth in the domestic demand for the rubber sector is therefore forecast to grow at a real average annual rate of 3.7 per cent over the next five years (RSA, 1998:267).

2.2.14 Plastic products

The sector contributes approximately 0.6 per cent to total GDP, 1.8 per cent to manufacturing GDP, and its products are utilised as inputs by virtually all other sectors in the economy. It employs 0.7 per cent of the total formal workforce and 2.3 per cent of the manufacturing sector's workforce (RSA, 1998:278).

Plastic products are used as inputs into almost every type of industrial activity, particularly the trade sector, the soap and cosmetics industries, and building and construction through their demand for packaging and other intermediate products (RSA, 1998: 278).

Exports have not been significant- representing a mere 4.5 per cent of total production in 1996, and consisting mainly of articles for the c onveyance or packing of goods and items such as typewriter correction tape, coats, jackets and tents (RSA, 1998:278).

Zimbabwe was the principal destination of exports (19 per cent of total exports), followed by the UK and Germany. Domestic demand is fore cast to grow at an average rate of 2.9 per cent p.a. during the period 1997 to 2001.

Relatively high rates of export growth are likely to be maintained, with the sector's export propensity rising to 7.7 per cent by 2001, targeting the African and East Asi an markets (RSA, 1998:281). The implementation of advanced production technologies could in many instances hinder employment creation. Average annual employment growth is not likely to exceed the 0.2 per cent mark over the forecast period (RSA, 1998:281).

2.2.15 Non-Metallic Mineral Products

The sector contributes a substantial 1.1 per cent to both South Africa's GDP and employment. Exports and imports are relatively low, as the high-bulk and low-value nature of many of the sector's products makes cost -effective transportation difficult (RSA, 1998:284).

The sector is highly dependent on the level of activity in the building and construction industry, although a large portion of the glass sub-sector's output is supplied to the beverage and motor industries . The sector's export propensity is low due to high transport cost and a disparity of requirements, standards and tastes in different countries (RSA, 1998:284).

A significant portion of production is dominated by a few large producers - mainly located in the vicinity of raw materials sources, but not necessarily close to their major markets (RSA, 1998:284).

Prospects for the sector are looking good. Anticipated increases in building activity, the expected acceleration in government's delivery of low -cost housing, infrastructure developments flowing from spatial development initiatives (SDIs) and tourism, as well as other investment opportunities within the SADC region, should contribute significantly towards higher sectoral growth in the near future (RSA, 1998:287).

Production over the period 1997 to 2001 is expected to increase by an average of 2.3 per cent per annum, with a similar rate of growth forecast for sectoral demand (RSA, 1998:287).

2.2.16 Iron and steel basic industries

The iron and steel sector provides the link between the mining of ore and the manufacture of final metal products. It generates approximately 2 per cent of the economy's value addition, accounts for 1 per cent of total employment and contributes 9 per cent to total exports (RSA, 1998:311).

Total carbon steel consumption of about 4 million metric tons p.a. South Africa accounts for almost 30 per cent of Africa's consumption but only for 0.6 per cent of world consumption. Local demand for carbon steel is mainly driven by the demand for new vehicles, the level of activity in the building and construction industry, and by capital expenditure in manufacturing (RSA, 1998:311).

Approximately one quarter of carbon steel consumption emanates from the metal products industry, which uses i t in the production of consumer and investment goods, whilst a further one-sixth is used in residential construction (RSA, 1998:311).

Mainly four companies are found in the carbon steel industry, namely Iscor (80 per cent of total production), Highveld Steel (9 per cent), Scaw Metals (6 per cent) and Davsteel (5 per cent), with a combined annual capacity of around 9.6 million tons (RSA, 1998:312).

Saldanha Steel, a joint venture between Iscor and the IDC will add 1.2 million tons of hot-rolled coils to the country's annual productive capacity since its start in mid-1998. Half of this output will be further processed into cold -rolled coil by Duferco, with Saldanha Steel expected to be amongst the top ten most cost-efficient producers in the world (RSA, 1998:312).

Columbus Stainless is the largest primary producer of stainless steel, with a total saleable production of 235 000 tons in 1996. Growth in stainless steel exports is expected, particularly tank containers, catalytic converters, pipes and tubes, kitchenware and catering equipment.

International pressure for leaner production and the utilisation of more capital-intensive technologies (e.g. mini -mills) are likely to result in employment losses (RSA, 1998:312).

2.2.17 Non-ferrous metal basic industries

This sector comprises the manufacture of primary non -ferrous metal intermediate products such as ingots, bars and billets plates sheets, foil, strips, rods, circles, profiles, tubes and castings. Also including processes like smelting, alloying and refining to rolling, drawing, founding and casting of aluminium (RSA, 1998:317).

The sector's contribution to GDP and export earnings in 1996 was 0.5 per cent and 6.5 per cent respectively. Domestic demand for non -ferrous basic metals is aluminium (the largest) followed by copper, zinc, brass, lead and tin (RSA, 1998:317).

Approximately 188 000 tons of aluminium were consumed in 1996. Growth opportunities could rise in the transport and automotive industry, the building industry, as well as the packaging and consumer goods industries.

The rest of the non -ferrous industry is struggling for various reasons: new product development; the substitution of certain products with cheaper materials (for example, the replacement of copper cables by aluminium due to theft); increased import penetration of downstream products (partly due to lower tariffs and finished products imported under non -base-metal tariff headings); and the export of scrap feedstock (RSA, 1998:318).

Sectoral exports increased dramatically in the re cent past, and now account for some 64 per cent of total production: approximately 75 per cent of total aluminium production, and 50 per cent of the remainder of non -ferrous production, are exported (RSA, 1998:318).

A few large, and numerous small, non -ferrous metals producers are mainly concentrated in KwaZulu -Natal and Gauteng. The upstream supplier of aluminium, Alusaf, is converting imported alumina. Hulett Aluminium and others supply midstream, semi-fabricated and finished products.

Feedstock for the other "upstream" non -ferrous metal suppliers consists largely of secondary material, while its availability is smaller due to the large amount of scrap feedstock, which is exported (RSA 1998:318).

2.2.18 Metal products

This sector is quite diverse, as i ts products are used in almost every other kind of economic activity. The producers of metal products vary greatly in terms of size and type of production process (RSA, 1998:323).

Metal products contribution to total GDP and exports are 1.7 per cent and 3 per cent respectively. The sector also accounts for 1.9 per cent of overall employment and 2.4 per cent of the country's imports (RSA, 1998:323).

Consumption by the household represents 12 per cent of total sales and is largely satisfied by the two smaller sub-sectors, namely cutlery, hand tools and general hardware, and metal furniture and fixtures of metal.

The metal products sector is reliant on its upstream basic metals industries and this is evident by the 32 per cent share of total costs taken by inputs from the basic iron and steel and basic non-ferrous metals sectors. Certain supply practises followed by these upstream industries, such as import-parity pricing, often translate into uncompetitive raw material costs, which eliminate potential competitive advantages (RSA, 1998:324). The most important cost structures in the sector is: primary factor inputs (37 per cent), labour inputs (23 per cent) and capital costs (14 per cent), this shows the sector's relative labour intensity.

The metal products sector is an important provider of job opportunities in the South African economy and could exhibit a far greater employment-creating potential than its upstream basic metals counterparts. However, recent benchmarking studies have indicated that most metal product operations are overstaffed and utilise outdated capital equipment (RSA, 1998:324).

The South African metal products future could depend on its ability to restructure and enhance its global competitiveness and competitive gaps could be bridged by further cluster initiatives (RSA, 1998:326).

2.2.19 Machiner

The importance of this sector in the South African economy is reflected by: its 1.2 per cent contribution to GDP in 1996, its 2.8 per cent share of total exports, 18.7 per cent total imports and 1.2 per cent of employment. The large share of the import basket is typical of developing countries and could be crucial for the expansion of the production base and future growth (RSA, 1998:346).

The machinery sector's labour input: capital cost rati o is between 3.3 and 3.33, thus implying a high labour intensity from a cost perspective. However, wage disputes, low levels of productivity and a severe shortage of trained technical staff have forced the industry to reduce its labour intensity over time. Furthermore the machinery sector needs, and relies on high technology to produce internationally competitive products that could reflect the trend towards higher capital intensity (RSA, 1998:347).

Production growth in machinery is forecast to grow at an average of 2.1 per cent p.a. over the next five years. Growth will probably be driven by demand from the basic iron and steel sector as well as from the machinery sector itself (RSA, 1998:349).

Domestic demand will be mostly satisfied by imported capital goods due to their superior quality, and the fact that they are often not produced locally. Growth in imports is forecast to an average of 6.2 per cent p.a. over this period (RSA, 1998:349).

2.2.20 Electrical machiner

Electrical machinery's production represents 1.5 per cent both to overall GDP and employment respectively. The limited ability of local manufactures of electrical machinery to compete internationally is reflected in the sector's weak export performance (only 1 per cent of total exports). While total imports is 11 per cent due to the high levels of technology required in the industry (RSA, 1998:376).

Private consumers account for 8 per cent of total demand, with their purchases consisting mainly of small electrical appliances as well as rad io, television and related equipment. Investment demand by private businesses and government comprises almost 40 per cent of the total. Influenced by large parastatals like the previous SA Post and Telecommunications Service, Telkom, Eskom and defence spending. The level of purchases has dropped in

recent years adding to the difficulties experienced by the electrical machinery industry (RSA, 1998:376).

The sector is dominated by a number of large international as well as local companies and groups of companies. The local caters for some 38 per cent of domestic requirements, with the balance being imported.

The sector is highly technology-driven and due to increased globalisation and openness of the South African economy, local companies have to compete with global leaders in technology (RSA, 1998:377).

Nevertheless, South Africa is at the forefront of technology in some areas, including security apparatus; power metering, and some telecommunication and television decoding equipment (RSA, 1998:377).

Uncertainties surrounding supply agreements with the public sector needs to be cleared up. However, promising prospects arise from the continuation of Eskom's electrification drive and the high targets delineated in Telkom's telecommunication projections (RSA, 1998:377).

2.2.21 Motor Vehicles and Motor Vehicle Parts

The motor vehicles, and motor vehicles parts importance is evident from its contribution to overall GDP and over 1 per cent to total employment (RSA, 1998:399).

The dominant sub-sector is motor vehicles, contributing over 60 per cent to the total sectoral output and constituting the major client of the motor vehicle parts sub-sector. The development policy for the largest part of this sector is embodied in the Motor Industry Development Programme (MIDP), which has been a major force in the development of this industry.

A sharp increase in vehicle prices during the late eighties and early nineties, partly due to the depreciation of the South African currency versus the

currencies of major vehicle man ufacturing countries (especially Japan and Germany) and compounded by stagnant domestic purchasing power, contributed to depressed domestic demand for vehicles and parts (RSA, 1998:399).

The main export destinations are Europe and Southern Africa, while t he export propensity was 11 per cent in 1996. Most important intermediate inputs come from the motor vehicle parts sub -sector (40 per cent of total costs) and the iron and steel sector (45 per cent of total costs) (RSA, 1998:400).

Total primary factor costs represented 35 per cent of sectoral costs in 1996, while this sector is relatively capital -intensive. Growth in employment has been negative at an average rate of 0.7 per cent between 1991 and 1996 (RSA, 1998:400).

A significant restructuring is taking place in the sector as a result of lower protection and the consequential need to become globally competitive. Some manufacturers have already been integrated into their parent/licensor company's global networks, and others are likely to follow. This coul d contribute to strong growth in domestic production, which is expected to approach the 5 per cent level by the end of the forecast period (RSA, 1998:402).

The forecasted average annual growth rate over the period 1998 to 2001 of 3.1 per cent could well b e underpinned by a sustained improvement in per capita incomes, the high number of persons per car (indicating an apparent need for vehicles), the high relative age of the vehicle pool, continuing downward pressure on vehicle prices and the wide range of f inancing schemes available to vehicle buyers (RSA, 1998:402).

2.2.22 Other Transport Equipment

Transport equipment consists of railroad equipment (accounting for slightly more than a quarter of output) and other transport equipment, which consists

of the manufacture of ships, boats and related products; aircraft and related goods; motor- cycles and bicycles; and other types of vehicles, excluding motor vehicles. The other transport equipment sub-sector accounts for a little fewer than three-quarters of output (RSA, 1998:415).

This sector contributes slightly more than 0.2 per cent to value added and slightly less than 0.2 per cent to employment in the economy. While export and import contributions are 0.5 per cent and 1.6 per cent respectively (RSA, 1998:415).

In 1996, exports amounted to 12 per cent of production, mainly consisting of aircraft and aircraft parts, destined for the developed world.

Demands, mainly from Transnet and the mining industry, have established the transport equipment industry. Do mestic demand has been declining in the recent past and now the industry is turning to the export market. Transnet's management of networks in Africa could create opportunities for supplying equipment to other African countries (RSA, 1998:418).

The aviation industry is also growing, forming strategic alliances with foreign manufacturers, and the application of existing military technology to civilian purposes (RSA, 1998:418).

Production over the period 1997 to 2001 is expected to increase at 2.9 per cent p.a., while exports, mainly driven by the railroad equipment, aircraft and aircraft parts and ship repair industries are expected to increase at 14.9 per cent p.a. and imports expected to increase by 7.7 per cent p.a. (RSA, 1998:418).

2.2.23 Other Manufacturing

Miscellaneous manufacturing activities, including jewellery production, form the other manufacturing sector (RSA, 1998:429).

This sector's role in the South African economy is reflected by its 0.4 per cent contribution to GDP and its 0.5 per cent contribution to overall employment. Trading results show that the sector's total imports are 4.6 per cent, while exports are only 2.9 per cent of total exports.

The sector's demand consists of the export market (66 per cent of total sales); domestic hous ehold (14 per cent total sales), intermediate and investment represented 12 per cent and 8 per cent of total sales in 1996 respectively (RSA, 1998:429).

The main export products of the other manufacturing sector were diamonds (from the jewellery sub-sector) and containers (from the other manufacturing, not elsewhere classified sub-sector) to destinations such as Belgium, Germany, the USA, Israel and Hong Kong (RSA, 1998:429).

The prospects for the other manufacturing sector differ significantly from its historical performance. Where as in the period 1991 to 1996 it experienced a decline in domestic production, it is foreseen that production will grow at 4.1 per cent over the period 1997 to 2001. This could have been the result of specialisation and refocusing of the industry towards higher value added export products, the establishment of a jewellery export council, improved access to first world markets and increased demand from the SADC countries for professional, scientific and controlling equipment as e conomic development takes off (RSA, 1998:431).

The expected improvement in international competitiveness and improved international demand could contribute to export growth of 7.9 per cent p.a. and this could increase the export propensity ratio from 65 per cent in 1996 to 78 per cent in 2001 (RSA, 1998:431).

Employment could increase at a rate of 1.1 per cent p.a. over the forecast period, an improvement over the decline of 0.2 per cent p.a. recorded over the period 1991 to 1996 (RSA, 1998:431).

2.2.24 Electrical

This sector consists of two utility related sub-sectors:

- The production, collection and distribution of electricity and gas, and
- The collection, purification and distribution of water (RSA, 1998:442).

Electricity sub-sector contributes 89 per cent of total production in this sector. Eskom connected over 307 000 homes to the supply network in 1996 (RSA, 1998: 442). Approximately 80 per cent of total electricity demand is for intermediate use like mining and manufacturing. Eskom also provides electricity to Zimbabwe, Botswana, Mozambique, Namibia, Lesotho and Swaziland (RSA, 1998:442).

Eskom generates 95 per cent of South Africa's power. It is the fifth largest, and has one of the cheapest rates in the world (RSA, 1998:443). Eskom is also involved in numerous training programmes to raise productivity (RSA, 1998:443). Water authorities serve urban areas like Rand Water Board in Gauteng and Emgeni water Kwazulu-Natal. The South African government is trying to attract foreign investors to help with large capital cost projects (RSA, 1998:443).

Electricity is expected to grow at an average rate of 3.3 per cent between the period 1997-2001, and to supply water to all South Africans in 2004 (RSA, 1998:444).

2.2.25 Construction

Construction is divided into three sectors namely building construction, civil engineering construction and other construction activities (RSA, 1998:447). Contributing 5.3 per cent to South Africa's total labour force and 2.9 per cent to gross domestic product (GDP). Demand for construction depends on the private sector, government investment policy and perceptions of consumers and the investment markets (RSA, 1998:447).

Government's low cost housing programme is on track despite earlier problems in 1998, with the government also investing in hospitals and clinics (RSA, 1998:447). The building of hotels has also increased the focus on the potential of tourism.

Local demand for construction is set to grow at an average of 3.1 per cent between 1997 and 2001, providing 3000 jobs annually (RSA, 1998:449). According to government's Medium Term Expenditure Framework (MTEF) the aim is to strengthen capital spending for the upgrading of infrastructure over the next 5 to 10 years (RSA, 1998:449).

Exports are set to grow at an average r ate of 15 per cent for the period between 1997 and 2001, with possible SADC projects for R9 billion (RSA, 1998:449).

2.3 Competitiveness of the South African Manufacturing Sector

Import substitution policies have been a dominant growth strategy initiated by the South African government in 1925 (Standish, 1992:117). Holden (1990) notes that after the Second World War this policy was reinforced through import tariffs and quantitative restrictions (cited in Standish, 1992:118).

According to Scheepers (1982:13) the benefits of the development strategy based on import substitution were probably exhausted by the1970's, political imperatives, sanctions and lobbying kept the previous government from adopting an outward-oriented development strategy. Furthermore the growing international isolation of the country and the gold price booms of the early 1970's and 1980's, which helped to overvalue the real exchange rate, had a negative impact on the exports of manufactured goods (Anand, et al.1999).

The country's competitiveness as a nation was undermined by the following factors, amongst others (Hanival and Hirsch, 1998:1):

- Inferior and racially skewed provision of education.
- Curtailment of skills accumulation through inefficient and discriminatory employment practices.
- Regional Industrial development policies that distorted location decisions.
- General worsening of the economy since 1973. (Anand, et al.1999)
- Industries' milking of government rather than providing services to members

The International Institute for Management Development (IMD) uses eight major categories to determine the competitiveness of a nation, namely domestic economic strength, internationalisation, government, finance infrastructure, management, science and technology, and the quality of people.

Using these categories, South Africa ranks as one of the least competitive nations. Table 2 shows that out of 46 countries, South Africa ranks on average at about 42nd place.

Table2: South Africa's Relative International Competitiveness in 1996

Category	South Africa	OECD Countries	Developing Countries	NICs
Domestic Economy	44	23	30	7
Internationalisation	39	17	35	18
Government	37	25	26	9
Finance	31	16	36	18
Infrastructure	32	16	35	26
Management	40	18	35	16
Science & technology	34	16	37	21
Quality of people	46	16	36	20

(Source: Anand, et al. 1999:67)

Table 2 shows that the Finance and Infrastructure categories performed better than the rest (31st and 32nd out of 46) in the world, while the average for the developing countries ranked a t 36th and 35th respectively in the world. Science and Technology in South Africa is also ranked higher than the average for developing countries. As far as the overall performance of the domestic economy and the quality of people is concerned, South Afric a ranks amongst the very worst (44th and 46th) in the world.

A disconcerting fact is that South Africa's poor quality of people could be the foremost factor that lowers its competitiveness. The IMD measured the quality of people by looking at their literacy rate, skills and labour productivity.

Between 1990 and 1995, although labour productivity (as measured by GDP per employee) grew by 2.5 per cent per annum on average this was still substantially lower than that of South Africa's main competitors, parti cularly the NICs of the East, such as Taiwan, (4.7 per cent), Korea (4.51 per cent), Hong Kong (3.7 per cent) and Singapore (3.0 per cent).

There is a close linkage between labour productivity and unit labour costs.[5] In manufacturing, rising unit labour co sts had resulted in slower increases in labour productivity in South Africa than in many other countries.

Labour productivity in South Africa's manufacturing between 1972 and 1990 grew only by 0.9 per cent on average annually, compared to 9.7 per cent in China, 7.6 per cent in Indonesia, 8.2 per cent in Korea, 5.9 per cent in Taiwan, etc.

Manufacturing earnings in South Africa in 1993 were US$9088 per annum, compared to a much lower labour cost in China (US$656), Botswana (US$3311) and Zimbabwe (US$3550). If South Africa only wants to compete on the basis of labour costs with these countries, or attempt to follow the

[5] Measure both changes in the amount of labour used in the production process, as well as charges in the price of labour.

approach of the current NICs and base export -manufacturing strategy on cheap labour, this could tum out to be futile.

Manufacturing firms i n South Africa, especially in labour–intensive sectors such as food processing, footwear, textiles, furniture, etc., would have to remain competitive despite relatively high labour costs. Higher labour productivity, through application the of high technolo gy, automation and of finding ways in which to keep distribution costs as low as possible, is required.

Currently South Africa has one of the lowest degrees of specialisation in a group of comparative countries investigated by UNIDO in 1995. South Africa's degree of specialisation in manufacturing is about 7per cent - compared to 30 per cent in Singapore, 20 per cent in Hong Kong, 25 per cent in Botswana. WEFA S.A. ascribes South Africa's low degree of specialisation to the past import substitution (IS) industrial strategy (Anand, et al. 1999:65). Local manufactures were sheltered from international competition by high tariffs and import quotas and prohibitions. This resulted in a lack of strong domestic competition due to oligopolistic and monopolistic industries. Coupled with high taxes and skewed (unequal) education and training, it has resulted in an environment that is not conducive to especially downstream manufacturing.

As a result of the above, South Africa's manufacturing sector is non - competitive. International benchmarking by the IDC has revealed, for instance, that several of the country's downstream industries (such as metal products, automotive components, wooden fumiture, particle board and footwear) are fundamentally uncompetitive at present . Findings show that South African manufacturers have a production cost disadvantage compared to most of its global competitors.

In a recent study of South Africa's manufacturing sector by Nordas 1996 an index of competitiveness is developed for South Afr ica relative to the U.S. (Anand, et al. 1999:66). If the index is larger than 1, South Africa is competitive compared to the U.S., and vice versa. Table 3 indicates that

South Africa is only competitive in the production of non -ferrous metal products, relative to the U.S.

Apart from non -ferrous metals, in which South Africa has a competitive advantage relative to the U.S.A., other industries with a high index value are iron and steel, paper and printing, and shipbuilding. All three industries are scale intensive with significant scope for gains from exploiting economies of scale when given access to a larger market, and are low technology, medium-wage industries.

The least competitive industries according to table 3 are chemicals, food, beverages and tobacco and computers and office equipment.

Table 3: Competitive Index for South African Manufacturing Firms (1996)

Sector	Index
Food, Beverages, tobacco	0.40
Textiles, apparel, leather	0.57
Wood products	0.62
Paper & Printing	0.71
Chemicals	0.30
Pharmaceuticals	0.30
Petroleum Refining	0.65
Rubber & Plastics	0.63
Non-metallic Mineral products	0.68
Iron & Steel	0.76
Non-ferrous metals	1.67
Metal products	0.64
Non-Electrical Machinery	0.65
Computers & office equipment	0.42
Electrical machinery	0.69
Communications equipment	0.59
Ship Building	0.75
Other transport equipment	0.46
Motor vehicles	0.51
Aerospace	0.52
Scientific Instruments	0.63
Other Manufacturing	0.59

Total manufacturing	0.64

(Source: SANPAD Manufacturing Survey of North-West Province Annual Report, 1999:Appendix C p.67)

In addition to relative high wages and low productivity, the Industrial Development Corporation's international benchmarking study found the low level of competitiveness of the South African manufacturing industry due also to higher costs of raw materials inputs, and high overhead and marketing costs.[6]

2.4 Spatial Distribution of South African Manufacturing

In sections 2.2 and 2.3 the broad national profile and competitiveness of manufacturing firms in South Africa were outlined. However, due to the location-specific nature of IDZs and EPZ (i.e. the success of these policies are not location or region neutral) it is necessary to provide an overview of the spatial distribution of manufacturing in South Africa. Also, it is explicitly one of the aims of the Spatial Development Initiative (SDI) programme, to which the IDZ concept and policy is related, to address the spatial inequalities in the distribution of South Africa's manufacturing firms. To a significant degree these spatial inequalities were due to past industrial policies.

Since 1994 South Africa has a "quasi-federal" system of nine provinces (see Suleman, 1998). Accordingly, the section below will describe the spatial distribution of South African manufacturing using these nine provinces as geographical areas. Table 4 below indicates the relative sizes of the nine provincial economies.

[6] The level of formal education as measured by the average number of years of schooling for the economically active population increased by 2.7 per cent between 1970 and 1980, and

Table 4: Provincial Contributions to GDP in South Africa, 1995 (%)

Province	R millions	% Of total GDP
1. Gauteng	139 455	38%
2. Kwazulu Natal	55 013	15%
3. Western Cape	52 842	14%
4. Mpumalanga	31 964	8%
5. Eastern Cape	25 383	8%
6. Free State	21 940	6%
7. North West	20 191	5%
8. Northern Province	10 280	4%
9. Northern Cape	7 014	2%
Total	R430 424	100%

(Source: Anand, et al.1999:)

Table 4 on page 53 shows the provincial contributions of all nine provinces to South Africa's total gross domestic product (GDP). Gauteng clearly is the largest contributor (c ontributing 38 per cent) to the national economy with KwaZulu-Natal and Western Cape in second and third place respectively. While the Northern Province and the Northern Cape were the smallest contributors (in 1995) to the national economy and showed a sma ll increase as contributors to the national economy in 1996 (DBSA, 2000:28).

In the sub-sections below, the size and nature of the manufacturing sector in each of the provinces will be outlined.

2.4.1 Western Cape

In 1996, the manufacturing sector in th e Western Cape provided the second highest jobs (21 per cent of total employment in manufacturing) with Gauteng the most (29.3 per cent of total employment in manufacturing).

Manufacturing plays an important role in the provincial economy contributing to 19 per cent of total employment in the province and manufacturing output was 23.3 per cent of the GGP in 1996.

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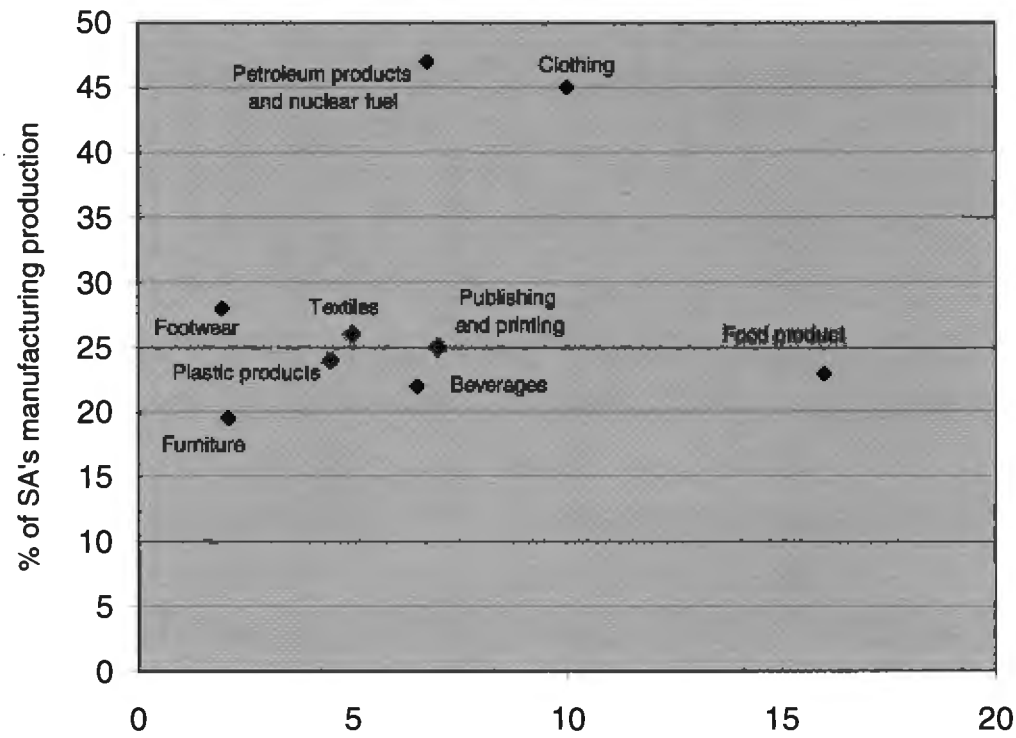
decreased to 2 per cent between 1986-1990.This compares unfavourably with some of the newly industrialised countries

Figure1 from DBSA (2000:48) shows the relative importance of certain sub - sectors in the domestic and national economy.

Figure 1: Western Cape: Contribution of manufacturing majo groups to provincial and national manufacturing production, 1996



(Source: DBSA, 2000: 51)

Certain sectors such as petroleum, nuclear fuel and clothing have a relatively high contribution (45 per cent and more) to the South African production. While the same sectors' contribution to the domestic economy was only between 6 per cent and 10 per cent in 1996. Food production plays an important role in the domestic economy producing (16 per cent) of total manufacturing and on a national level its contribution was even higher (23.1 per cent).

The Cape Metro pole powers the grow of the province's economy, 70 per cent of total production, creating employment for more than 60 per cent of the

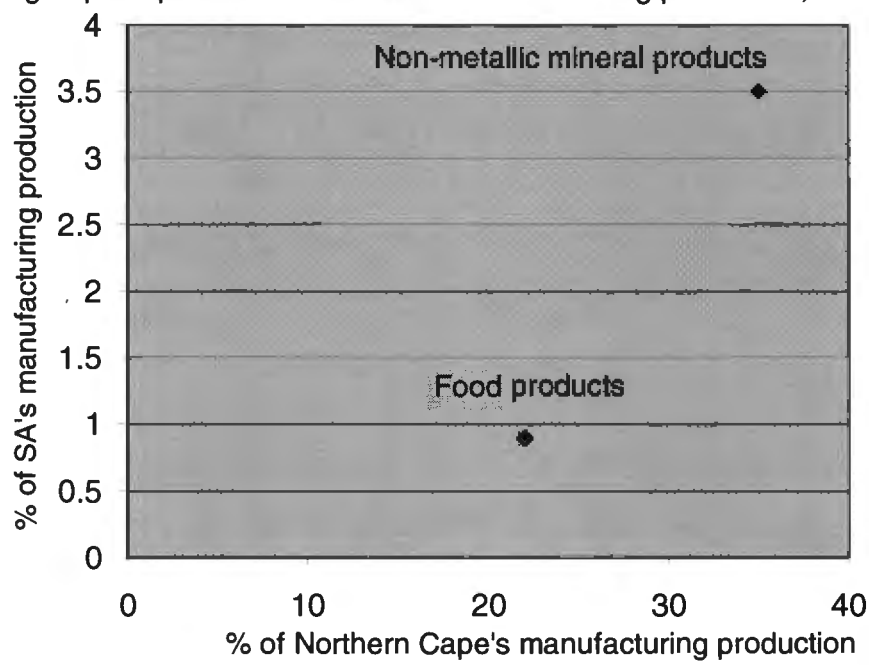
labour force, hosting 60 per cent of the population, and only covering 1.4 per cent of the Provincial's total surface area.

2.4.2 Northern Cape

In 1996, total employment opportunities in the provincial manufacturing sector contribution were only 0.8 per cent in South Africa. While the Northern Cape's contribution to GDP was only 2.3 per cent in 1996, indicating its insignificance on a national level.

The Northern Cape does not have an industrialised economy and the manufacturing sector's share of GGP is the lowest of all provinces. It contributed only 4.5 per cent to the province's GGP compared to the national average of 23.7 per cent.

Figure 2 : Northern Cape: Contribution of manufacturing major groups to provincial and national manufacturing production,



(Source: DBSA, 2000:61)

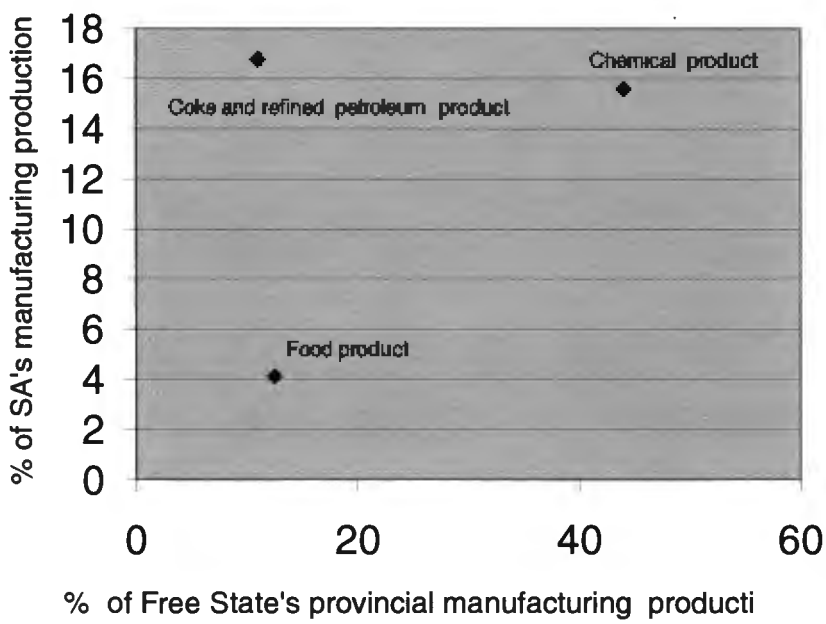
The only two significant sub-sectors in the provincial manufacturing shown on page 56 are food products, mainly the processing of deciduous fruit (21.8 per

cent) and non -metallic mineral products (36 per cent). The province's contributions to these products on a national level are rather small, at 0.9 per cent and 3.5 per cent respectively.

2.4.3 Free State

In 1996, the manufacturing sector's contribution to employment opportunities in South Africa was 3.9 per cent. The manufacturing sector's contrib ution to the provincial economy was 15 per cent in 1996 and this level of industrialisation is below the national average of 23.7 per cent.

Figure3: Free State: Contribution of manufacturing major groups to provincial and national manufacturing production, 1996



(Source: DBSA, 2000:69)

The sub -sectors, which have been significant as contributors to the local economies manufacturing sector, were food production (12.5 per cent), coke and refined petroleum production (10.2 per cent) and chemical production (44.2 per cent).

The province's share in total production of these sub -sectors in South Africa was 4.2 per cent, 16.6 per cent and 15.3 per cent respectively.

According to DBSA (2000: 70) there is a need for a more diversified economic structure in the province because of the declining dependence on the mining sector in recent years

2.4.4 Eastern Cape

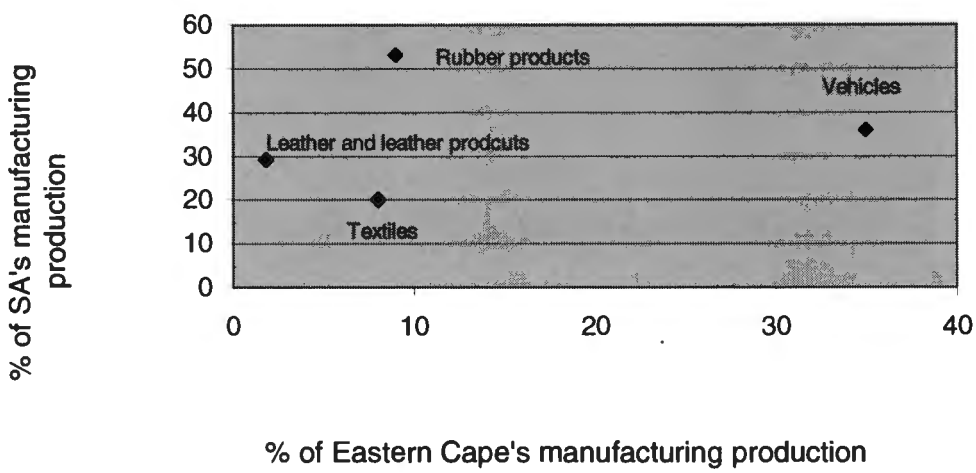
This province has the highest unemployment rate (48.4 per cent) in South Africa (DBSA, 2000:74). This unemployment rate excludes the people who left the province to find employment in the Western Cape and Gauteng (DBSA, 2000). In 1996, the manufacturing sector's contribution to employment opportunities in South Africa amounted to 8.6 per cent. The province's GDP grew at an average annual rate of 1.5 per cent during 1991 and 1996, while the manufacturing sector had a higher average growth rate of 3.3 per cent in the same period.

The most important sectors on an intra -provincial level are manufacturing (25.8 per cent), commerce (16.3 per cent) and community services (27.3 per cent). The relative importance of the manufacturing in the province's economy exceeds the national average: 25.8 per cent as against 23.7 per cent.

The province possesses comparative advantages with regard to the following products: textiles, leather products, rubber products and vehicles. Looking at figure 4 on page 58 it is evident that in the case of th e provincial economy's contribution (especially textiles, leather and rubber products) towards national economy shows the importance of these sectors.

Vehicle production also plays an important role contributing to (35.1 per cent) to the province's economy and slightly better on a national level (35.6 per cent).

Figure 4: Eastern Cape: Contribution of manufacturing major group to provincial and national manufacturing production, 1996



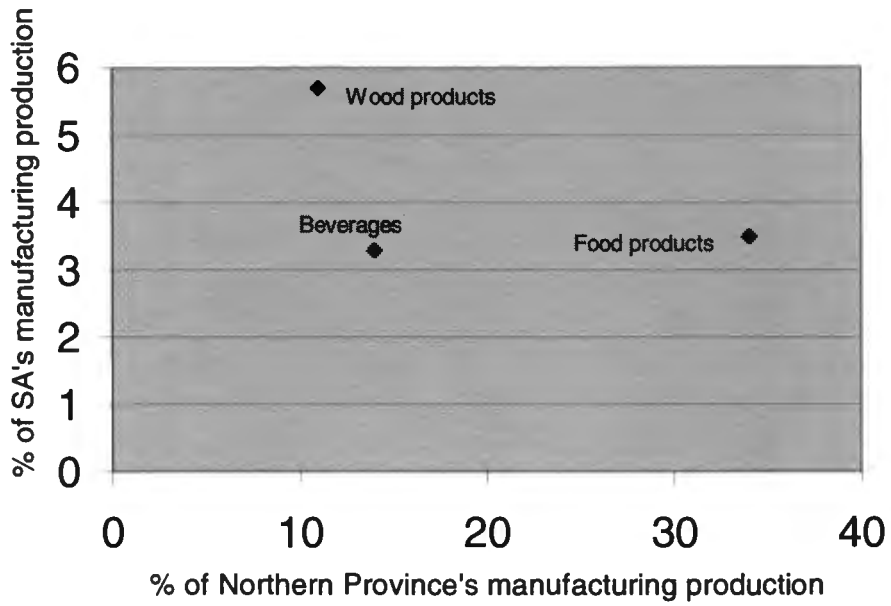
(Source, DBSA, 2000: 77)

2.4.5 Northern Province

This province had the highest average growth rate (4.2 per cent) between 1991 and 1996. The manufacturing sector's contribution towards empl oyment opportunities was 2.5 per cent, while the sector's contribution to the province's employment was just over 5 per cent.

This mentioned above shows that the Northern Province have little industrialisation and shows the insignificance of the manufactu ring sector. Manufacturing contributes only 6.1 per cent to the GGP while the national average is almost four times higher at 23.7 per cent.

Figure5: Northern Porvince: Contribution of manufacturing major groups to provincial and national manufacturing production, 1996



(Source: DBSA, 2000:103)

Sub-sectors that have significant contribution to the province's manufacturing sector are food (35.1 per cent), beverage (14.4 per cent) and wood products (10.6 per cent). However, these sectors contributions to the national production are 3.5 per cent, 3.3 per cent and 5.6 per cent respectively.

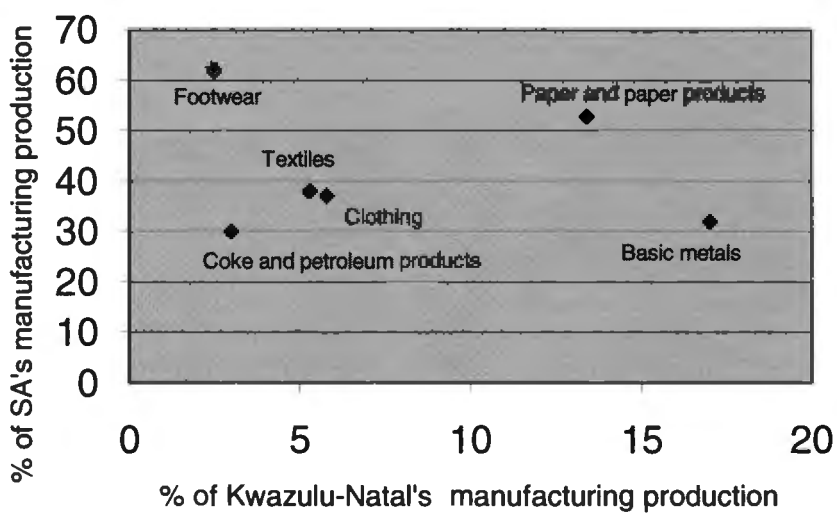
2.4.6 KwaZulu-Natal

In 1996, the provinc e provided 23.7 per cent of all manufacturing sector employment opportunities in South Africa. In Kwazulu-Natal the manufacturing sector is the second highest provider of jobs in manufacturing in South Africa (DBSA, 2000:83).

Manufacturing was 21.5 per cent of the national production slightly lower than the national average of 23.7 per cent and the most important contributor to the province's GGP with 31.7 per cent in 1996. However the manufacturing sector's average annual growth rate for the period 1991 to 1996 was 2.9 per cent beating the national average of 2.5 per cent for the same period.

Kwazulu-Natal's economy attained the highest level of industrialisation of all nine provinces as measured by the contribution of manufacturing to the GGP: 31.7 per cent against the national average of 23.7 per cent. The manufacturing sector reveals a high level of diversification that is in contrast with the rest of the province's economy (DBSA, 2000:85).

Figure 6: Kwazulu-Natal: Contribution of manufacturing major groups to provincial and national manufacturing production, 1996



(Source: DBSA, 2000:86)

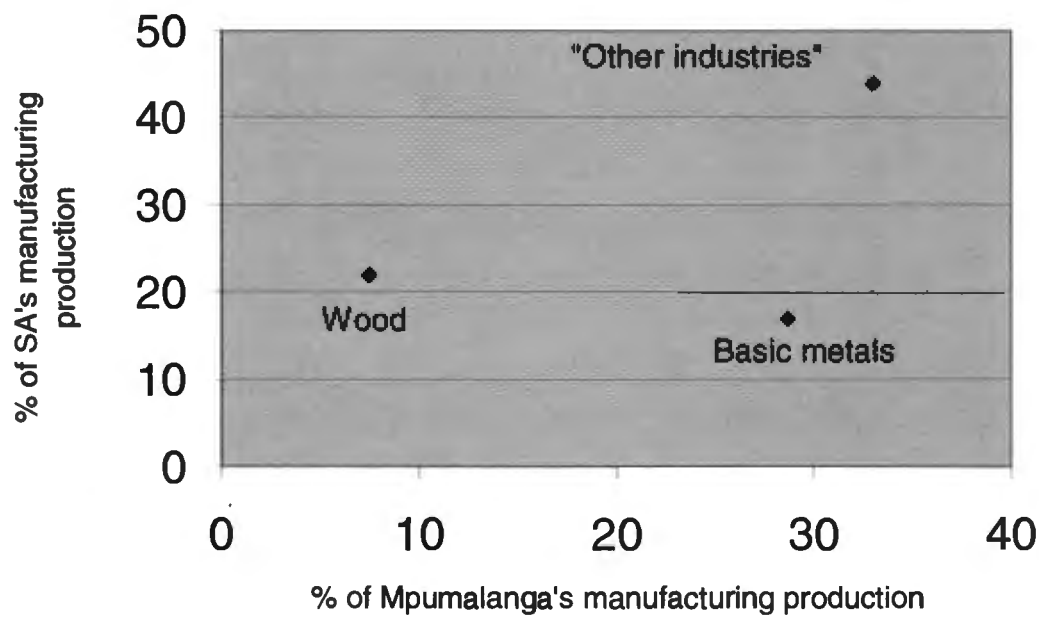
2.4.7 Mpumalanga

This province has the smallest labour force in South Africa. In 1996, the province provided 5.3 per cent of all employment opportunities in the manufacturing sector.

Manufacturing output declined between 1991 -1996, having a negative average annual growth rate of 3.7 per cent during the same period. Manufacturing in the province is still a dominant production force.

The importance of the manufacturing sector has increased from 11.9 per cent (of total provincial production) in 1980 to 20.8 per cent (of total provincial production) in 1996. However the province's manufacturing growth rate is almost three percent lower than the national average of 23.7 per cent.

Figure7: Mpumalanga: Contribution of manufacturing major groups to provincial and national manufacturing production, 1996



(Source: DBSA, 2000:94)

Three sub -sectors in which the province's manufacturing production is relatively high are wood and products of wood (21.1per cent), basic metals (16.4 per cent) and refined petroleum products.[7]

Manufacturing in the province is dominated by basic metals (28.8 per cent), and 'other industries' (32.6 per cent).

2.4.8 Gauteng

The Gauteng province was the biggest provider (29.3 per cent) of manufacturing employment opportunities in South Africa in 1996.

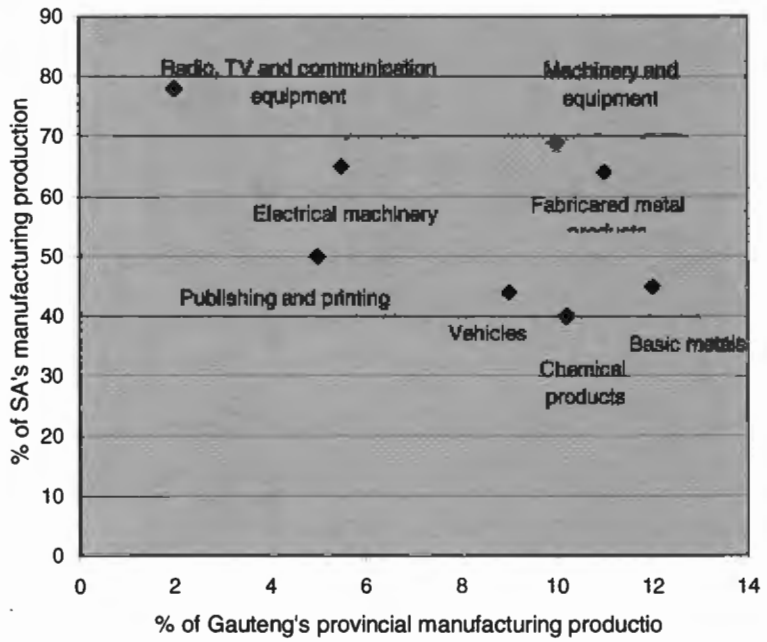
Manufacturing's contribution to the national economy was 41 per cent in 1996, while the manufacturing sector's contribution to the provincial economy was 26.6 per cent in 1996. The relative importance of the manufacturing sector as measured by the contribution of manufacturing to the provincial GGP, which indicates the level of development of the province's economy, shows that it exceeds the national average of 26.6 per cent as against 23.7 per cent.

Figure 8 on page 63 shows the relative importance of certain manufacturing sub-sectors in the domestic and national economy.

Almost all of the manufacturing sub -sectors of Gauteng contribution to the national production exceeded 40 per cent. The most important contributors on the provincial level in 1996 were: chemical products (10.3 per cent), basic metals (12.0 per cent), fabricated metal products (11.1 per cent) and machinery and equipment (10.2 per cent).

[7] The last sector falls under the "other industries" therefore the percentage has not been

Figure 8: Gauteng: Contribution of manufacturing major groups to provincial and national manufacturing production, 1996



(Source: DBSA, 1999:110)

2.4.9 North West

The Mafikeng International Airport (MIA), the focus of the case study in chapter five, is located in the North West Province where it forms a potential western node of the Platinum SDI. Section 1.2 indicated the importance of the MIA project to the North West Province, and serves as a possible guideline for other Industrial Development Zones (IDZs) in South Africa. Section 4.4.6 gave a brief overview of the possible IDZs to be developed in South Africa.

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revealed by Statistics South Africa Manufacturing Census (DBSA, 2000).

In 1996, the province provided only 4.9 per cent of all manufacturing sector's employment opportunities in South Africa. The manufacturing sector's importance increased between 1991 and 1996, and could have resulted from a more diversified economy (DBSA, 2000:117).

The tress index declined from 69.9 in 1980, to 49.8 in 1996. This could have resulted in a positive trend in the way that the provincial economy became more diversified and less vulnerable to adverse exogenous factors such as the gold price and other commodity prices.[8]

Manufacturing sector's contribution to the domestic economy increased from 8.4 per cent in 1991 to 12.8 per cent in 1996, with an annual growth rate of 9 per cent during the same period (DBSA, 2000:118). This is still far below the national average of 23.7 per cent.

The dominant manufacturing sub -sectors in the domestic market is non - metallic mineral products (20.3 per cent) and basic metals (14.7 per cent). However on a national level these two products contribution was 12 per cent and 3.6 per cent respectively as figure 9 on page 65 illustrates.

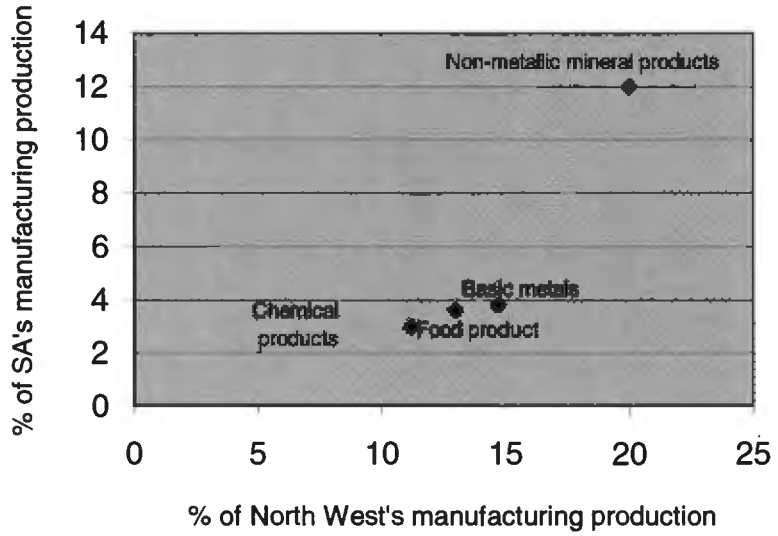
(Source: DBSA, 2000:118)

2.5 FDI in South Africa

FDI can be argued to be essential for South African manufacturing to increase its international competitiveness. For instance, FDI to South Africa could contribute to the contestability of domestic markets. Multinational enterprises (MNEs) may be better able than domestic firms to overcome some of the cost-related barriers that limit the number of firms to enter in an industry (Hanival and Hirsch, 1998:88).

[8] A tress index of zero represents a totally diversified economy on the other hand, the higher the index (closer to 100) the more concentrated or vulnerable the Province's economy is to exogenous variables (DBSA, 2000).

Figure 9 : North West: Contribution of manufacturing major groups to provincial and national manufacturing production, 1996



Empirical evidence shows a positive correlation between MNE activity and market concentration (Hanival and Hirsch, 1998:88). MNEs bear special advantages (proprietary assets such as technology or brand names) that are generated in industries with relatively high cost -related barriers to entry (because of high research and development – R&D - or advertising) and that are conducive to their entering such industries in host countries. Therefore the majority of FDI arises from oligopolistic firms investing in oligopolistic markets (Hanival and Hirsch, 1998:88).

Foreign investment inflows could have positive spill over effects (new technology and managerial practices) if local companies have strong competition. However, if the gap in capabilities is too large, the affect of entry by a multinational with more resources could force local firms to either exit or go into joint ventures and non -equity arrangements with the MNE. The latter part could only be possible if co mpetition laws are absented (Hanival and Hirsch, 1998:88).

Over 50 per cent of foreign direct investment (FDI) in South Africa originates from the European Union (EU) and its member countries (Links, 2000:31). The recently established free trade agreemen t between South Africa and the EU could further raise the level of FDI in South Africa.

According to the United Nations Conference on Trade and Development (UNCTAD) (1995:38) the following basic factors in Africa made the rate of investment for both domestic and foreign investors less attractive than other developing countries:

- Continuing civil conflicts, political crises and natural disasters, especially drought.
- Small domestic markets.
- Lower economic growth and even in some countries negative rates relating to other developing countries.
- Poor, and in many cases deteriorating physical infrastructure, especially telecommunication and transportation, and the lack of capital to improve it.
- The high debt of many African countries makes it a daunting task to manage.
- Slow progress in a number of countries in introducing market - and private -sector-oriented economic reforms undertaken within the framework of structural adjustment programmes, for both objective and subjective reasons.
- Lack or low levels of skills and general technological capabilities and relative high production costs. By the mid 1980's, cost of production in Sub-Saharan Africa was frequently more than double than those in Asia.

The impact of FDI and MNEs on a country depends on many factors, such as the role of the MNEs in the economy, the sector that will receive FDI, the type of investment (e.g., export-oriented or import-substituting), and linkages with foreign subsidiaries in the host economy, and the conditions in the host economy (UNCTAD, 1995:51).

According to UNCTAD (1995:52) the most significant impact of foreign subsidiaries on host countries is their contribution to output and employment.

However the activities of MNEs in most African countries are concentrated in a few and in some cases only one industry (UNCTAD, 1995:53).

Noticeably, in developing countries where FDI are concentrated on the development and export of natural resources (nine oil exporters), it has shown a significant contribution in sharing high exploration and develop ment costs, bringing know-how and technology and sustaining and expanding exports (UNCTAD, 1995:53). South Africa especially needs FDI in training and development, high technology and infrastructure, primary education and vocational training and Wakeford (2000:101) note the importance of the SA - EU FTA in helping the above mentioned.

De Villiers (1994:7) argue by establishing EPZs (or IDZ in its current policy form) in South Africa, FDI is needed to help to establish downstream industries in manufacturing g oods, adding value to the South African dominating primary sector.

South Africa exports raw materials to EU and import high value-added goods. From this it is clear that South Africa has to move up the value chain (COSATU, 2000:109). Ryan (1994:2) notes that due to the high demand for FDI internationally (particularly from developing and emerging countries) South Africa has to do more than just rely on the lifting of sanctions to receive FDI.

Table 5 below shows the flow of FDI into South Africa from 199 4 to the first half of 1999 (Heese, 1999).[9]

[9] Mhango (1999) notes that foreign direct investment is a form of foreign private investment. Most foreign private investment involves the purchase of stocks or bonds and hence called portfolio investment. FDI, in contrast, involves the purchase of an equity stake or full or partial ownership, with the expectation of active participation in firm management. He claims that in practise, FDI is usually defined as a 10% or more equity stake.

Table 5: Year on Year FDI flows to South Africa, 1994-1999

Year	R (billions)	US$[10]
1994	6.1	1.72
1995	5.7	1.57
1996	8.7	2.02
1997	15.7	3.4
1998	17.9	3.2
1999 (1st & 2nd quarters)	4.1	.687

(Source: Business Map's On-Line SA FDI Database)

The growth in FDI has steadily increased from 1994 until 1998 followed by a slowdown in investment in the first half of 1999. Data from the South African Reserve Bank (2001:84) showed that the total flow of FD I to South Africa for 1999 was R9184 billion. According to Heese (1999) FDI most probably slowed down because of the following factors:

- A slowdown in investment to developing countries as investors become less secure about emerging markets and economic slowdown in these countries decreases market size;
- Political uncertainty around South Africa's national elections and new governments leaders and officials;
- Decreased investment from South East Asian partners dealing with problems at home; and
- Unstable economic circumstances in South Africa, especially with 1998's exchange rate volatility and criticism and uncertainty around interest rates.

The level of FDI to South Africa also declined in 2000 and the total inflow was R6083 billion compared to the R9184 billion in 1999 (SARB, 2001: 84).

Mhango (1999) while analysing the state of FDI concludes that FDI in export-oriented sectors in South Africa is still too low, and not growing significantly. To attract more FDI it seems that conditions that facilitate FDI to be improved

[10] Converted at each year's average exchange rate.

in order to use the resources and technology of the world market to improve its economic situation.

2.6 Selective Industrial Policy for Manufacturing Development

From sections 2.2 to 2.5 it was argued that South Africa's manufacturing sector is facing particular pressure from globalisation due to its nature (being dependent on labour -intensive, aging industries dependent on natural resources), its spatial distribution (around the historical patterns of mining development), and to its lack o f human skills and resources. The previous section implied that the slow pace of FDI inflows into the South African manufacturing sector is exacerbating these disadvantages.

In this light, the present section takes the argument one step further in arguing that a laissez-faire approach to manufacturing development will fail to address these problems. As section 2.6.1 argues, it is largely due to wrong (with hindsight perhaps) industrial policy in the past that the South African manufacturing is currently n ot sufficiently internationally competitive. Section 2.6.2 suggests that more appropriate industrial policy should focus on integrating the South African manufacturing sector into the world economy, and that spatially or location-focused support programmes that are allowable under WTO -rules, could be necessary to address the low level of competitiveness in the South African manufacturing sector.

2.6.1 Industrial Policy as Import Substitution

South Africa has followed import substitution policies over the past century and has started in the 1990's to change towards an outward approach (see section 4.2 for more detail on past industrialisation in South Africa). These policies consisted of quantitative import restrictions and tariff barriers, and the establishment of parastatal industries, such as Iscor (Hanival and Hirsch, 1998:38). This strategy has aimed to both diversify the economy in terms of

production and in terms of origin of imports so reducing South Africa's dependence on Britain.

During this period the manufacturing sector diversified at a great pace in terms of production and became concentrated in terms of ownership. The mining and diamond sectors also became heavily involved in manufacturing production. Strong gold sales led to an appreciation of the exchange rate that further encouraged the importing of capital and intermediate goods. Consumer goods were produced at a premium to international prices and were only competitive on the domestic market with significant import protection (Hanival and Hirsch, 1998:38).

By the 1970's, growth had begun to slow and the negative consequences of IS industrial policy were becoming apparent. These negative aspects included the existence of an anti -export bias and import dependence especially of capital goods. The Reynders Commission of Inquiry of 1972 proposed a range of export incentives including tax concessions, import duty rebates and cash grants to exporters trying to reduce the anti -export bias. However, these offered incentives did little to increase exports.

The debt crisis in 1985 led to the further investigation into export promotion programmes such as, structural adjustment programmes, the devaluation of the exchange rate and re -introduction of the dual exchange rate system, and the imposition of pu nitive surcharges on imports (Hanival and Hirsch, 1998:38).

In 1990 the General Export Incentive Scheme (GEIS) was introduced and formed a cash subsidy payable to exporters on the basis of the level of value added and local content. However, GEIS was not entirely successful in promoting exports and intended to reward companies already exporting while doing little to encourage rent seeking. The DTI negotiated with GATT to begin phasing out the programme over a five -year period but as a result of the re - prioritisation of the national budget and accumulating evidence that the

programme was not operating optimally, the DTI accelerated the phase -down and GEIS was finally discontinued in July 1997 (Hanival and Hirsch, 1998:38).

According to Smalberger (2000:48) high tariffs imposed by the South African government has made industries complacent, slowing industrial restructuring in South Africa.

An examination of the process of industrialisation through protectionism in many countries across the world, whether in the developed countries at the early development stages or more recently in East Asian countries, shows a consistent pattern of protection of domestic industries during the early phases of development with tariff liberalisation following at a later stage (Porter, 1990; COSATU, 2000:112).

The Congress of South African Trade Unions (COSATU, 2000:112) recommended that the government should extend its focus from export oriented to import substitution, to expand the country's domestic goods sectors. Introducing specific strategies of import substitution in selective sectors, which have a high potential for sustainable job creation (COSATU, 2000:113). Social adjustment programmes need to be developed to transfer workers who lost their jobs due to retrenchments be cause of the effects of tariff reduction and international competition.

Government argues that the job loss in manufacturing is a result of restructuring in the South African economy to global trends in manufacturing, and not because of tariff reductions or supply side measures (COSATU, 2000:113).

2.6.2 Outward-orientation and Industrial Polic

The desirable alternative for South African manufacturing is greater integration into the international economy (Keet, 1996:360). Selective industrial policy ca n be consistent with this through supporting exports of manufactured goods in a manner that is WTO -friendly, through support

technology transfer to South Africa, and through support for small, micro and medium enterprises (SMMEs), spatially-oriented support measures, competition policy and special economic zones. These six aspects or measures of selective industrial policy will be discussed in greater detail in the sub-sections below.

2.6.2.1 Export Assistance

Export promotion has to be seen as a long -term strategy and that the domestic market still has an important role to play. The ideal would be if the domestic market could serve the external dimension (Nel, 1994(a): 8; Haufiku, 2000).

The DTI of South Africa started to reform and rationalise the tar iff structure and the continuous liberalisation of trade. Tariff lines were reduced from about 12 500 in 1990, to 8250 in 1996, and tariff rates were reduced from 210 in 1990, to 6 in 1996 (Hanival and Hirsch, 1998:39). Tariff reform reduces the administrative costs associated with applying a large number of tariff lines and reduces the possibilities for miss-classification of goods.

According to Hanival and Hirsch (1998:39) the objectives of South Africa's tariff liberalisation are twofold: Firstly, it is intended to increase the level of competition on the domestic market and in so doing dampen inflationary pressures while also forcing manufacturers to become internationally competitive. Secondly, the liberalisation is designed to encourage exports by reducing the anti-export bias.

The DTI of South Africa implemented supply side measures including matching grants for outward selling trade missions, exhibition assistance and primary export market research.

The level of the South African exchange rate is very important with regard to the anti-bias of exports, and according to Hanival and Hirsch (1998:40) two issues are important: Firstly, the stability of the real exchange rate is important

in order to allow manufacturers to make long-term investment decisions with some degree of certainty, and with some assurance of the predictability of exchange rate policy. Secondly, and perhaps more importantly, the level at which the exchange rate is pegged is crucial. GEAR has acknowledged the importance of the real exchange rate and will, through the Reserve Bank's operations, attempt to maintain South Africa's exchange rate at a competitive level.

The DTI introduced two programmes in 1997 to achieve its trade objectives namely the Export Marketing and Investment Assistance Scheme (EMIA) and the Export Credit and Foreign Investment Reinsurance programme (Hanival and Hirsch, 1998:42). Under EMIA the DTI has developed a set of financial schemes designed to partially compensate exporters for certain costs incurred in the process of developing new markets:

- *Primary Export Market Research* – This scheme provides assistance to exporters or export-marketing consultants for costs incurred in developing entirely new export markets for manufactured goods.

- *Outward – Selling Trade Mission* – This scheme assists South African exporters to penetrate new markets by assisting them to gain access to foreign buyers.

- *Inward – Buying Trade Mission* – Similar to the above scheme, assistance is provided by facilitating contact between foreign buyers and South African exporters.

- *Exhibition Assistance* – The DTI funds South Africans to participate in foreign exhibitions.

- *Assistance to industry specific sectors* – This scheme encourages associations of specific industry sectors to initiate the setting up of export councils.

The *Export Credit and Foreign Investment Reinsurance programme* aims to reduce the risk exporters have t o face and consists of four programmes namely:

- *Short-term Insurance* – This scheme offers cover for pre -shipment, post-shipment and consignment stock risks.

- *Medium/Long-term Insurance* – Risks covered by this scheme include: contractor's cover, unfair calling of bonds, financial credit cover and foreign exchange cover.

- *Export Finance for Capital Goods and Projects* – This scheme assists exporters of capital goods to offer foreign buyers credit facilities.

- *Export Finance Guarantees for SMEs* – The purpose of this scheme is to assist SMEs to obtain finance for export orders (Hanival and Hirsch, 1998:44).

2.6.2.2 Technology Transfers

According to Hanival and Hirsch (1998:45) if technology development is left to the market, the level of investment in generati ng new technology would be less than socially optimal, therefore government support of scientific and technological development has been in place in advanced industrialised countries. While less developed countries (LDCs) were and still are mostly consumers of technology. The NICs have shown that the endogenous growth theory can be extended, indicating that intervention in the acquisition and absorption of technology can be just as important as support for the development of new technology (Hanival and Hirsch, 1998:45).

Two pillars of technological development that have received particular attention in other countries are investment in human resources and support for technological innovation. A number of interventions have taken place in the development of skills and include: transformation of education and training to

industrial needs, co-ordinating the skills needs of industry with the design of educational curricula, increasing the emphasis on technical subjects at higher levels of education, and increasing industry involvement in training at the vocational level. Functional and selective interventions in education and training surfaced through the experience of the East Asian NICs. Close cooperation existed between the industry, its design and the trainin g of managers, engineers and industrial workers.

The DTI of South Africa introduced a number of technology transfer programmes. Firstly, the foresight programme is a short -term initiative aimed at identifying those areas of science and technology that are likely to yield the greatest economic and social benefits for South Africa in the longer term. Secondly, the innovation fund is part of a major reallocation of resources from the historical patterns of government science towards encouraging industrial competitiveness. The aim is to enable longer-term, large innovation projects through the co-operative efforts of all the science, engineering and technology (SET) players, namely the higher education institutions (HEIs), government science, engineering and te chnology institutions (SETs), civil society and the private sector. Thirdly, the Technology and Human Resources for Industry Programme (THIRP) aimed to provide South African industry with the means to obtain specific responses to its technological needs, a nd to produce a flow of highly skilled researchers and technology managers who understand research, technology development and the diffusion of technology from both the point of view of industry and the academic sector. Providing students with industry-relevant experience and encourages cooperation between SET participants. The following funding mechanisms are available:

- Firms and THIRP invest jointly in research projects where project leaders are on the academic staff of South African HEIs.
- THIRP matches investment by industry in projects where SETI -based researchers / experts serve as project leaders and students are trained through the project.

Technology Innovation Promotion through the Transfer of People (TIPTOP) schemes provides mechanisms to promote the mobility of researchers and students between the industrial participants within THRIP projects. [11] Hanival and Hirsch (1998:47) note that most of the former investments in SET where politically motivated therefore not market competitive and not related to the development needs of the economy. THIRP has a black empowerment component with more than 25 per cent of all students involved in the programme were black and 27 per cent were female students (Hanival and Hirsch, 1998:51).

Fourth, the Support Programme for Industrial Innovation (SPII) designed to promote technology development in manufacturing industries through direct financial and project management support for innovation of competitive products and/or processes. This programme originated from the Innovation Support for Electronics (ISE) programme of 1989. The success of the ISE programme resulted in the expansion of the programme to all manufacturing firms in 1993. SPII provides grants to selected technology innovation projects of 50 per cent of the direct pre-competitive costs involved, up to a maximum of R1, 5 million per project. According to Hanival and Hirsch (1998:57) the SPII has shown a significant increase in promoting internationally competitive exports and created a significant number of jobs.

Fifth, the CSIR is doing research on industrial technology in South Africa on contract basis for the government and together with the NSI forms an important pillar in the implementation of the government's technology policy. Support for technology absorption, innovation development, human resource capacity building and the cooperation of SET institutions are all in line with the broader DTI objectives namely the establishment of downstream high value - added manufactured exports, and the promotion of the SMME sector. According to Hanival and Hirsch (1998:58) the CSIR is an active player in both the developing of SMME sector and the high value-added exports.

[11] See Hanival and Hirsch (1998:48-50) for more on the THIRP programme.

Sixth. Support for Feasibility Studies (SFS) was established to provide assistance in the form of a grant of 50 per cent of the direct cost incurred in carrying out a feasibility study, up to a maximum grant of R30 000 per project. The aim is to assist SMMEs in making informed decisions about possible innovation projects and participation in SPII.

Seventh. The Technology Transfer Programme of the DTI was converted into the Technology Transfer Agency and the roles of the agency will go beyond the policing and advising of licensing and royalty agreements, to include more aspects of facilitating access by firms to needed technologies. According to RSA (1998) a large percentage of technology transfer agreements were not effective, reflecting into high royalties, restrictions on exports and provisions that retard the local firm's abilities to develop their own technological capacities. The argument could then be that imported technology has tended to displace rather than complement local innovation capacity in South Africa.

Eighth. The ceiling value of the SPII grant per project was insufficient to provide an incentive for large innovation projects, by not making a significant contribution to project costs and the extensive application and evaluation procedures would in some cases not justify participation in SPII. This program forms a combined partnership between the government and the private sector. SPII is not a grant -giving project, but rather provides funds on the basis that they are repayable if the project is successful (Hanival and Hirsch, 1998:60).

Ninth. Business Incubators as defined by the Uni ted Nations Development Programme as "a controlled work environment, designed to foster the growth of new and emerging companies". These centres aim to help newly formed SMMEs to overcome financial, marketing and management problems. According to Hanival and Hirsch (1998:61) these incubators have seven characteristics: careful initial selection of early-stage or start-up entrepreneurial firms with potential for growth; designated work spaces provided for each tenant; shared facilities necessary to operate a business; such as communications and administrative support; a small management

team who train, develop and assist new entrepreneurs; access to critical professional services such as legal and financial assistance; affordable rent and fees for services; and businesses 'graduating' after three or four years of residence at the incubator. In South Africa, the entrepreneurial culture is one that needs to be developed and therefore the incubator concept should not only be seen as a business support centre, bu t also a tool to foster an entrepreneurial culture. Finally, a Venture Capital program will be established.

2.6.2.3 Small Business Promotion

In the past it was believed that large firms were responsible for creating the most jobs, but according to research, small companies with less than 100 employees were responsible for as many as eight out of ten new jobs (Hanival and Hirsch, 1998:64). SMMEs are the leaders of economic growth and job creation in both industrialised and developing countries. The most b usiness failures occur in the first two to five years, and if a country can increase the survival rate of its new start-up ventures, it could create significant economic leverage (Hanival and Hirsch, 1998:64). In 1996, there were more than 1 million SMMEs in South Africa employing 15 million people, more than a quarter of the workforce. The Small Business Development Centre (SBDC) estimates that approximately 40 per cent of the overall economic activity in South Africa can be accredited to small-scale enterprise in both formal and informal sectors. They also estimate that approximately 75 per cent of new jobs in South Africa are generated by the small business sector. The SMME sector has traditionally been neglected by government industrial policy (Hanival and Hirsch, 1998:65). The Centre for Small Business Promotion (CSBP) was established to address this problem. The mission of the Centre of Small Business Promotion (CSBP) is to implement, monitor and evaluate the national Small Business Strategy. This strat egy aims to contribute to job creation, income generation, redistribution of wealth, and overall economic growth (Hanival and Hirsch, 1998:66).

The Centre for Small Business Promotion (CSBP) relies on the cooperation between the National Small Business C ouncil (NSBC); the Ntsika Enterprise

Promotion Agency (Ntsika); Khula Enterprise Finance Limited (Khula); the provincial SMME desks; and regional development corporations to operationalise its various support strategies.

2.6.2.4 Spatially-oriented support

The more successful exporting countries like Korea, Singapore and Japan, have found that investment promotion countries need to focus on selective targets or industries in locationally specific areas (Ryan, 1994:13).

In the 1980's Best and Porter argu ed that firm level competitiveness was largely determined by factors external to the firm and included:

- Arrangements integrating producers with their suppliers and customers,
- The existence of sophisticated and demanding product markets, and
- Shared institutions to promote training and research across companies (Hanival and Hirsch, 1998:75).

The implications of these findings were important, not only for firms, but also for government. Companies could no longer rely on their own inherent strengths to survive, but need to work with clients, suppliers and competitors to develop collective strength and resources to compete in the international markets. While government needed to promote cooperation between different industry players, rather than engaging with them on a purely individual basis.

The South African manufacturing sector has made significant in -roads in its restructuring process in response to the competitive pressures. However, Hirsch and Hanival (1998:74) note that South Africa still needs to go f urther than just physical restructuring. They recommended that South Africa needs to expand its comparative advantage through better intra and inter firm cooperation. This would include initiatives between stakeholders at shop floor level, between producers and their customers, across companies with common interests, and between business, labour and government at national and industry level.

South African manufacturers have historically battled with each other for shares in the protected domestic market. T he level of trust between competitors was generally low, with the only examples of joint action being requests to government for import protection. Only a small number of firms are positioned to respond to the new competitive environment, and without experience of cooperation, it is unlikely that businesses will come together to develop shared resources to enhance their competitiveness.

The DTI has developed four processes which could help companies to better their cooperation: Firstly, the "Cluster" and Sectoral Strategy Initiatives. By the end of April 1997, the IDC, DTI and Nedlac performed 16 cluster studies. Although a wealth of industry information had been collected, the majority of the cluster processes:

- Lacked an overall vision of what they were trying to achieve,
- Had not developed programmes which could enhance competitiveness,
- Had limited leadership capacity, and
- Focused mainly on short-term problems and the need for government support.

The DTI then decided to focus on a limited number of "role model" clusters to increase collaboration and securing commitment, and buy in from industry stakeholders. This process involved setting up joint fora with industry in which to collect, share and debate data, and develop an understanding of the industry's "natural" evolution, identifying government or industry interventions which will shift this evolution in a manner that realises their respective objectives, to put together an action plan that effects these interventions, and the constant revision of objec tives and priorities on the basis of new information and experiences (Hanival and Hirsch, 1998:76).

Secondly, the Fund for Research into Development, Growth and Equity (FRIDGE). This program is financed by the DTI and supervised by a subcommittee of Nedla c. It aims to improve local competitiveness, building

capacity of industry stakeholders and to enhance their contribution to policy formulation (Hanival and Hirsch, 1998:76). FRIDGE is a successor of the Japanese Grant Fund (JGF) of 1994. The JGF had a num ber of successful projects and included the following:

- The establishment of Investment South Africa (now Trade and Investment South Africa)
- The creation of a Short Term Export Guarantee Programme, and
- The creation of the Competitiveness Fund

A number of possible research projects have already been identified for FRIDGE. These include: a study into environmental strategy for industrial development, research into South Africa's standards and conformance infrastructure, an industrial study into the tourism sector and the establishment of South Africa's own domestic competitiveness investigation (Hanival and Hirsch, 1998:77).

Thirdly, the Sectoral Partnership Fund (SPF). The SPF was established at the end of 1997 by the DTI to support technical and marketing projects and programmes aimed at improving competitiveness and productivity (Hanival and Hirsch, 1998:77). Funding is provided either for short -term projects like export market studies, training on workplace practices, or more sustained institutional development, such as the establishment of joint quality control facilities, technology clubs or procurement centres. Successful applicants to the SPF receive a grant to the value of 65 per cent of the project cost. The maximum grant considered is R1 million. A n additional R10 000 is available for a "network facilitator" to assist applicants to draft project proposals.

Four partnerships comprising 37 firms have received approval for the funding of projects in 1997 with a total value of R2.8 million. The SPF pla ns to fund a total of 65 partnerships at the end of 2001.

Lastly, the Work Place Challenge. This program was established in 1995 as a joint initiative between the DTI, the National Productivity Institute and Nedlac.

The aim of the program was to improve the firm level performance through the cooperation of business and labour in introducing practices on the shop floor. According to Hanival and Hirsch (1998:78) the program was successful in raising awareness amongst stakeholders of the threats and opportun ities presented by increasing competition and the need for productivity enhancement. After phase one DTI recommended that a second phase based on a sectoral level should be launched which would aim to develop the capacity of the South African industry to c ompete globally. The plastic and footwear sectors have been attracted to this program in early parts. No further information is available on these sectors' progress.

2.6.2.5 Competition policy

Hanival and Hirsch (1998:86) note that the role of competitio n policy should be " to help domestic firms to participate effectively in international competition and to move up the value-added chain".

Competition policy indicates the growing importance of institutions and business laws as critical determinants of na tional economic growth. Porter (1990) suggests that a strong competition policy is essential for the upgrading of technology and innovation in an economy. According to Hanival and Hirsch (1998:81) South Africa has to implement a new competition policy supp orting both microeconomic productivity initiatives and macroeconomic management strategies. Competition policy in South Africa started with the Regulation of Monopolistic Conditions, Act of 1955. According to Hanival and Hirsch (1998:84) the past governme nt failed to establish fair monopolistic structural conditions and anti -competitive conducts. Even in 1986 and 1990 the government failed to make a clear difference between the structure or conduct of large companies possibly due to flaws in both the content and the logistical implementation associated with the Act (Hanival and Hirsch, 1998:84).

The main focus of competition policy has traditionally been that of "economic efficiency". It is argued that it should include the following: wider, developmental considerations, such as contributing to industrial restructuring,

controlling the concentration of economic power, fostering the growth of SMMEs, encouraging innovation, and contributing to the empowerment of previously disadvantaged portions of society (Hanival and Hirsch, 1998:81). The UNCTAD World Investment Report (1998) noted the following: "In the context of developing countries, flexibility in applying competition policy may be even more necessary in order not to impede efficiency, growth or development goals, policy coherence should be ensured between competition policy and other policies aiming at promoting investment" (Hanival and Hirsch, 1998:91).

Most analysis shows that mergers and inter -firm agreements could cause significant welfare losses in the economy. According to Porter (1990), domestic rivalry contributes directly to the international competitiveness of a nation's firms through pressures to innovate.

The role of competition policy is based on the optimising properties of competitive markets. Competition ensures that prices paid by consumers are the same as the marginal costs of producing individual goods and services. Therefore competition encourages the efficient allocation of resources ("allocative efficiency") and could minimise the cost of best technologies and organisational forms ("technical efficiency") needed (Hanival and Hirsch, 1998:81).

Hanival and Hirsch (1998:82) argue that the market structure and industry concentration are the end products of the competitive process. It has been argued that the reason why firms in concentrated industries earn higher profits is not because firms set higher prices, but rather because they are more efficient.

Competition policy could also improve the dynamic efficiency through protecting consumers from the abuse of market power. [12] According to Hanival and Hirsch (1998:83) research indicated the importance of domestic

competition as a specific factor in increasing the rate at which multinational organisations transfer technology into the ho st country. Therefore it is argued that domestic competition policy could be used for both static and dynamic efficiencies. According to UNCTAD (1998), the world investment report on competition policy states: "If anything, the effect of globalisation call s for a direct, necessary and enlarging relationship between the liberalisation of trade and FDI policies, and the importance of competition policy: on the one hand, FDI and trade liberalisation is a means of promoting competition among firms; on the other hand, in order to benefit fully from such liberalisation, countries need to ensure that, as statutory obstacles to contestability are reduced, these are not replaced by anti -competitive practices of firms, be they foreign or domestic" (Hanival and Hirsch, 1998:83).

During the late 1970's, a Commission of Inquiry of South Africa investigated the 1955 Act and found that oligopoly had intensified dramatically in spite of the Act. In addressing this problem it was felt that the 1955 Act was ineffective because it only came in power after a merger or acquisition was complete (Hanival and Hirsch, 1998:84). In 1979, the Maintenance and promotion of Competition Act replaced the earlier statute and the 1979 Act was amended in 1986 to increase the Competition Board's powers further by the ability to act not only against new concentrations of economic power but also existing monopolies and oligopolies. Although the Act in theory came in line with U.S. anti-trust legislation the Act was still judged as ineffective on b oth substantive and logistical grounds (Hanival and Hirsch, 1998:84).

In November 1997 the DTI of South Africa published a set of policy guidelines indicating the following problems with the former Act:

The Act did not address the extent of concentrat ion of ownership in South Africa and the act had not contained any provision against monopolisation per se except in so far as conduct arising there from is not in the "public's interest". No provisions existed to address vertical acquisitions. There were no

[12] Dynamic efficiency is defined as the rate of at which technological constraints change over

restrictions made to address potential restrictive mergers and acquisitions and would therefore be difficult to enforce. The Act did not contain prohibitions of anti-competitive activity.

The DTI of South Africa proposed that the South African monopoli es law be directed at restrictive practices and abuse of dominance. The DTI also proposed that a separate Securities Act be drafted (which would include aspects of the existing Companies Act) to deal solely with matters of corporate structure, including me rgers and acquisitions (Hanival and Hirsch, 1998:85).

The following recommendations were made towards the relationship between market forces and competition policy by the DTI in 1998: Firstly, South Africa will not need an active competition policy, or in dustrial policy, as trade and investment liberalisation would act as regulators of the domestic economy. Secondly, the large oligopolistic structure in South Africa supports strong competition and promotes international competitiveness and that an interventionist competition policy that interferes in this market structure could have dreadful efficiency consequences. Thirdly, competition policy should deal solely with efficiency issues and not wider questions of development meaning that competition policy sh ould not be subverted to industrial policy (Hanival and Hirsch, 1998:87).

2.6.2.6 Special Economic Zones

A final form of support that a selective industrial policy can provide within an overall outwardly oriented strategy is the declaration of, for pur poses of this study "special economic zones". These include free trade zones, export - processing zones, and industrial development zones, amongst others. According to De Villiers (1994:4) five elements of special zones for export - oriented manufacturing is:

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time (Hanival and Hirsch, 1998:82).

- Free import or export of goods in manufacturing and services;
- Free Trade Zones (FTZS) or Export Processing Zones (EPZs);
- Bonded Manufacturing Warehouses (BMWs);
- Automatic import licenses and duty exemptions on imports in the manufacturing process and
- Automatic provision import licenses and duty drawbacks.

An example of a country that has used special economic zones as an active industrial policy, is the Korean government who transformed its small uncompetitive domestic manufacturers into world exporters through currency devaluations and awarding free trade status to export manufacturers (De Villiers, 1994:4).

Regarding the uncompetitiveness of the South African manufacturing sector (Suleman, 1998:26) and as indicated by (Ligthelm and Wilsenach, 1992; McCarthy, 1986; Schulze, 1997&1999) manufacturing plays a significant role in EPZs exports. This could help to create environments for manufacturing firms to become more competitive internationally, without disrupting local manufacturing in South Africa, by subjecting previously sheltered firms to high foreign competition.

The next chapter will describe in detail the use of special economic zones as selective industrial policy measures.

2.7 Summar

This chapter argued that a selective industrial policy might be needed in South Africa's manufacturing sector to boost its exports and attract more FDI.

Section 2.2 gives an overview of the 25 main sub -sectors of South Africa's manufacturing sector in terms of employment, exports and imports. It also predicted a forecasted growth rate indicating how each sector is coping with

the restructuring process. Showing that some sectors, like the food industry, are little affected while others find it more difficult to restructure.

Section 2.3 examined the competitiveness of the South African manufacturing sector. Indicating that the international isolation of South Africa and the gold price booms of the 1970's and 1980's had a negative impact on the exports of manufactured goods. This section also concludes that South Af rica is ranked as one of the least competitive nations.

Out of 46 countries, South Africa's quality of people is ranked the lowest, while the Finance and Infrastructure categories performed better than the rest of the world. Manufacturing firms in South Africa, especially in labour-intensive industries such as food processing, footwear, textiles, furniture, etc., would have to remain competitive despite relative high labour costs. Productivity could be increased through the application of high technology, automation, and by finding ways in which to keep distribution costs as low as possible. South Africa has also one of the lowest degrees of specialisation out of a group of comparative countries and is argued to be the result of the past IS industrial strategy. Local manufacturers were sheltered from international competition by high tariffs and import quotas and prohibitions. Resulting in a lack of strong domestic competition due to oligopolistic and monopolistic industries.

Section 2.4 provides an overview of the spatial distribution of manufacturing in South Africa. The SDI programme aims to address the inequalities in the distribution of South African manufacturing firms. Studying the provincial contributions to South Africa's GDP it, clearly confirms t he inequalities. Gauteng is the largest contributor to the national economy with 38 per cent followed by KwaZulu-Natal and the Western Cape.

It was shown that Northern Cape has virtually no industrial base and therefore would not be suitable location for an IDZ, except for areas like Upington and Kimberley, which have airports and this could also be argued in the case of the Northern province. Eastern province has the highest unemployment rate

(48.4 per cent) in South Africa and the establishing of an IDZ in this region could help to reduce it.

In section 2.5 the inflows of Foreign Direct Investment (FDI) in South Africa were examined. It was argued that multinational enterprises (MNEs) might handle the cost-related barriers to entry better than domestic f irms, because of their size, proprietary assets and brand names. Various factors that made the rate of investment for both local and foreign investors less attractive to invest in Africa were mentioned. The impact of FDI on a country depends on many factors, such as the role of the MNEs in the economy, the sector that will receive FDI, the type of investment, and linkages with foreign subsidiaries in the host economy, and the conditions in the host economy.

FDI in developing countries are concentrated on the development and export of natural resources and have shown a significant contribution in sharing high exploration and development costs, bringing know -how and technology and sustaining and expanding exports. It was also noted that South Africa needs FDI for training and development, high technology and infrastructure, primary education and vocational training.

Numerous factors have been mentioned that could have resulted in the reduction of FDI in South Africa, and include a slowdown in investment because of uncertainties in emerging markets, political uncertainty around South Africa's national elections, decreased investment from South East Asian partners dealing with internal problems and the volatility of the South African exchange rate and uncertainty around interest rates.

In analysing the state of FDI it was concluded that FDI in export -oriented sectors in South Africa is still too low and not growing significantly. Therefore, it were suggested that the conditions facilitating FDI, need to be i mproved in order to use the resources and technology of the world market to improve the current economic situation in South Africa.

In section 2.6 the need for a selective industrial policy for manufacturing development was stressed out. It was argued tha t the South African manufacturing sector faced particular pressures from globalisation due to its nature, due to its spatial distribution and due to its lack of human skills and resources. In this light, the present section takes the argument one step further in arguing that a laissez-faire approach to manufacturing development will fail to address these problems. Section 2.6.1 argued it was largely due to wrong industrial policy in the past that the manufacturing sector is currently not sufficiently internationally competitive. Although the manufacturing sector diversified at a great pace in terms of production, by the 1970s growth had begun to slow down and the negative consequences of IS industrial policy were becoming apparent. These negative aspects inc luded the existence of anti-export bias and import dependence especially of capital goods.

Section 2.6.2 suggested that a more appropriate industrial policy should focus on integrating the South African manufacturing sector into the world economy, and that spatially or location-focused support programmes that are allowable under WTO -rules, would be necessary to address the low level of competitiveness in the South African manufacturing sector.

Chapter 3:
Special Economic Zones as Selective Industrial Policy Measures

3.1 Introduction

In chapter two it was argued that South Africa's manufacturing sector is facing particular pressure from globalisation due to its nature (being dependent on labour-intensive, aging industries dependent on natural resources), due to its spatial distribution (around the historical patterns of mining development), due to its low lack of human skills and resources. It was also argued, that these disadvantages are worsened by the slow pace of FDI inflows into the South African manufacturing sector.

It was shown in chapter two that a laissez-faire approach to manufacturing development will fail to improve the international competitiveness of South Africa's manufacturing firms. As was outlined, it was largely due to wrong industrial policy in the past that the South African manufacturing sector is currently not sufficiently internationally competitive. Consequently, more appropriate industrial policy should focus on integrating the South African manufacturing sector into the world economy and that spatially or location-focused support programmes that are allowable under WTO -rules would be necessary to address the low level of competitiveness in the South African manufacturing sector. Chapter two specifically argued that selective in dustrial policy can be consistent with this through supporting exports of manufactured goods in a manner that is WTO -friendly, through support technology transfer to South Africa, and through support for small, micro and medium enterprises (SMMEs), spatially-oriented support measures, competition policy and special economic zones.

The previous chapter concluded that the use of selective intervention through the incentives offered as part of EPZs could contribute to the competitiveness of the manufacturing sector. Because Industrial Development Zones (IDZs)

derives from the more general institutional concept of Special Economic Zones (SEZ), this chapter will provide a theoretical analysis of SEZ in its various forms, as well as the manner in which the concept is currently applied across the globe.

The layout of this chapter is as follows. Section 3.2 defines the various concepts of SEZs. In section 3.3 free trade areas (FTAs), Free Ports (FPs), Free Industrial Zones (FIZ) and Free Trade Zones (FTZs) are di scussed. Section 3.4 discusses EPZ as one of the most frequently found and well - known types of SEZ. A brief overview of the various SEZs that are operating (pre envisaged) in Southern Africa are provided in section 3.5. Section 3.6 concludes with a summary.

3.2 The Concept of SEZs

SEZs have been given various names in the international trade literature to describe the main types of activities performed in these zones (Ge, 1999:1). Ranging from free -trade zones; duty -free zones; free -export zones; free - investment zones; free -economic zones; free -enterprise zones; free manufacturing zones and industrial estates, to industrial or scientific parks. Bonded warehouses, free ports, and duty -free shops could be regarded as zones of special types where services are at the centre stage of economic activities. Free banking zones (FBZs) or free insurance zones (FISZs) also fall in this category (Ge, 1999:2).

Specific terms are often used to describe a zone's main characteristic, such as electronics export-processing zones to signify the dominance of electronic manufacturing. The name export-processing zone will be used in this study to signify the dominance of export oriented production activities that tend to be most common among the real-world zones.

A Free Trade A rea or (FTA) is formed when two or more nations agree to eliminate substantially all import tariffs and duties and in theory, non -tariff barriers to trade between them.[13]

A customs union is formed when a group of countries come together to offer trade priv ileges exclusively to each other (Schulze, 1997:5). Haight (1972) argue that Customs Unions are based on political agreements whereas Free Trade Areas form a commercial agreement between countries (Tovias, 1973:602). However FTAs are not just based on comm ercial intents, but as Tovias (1973:603) notes, it also includes financial aid, and cartel and anti - dumping regulations.

According to Schulze (1997:5) out of a legal framework the only major difference between a customs union and FTA is that in a customs union, member countries try to build a common tariff wall towards the outside world. While in a FTA the member countries are free to maintain or modify independently their external structure of tariffs and other barriers to imports from third countries.

MacElwee (1926) defines a Free Port as follows: "The modern free port is an area of a port separated from the customs area of a nation by a stockade. Ships may enter such as a port, discharge, load, and depart without customs formalities. The goods may be stored, repacked, manufactured, and re - exported without customs formalities. Only when the goods pass the barrier to reach the consuming public of the country do they undergo customs revision and pay the necessary duty. A free port is a 'Customs Outland' w ithin the political boundary of a country."[14]

According to Rhee (1985) "The rationale of the export -oriented or outward-looking approach is to create circumstances of neutrality between production for the domestic and the foreign markets" (Ligthelm and Wil senach, 1992:399). McCarthy (1991:461) argued that this might be attained through

[13] See Schulze (1997:6) for types of FTA.

the overall removal of protective tariff barriers to create an internationally competitive economy.

Due to the socio-economic costs of such a radical approach, governments would argue that they would rather protect the domestic economy than subjecting local firms to foreign competition through trade liberalisation. In light of this Ligthelm and Wilsenach (1992:399) argue that a possible alternative for providing neutrality could be isolated and restricted areas (such as Free Ports, Free Trade Zones, Free Industrial Zones, Export Processing Zones, etc.) where free trade could take place, often more attractive to governments.

The aim of free ports was to stimulate economic activity by exempting foreign trade goods from customs requirements upon arrival in the host country. Free Trade Zones on the other hand, pursues the same purpose, namely to motivate and increase foreign trade by eliminating the payment of customs duties unless and until foreign merchandise is imported into the country's customs territory (Schulze, 1999:196). Due to the changing nature of trade and investors demands 'specialised free trade zones' had evolved namely Export Processing Zones (EPZs) and Free Industrial Zones (FIZ).

The predecessors of EPZs are free-trade zones (FTZs) and free ports (FPs) which date back to the Roman and Greek empires. (Nel, 1994(b); Schulze, 1997:1). The Roman Empire established a free port (acting as a customs-free centre) on the Aegean island of Delos to promote trade between Egypt, Greece, Syria, North Africa, Asia and Rome and later Genoa, Venice and Gibraltar followed (Jayawardena, 1983:427).

According to Celler a FTZ "is an isolated, enclosed and policed area in or adjacent to a port of entry, without a resident population, furnished with the necessary facilities for loading and unloading, for supplying fuel and ship stores, for storing goods, and for reshipping them by land and water-an area,

[14] RS MacElwee *Port Development* 1926:381 (quoted from HCAW Schulze, 1997).

within which goods may be landed, stored, mixed, blended, repacked, manufactured and reshipped without payment of duties and without the intervention of the customs officials" (quoted from Schulze, 1997:17).

Open Free Zones (OFZs) are an accumulation of customs warehouses indicating a move away from the free trade zone/free port principle (Schulze, 1999:200). These zones are currently being implemented in Europe.

The shift from customs laws to tax laws in most free ports and free trade zones have resulted in the abolishment of past custo ms advantages. Under the new European legislation the same advantages could be achieved that historically been used to establish free trade zones and free ports by establishing a customs warehouse (Schulze, 1999:198).

The general advantage of a customs wa rehouse compared to a conventional free trade zone/free port is that both the transport to and from a customs warehouse are merely recorded by the customs authorities without the goods having to cross the border from the domestic tariff area, which would b e the case in a free trade zone / free port.

A Free Industrial Zone (FIZ) can be defined as an administratively and sometimes geographically designated area that enjoys a special status and allows for free import of equipment and other materials to be use d in the manufacture of goods earmarked for export. This special status generally involves favourable legal provisions and regulations creating incentives for foreign investment (Schulze, 1997:3).

United Nations Industrial Development Organisation (UNIDO) defines an EPZ as a small, closely definable area within countries within which favourable investment and trade conditions are created to attract export oriented industries usually foreign owned (Nel, 1994(b); Schulze, 1997:3).

3.3 Generic Free Trading Areas

Under this heading the following general free trade areas will be discussed: free trade areas (FTAs), Free Ports (FPs), Free Industrial Zones (FIZs) and Free Trade Zones (FTZs). Because of the prominence of FTAs for developing countries in the light of the recent creation of a number of such areas (such as the EU-South African FTA) section 3.3.1 will be the most exhaustive.

3.3.1 FTAs

The General Agreement on Tariffs and Trade (GATT) currently serve as a framework for the establishing of an FTA. G ATT functions as a central international trade organisation with its main objective to coordinate national policies on international trade (Schulze, 1997:6).

Under GATT, the Uruguay Round of Multilateral Trade Negotiations was launched on 20 September 198 6 and out of these agreements evolved two new trade institutions: the World Trade Organisation (WTO) and the WTO Appellate Body (Schulze, 1997:7). The WTO came into in effect on 1 January 1995. In terms of the Uruguay Round Final Act, the scope of the WTO is to provide the common institutional framework for the conduct of trade relations in matters relating to the various instruments that make up the Final Act. By targeting trade expansion to raise standards of living, to ensure full employment and an incre ase in income, constitute the ultimate aim of the organisation.

Examples of FTAs are the Association of South-East Asian Nations (ASEAN), the North American Free Trade Agreement (NAFTA), the Israel FTA, the Central European Free Trade Agreement (CEFTA) and recently formed Trade Development and Co-operation Agreement between South Africa and Europe.

The ASEAN free trade area was established in Bangkok on 8 August 1967 by Indonesia, Malaysia, the Philippines, Singapore and Thailand to improve

economic integration and later expanded to areas like politics and external relations (Schulze, 1997:12).

The United States has entered into three regional FTAs. The American Free Trade Agreement (NAFTA) is an expansion of the Canada -United Sates free trade agreement (Canada-U.S. FTA) including Mexico as third partner. According to Schulze (1997:13) the rules and principles are six fold. First, to eliminate barriers to trade, and to facilitate the cross border movement of goods and services between the territories of the parties. Second, to promote conditions of fair competition in the free trade area. Third, to increase investment opportunities in their territories. Fourth, to provide adequate and effective protection, and enforcement of intellectual property rights in each party's territory. Fifth, to create effective implementation and application for this agreement and for its joint administration and the resolution of disputes. Last, to establish a framework for further trilateral, regional and multilateral co-operation to expand and enhance the benefits of this agreement.

In 1985, an agreement was signed between the United States and Israel (Israel FTA) that allows American producers to compete freely in Israel and vice versa (Schulze, 1997:14). The Israel FTA was formed to eliminate all tariffs over a ten-year period and also non -tariff barriers were reduced. In order to qualify under this agreement, a product must be subjected to the rules of origin, requiring that the product be imported directly from the exporting country or if it passes through a third country not be sold in the domestic economy.

On 21 December 1992, the Central European Free Trade Agreement (CEFTA) was established between four countries namely the Czech Republic, the Republic of Hungary, the R epublic of Poland and the Slovak Republic. The main objective of CEFTA is to create a free trade within Central Europe by 1 January 2001 (Schulze, 1999:15). The EU has signed thirty -three FTAs of which sixteen are currently in operation (Phaswana, 2000:3).

According to Bertelsmann-Scott, et al. (2000:17) the Trade, Development and Co-operation Agreement (TDCA) between the European Union (EU) and South Africa could be seen as 'a landmark understanding between the developed and the developing world'.[15]

Erwin (2000:7) points out two key aspects influencing this agreement namely, the increased support from the EU helping S.A. in restructuring its economy through the expected enhanced flows of trade, investment and technology. Secondly, market opening could en hance productivity and stimulate exports, contributing to economic growth.

The EU is South Africa's largest trading partner, with imports from Europe worth R5.5 billion and exports to Europe worth R4.1 billion (Phaswana, 2000:1).

In negotiating the EU -SA agreement, South Africa had to face problems like its newly developed democratic system and the uncertainty with which Pretoria re-entered the global market after 1994 (Phaswana, 2000:2). According to Davies (2000:5) SA's objectives were twofold in searching a new trade agreement with the EU:

- To remove the discrimination against South African goods in EU markets resulting from the exclusion of the country during the apartheid years from a range of preferential trade agreements the EU had been developing with various countries; and
- To secure better terms of access to one of the major markets of the world, one of South Africa's main trading partners.

In 1996, the Department of Trade and Industry (DTI) of South Africa developed a 'butterfly' strategy to deve lop trade and cooperation between countries of the developing world (Davies, 2000:6). Africa forms the body of

[15] The free trade agreement between South Africa and EU is not the first agreement between a developed country and a developing country. Former agreements include EU and Israel and EU and Turkey (see Bertelsmann-Scott et al., 2000:23).

the butterfly; the Indian Ocean Rim and Asia, including China (form one wing); and in Latin America and the Atlantic (form the other wing). Acco rding to Kievit (1997:1) this strategy was implemented to expand South Africa's business to Asia and to the Southern African Development Community (SADC) countries, in reaction to the relatively unsuccessful free trade agreement with EU at that given time.

The main features of the EU -SA FTA are as follows: the EU will reduce its import duties imposed on South Africa to approximately 95 per cent of its tariffs within ten years. [16] Secondly, agricultural products formerly excluded from the agreement was reduc ed from 46 per cent of South Africa's current agricultural exports to the EU to around 26 per cent. Thirdly, a specific agricultural safeguard mechanism will be established, which could resolute to 'appropriate solutions' if imported agricultural goods fro m both countries causes serious volatility in the market of the other. Fourthly, South Africa needs to increase its reduction on duties imposed on the EU from 81 per cent to 86 per cent over a period of twelve years.

Although the EU -SA FTA comply with the rules of the World Trade Organisation (WTO) and the African, Caribbean and Pacific (ACP) countries could still severely limit access to the EU market (Davies, 2000:14).

According to Bertelsmann-Scott et al. (2000:24) four reasons could be given why South Africa did not receive full -membership of the Lomé Convention. [17] First, the South African economy was too sophisticated for its quality, with South African exports to EU contributing more than a third of total exports from ACP countries. Second, EU wanted to protect its own vulnerable sectors (mostly agricultural related). Third, other countries with the same level of

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[16] According to Davies (2000:9) the tariff reduction will be most extensive to industrial products and it also include agricultural goods for example 60,000 tons (72,000 tons are currently exported to EU) of ca nned fruit will be allowed to enter at half the most favoured nation duty.

[17] Lomé Convention aims to create non -traditional export sectors in African, Caribbean and Pacific countries. An example in Southern Africa is Zimbabwe's is cut flower industry (Davies, 2000:13).

development as South Africa (like Brazil) might also want to join the Lomé Convention. The last reason was that the Lomé Convention expired February 2000.

Following the end of the Lomé Convention the EU want to create FTAs with ACP countries based on trade instead of continuing with tariff preferences and aid programmes (Bertelsmann-Scott et al., 2000:28).

The main parameters of the EU -SA FT A (Lowe, 2000:39) are: First, WTO compatibility: to ensure that the agreement is not challenged by third parties. Second, South Africa has to go through a series of structural reforms to make its economy more competitive backup by support from EU to help w ith SA development process. [18] Third, respecting EU and SA common policies, the FTA should be consistent with internal policies for example in line with SA's Motor Industry Development Programme (MIDP) and Europe's Common Agricultural policy (CAP). Fourth, the need for coherence with other agreements, the EU -SA FTA not to undermine SA's relationships with other trading partners such as the ACP countries and Mediterranean countries. Last, regarding the effect of the agreement on regional dimension. This means that the agreement should be consistent with Southern Africa Custom Union (SACU) countries and also Botswana, Lesotho, Namibia and Swaziland (BLNS countries). Europe may not gain better access than the Southern Africa Development Countries to SA's market through the agreement.

The Congress of the South African Unions (COSATU) supports the SA -EU FTA (COSATU, 2000:107) and according to COSATU (2000:108) the greatest threat is the trade part of the agreement. In chapter 4 this will be discussed in more detail.

[18] Lowe (2000:41) note two important areas of the agreement to help South Africa with the restructuring process namely differentiation and asymmetry. Differentiation is the difference in the coverage of free trade between countries. South Africa would grant duty free status to 86 per cent of its imports from the EU, whereas the EU will accept 95 per cent of SA exports duty free. Asymmetry refers to the pace at which tariff cuts will take place, tariff reduction will happen much faster and easi er on the EU side (could be finished in 2002) than on the SA side (between 2006-2012).

The SA-US FTA should be seen as a long-term relationship (Links, 2000:31). Wakeford (2000:101) notes the importance of a win -win relationship through addressing political, social and economic challenges facing SA. The following sub-sectors of manufacturing could benefit immediately from the EU -SA FTA and include: steel and steel products, ferrow alloy, aluminium products, furniture and automotive products (Davies, 2000:10).

The EU has chosen to manage trade rather than using free trade holistically and remains protective on most of its agricultural products fearing competition of developing countries (Davies, 2000:11).

South Africa and the EU both indicated that tariffs on certain products would remain until a later stage. SA is keeping tariffs on its sugar, beef, wheat and textiles industries, while EU will protect its wine, fruit and other agricultural industries (Links, 2000:32).

The benefits of FTAs can be summarised as follows:

- Increased market access and trade relationships between countries.
- By entering a country could promote trade diversion, aiming to equalise their bilateral trade balance.
- Strengthening political, cultural and even military relationships between countries
- Reduced barriers between countries could create new trade opportunities.
- Participating countries (consumers and producers) are able to obtain low-cost foreign supplies instead of using high-cost protected supplies. According to Petrillo (1986) and Schott (1989) such a shift could cause economic growth and increases efficiency (cited in Schulze, 1997:11).
- According to Keet (1996:361) two key advantages exists for less developed countries (LDCs) to form regional groupings; Firstly, more comprehensive regional resource bases, economies of scale in infrastructural investment and production, and larger internal markets provide them with a stronger base for self sustaining integrated

development programmes, as well as more competitive and effective interactions with the international economy. Secondly, a strong alliance with other similar groupings, especially amongst the countries of the South-that effective efforts can then be made to challenge and change the new liberalised global order that carries such dangerous implications for the weaker economies and peoples of the world -and, indeed the very stability and security of the world itself.

A number of shortcomings of FTAs are the following:

- The complexity of some trade barriers can't be overcome by bilateral efforts.
- FTAs are limited to tariff reductions and therefore it's unli kely to bring substantial trade reforms. According to Keet (1996:361) developing countries pursuing integration solemnly through national liberalisation programmes into a global economy by organising themselves into regional blocks have to be careful becau se the stronger trade partner could demand more than they could deliver, resulting in domestic market distortion. While emerging economies organise their own trading, and regional blocks might be a more sensible approach, Keet's (1996:361) recommendation f or South Africa is to form more closely defined trade strategies with its neighbours.
- The limitation of FTAs to selective sectors and products may threaten multilateral efforts.
- FTAs have been categorised as trade distorting (Schulze, 1997:11).

3.3.2 Free Ports

A "free port" functions merely as a trans -shipment (on and off loading of cargo) centre or a bonded warehouse facilitating international trade, whereas an FTZ is an onshore manufacturing enclave that is free from domestic laws (Schulze, 1997:3).

A FP is a fenced and patrolled area and when situated in a seaport, it does not necessarily include the entire harbour area. It is "free" and to be regarded as a "foreign territory" only with respect to customs and excise laws, regulations and formalities (Schulze, 1997:27). Directly or indirectly, it is still within the jurisdiction of the customs authorities, since it is not an independent political entity, but always part of a country and thus part of that country's customs territory. In other words, despite the fact that a specific area within a harbour is a free port, customs officials still have jurisdiction over the goods that are within that free port.

According to Schulze (1997:28) the main advantage of a free port is the reduction of customs formalities that could lead to the shortening of the unloading process when ships enter the harbour.

A free port accepts legally admissible merchandise and the accompanying transportation media from all nations with a minimum of customs procedures. The customs inquiry occurs at the surrounding fence and not at shipside or in the warehouses within the free port area. Brokers, forwarding agents, merchants, ship chandlers and similarly engaged persons or firms are permitted to have office and warehouse space withi n the free port area (Schulze, 1997:27). Sorting, cleaning, manipulation and similar functions are usually permitted in addition to warehousing. Manufacturing may or may not be legally sanctioned, and if legally possible, may or may not be allowed in practice.

In general, a free port permits neither extensive retail trade nor the on -the-spot consumption of goods. Exception is made in the case of ship chandlering, which may be carried on by special permission. A free port usually offers the possibility of exhibition of merchandise. It is not permitted to take up residence within the area of a free port; however, exceptions to this rule apply for some employees, such as watchmen. In most instances a free port is managed either directly by a branch of local go vernment or by a corporation of which the majority shareholder is a local government (Schulze, 1997:28).

According to Schulze (1997:29) Free Ports could be divided into three groups having the ability to overlap namely: Firstly, a free port area situated in a highly industrialised country with extensive export activities, which facilitates such trade, i.e. export and import, activities. Secondly, a free port as a hub of sea transit, which serves as a transhipment point and trade centre for a large area, with its main task being the distribution of goods. Thirdly, most free ports are situated in less developed countries, which serve as a major attraction for trade and industry of that country and thus provides job opportunities and support to the economy of the customs territory.

Examples of free ports are found in countries like Hong Kong, Singapore and Hamburg. The whole of Hong Kong serves as free port area since 1842 providing deep-water off and on loading harbour facilities and warehouses for multi-storage usages (Schulze, 1997:30). The Hong Kong government offers investors tax holidays, subsidies, no import and export duties, no exchange controls, tax-free profits and banking facilities (Schulze, 1997:31).

Like Hong Kong, the entire Singapore functions as a free port with the main area designated as a fenced -off area situated at the port of Singapore. The Port Authority of Singapore provides loading, unloading, storage, sorting, distribution, repacking, bunkering and banking facilities to investors (Sc hulze, 1997:32). Manufacturing in Singapore is not allowed in the Port Authority's public warehouses but may be performed in other buildings specifically designated for such purposes within the port area (Schulze, 1997:32).

Singapore, unlike Hong Kong, of fers foreign investors more specific advantages than local investors (Schulze, 1997:32). Firstly, Pioneer industries (industries not operating in Singapore) are offered tax holidays of five years that could be extended for another five years at a concessio n rate of ten percent. Secondly, granting investment allowances of up fifty percent for expenses on plant, machinery, patent rights and factory buildings. Thirdly, also granting capital allowances on manufacturing, technical services, construction and various other services.

The Port of Hamburg is situated on both sides of the Elbe River serving the North Sea-Atlantic shipping routes. The Port of Hamburg as well as other German free ports provide services such as loading and unloading, forwarding, storage, sampling, sorting, repacking, refilling marketing, labelling, warehousing, shipbuilding and ship repair (Schulze, 1997:33).

However, the port of Hamburg is the only port in Germany that is allowed to offer manufacturing, assembly and processing operations to investors. Trade and investment incentives ranging from free customs and excise duties to free value added tax (Schulze, 1997:33). German products entering the port are seen as exports and are also entitled to be exempted from custom and excise duties. Customs duties are only payable if goods in the port are sent to Germany's local market (Schulze, 1997:33).[19]

The general advantage of open free zones (OFZs - customs warehouses) compared to a conventional free trade zone/free port is that both the tran sport to and from a customs warehouse are merely recorded by the customs authorities without the goods having to cross the border from the domestic tariff area, which would be the case in a free trade zone/free port.

The disadvantages of OFZs are firstly that goods cannot be moved freely inside a customs warehouse and if goods have to be moved from one company to another it must first be declared by the customs authorities. Secondly that the company operating in a customs warehouse have to pay for security due to the fact that there are no fences surrounding the premises.

3.3.3 Free Trade Zones

The aim of FTZs is to encourage and expedite foreign trade by eliminating the payment of customs duties while most of the civil laws and government

[19] For a more detailed background on these ports see (Schulze, 1997:29-40; Schulze, 1999:198-201).

controls are related to the domestic economy are immune in most of the zones (Wall, 1976:479; Schulze, 1997:17)

Examples of FTZs are Macau in China, Madeira in Portugal and the whole country of Thailand.

The advantages of FTZs include the following:

- Any goods entering the FTZ qualify for export incentives presented by the host country.
- Goods imported from any country in the world are landed and stored quickly without customs or any other administrative formalities.
- The owner's goods can be withdrawn at any time in an y quantity from the zone.
- Companies using FTZs can improve their cash flow substantially, especially in times of tight money conditions, since customs duties are not payable while goods are in the zone or when they are exported. Only when the merchandise c rosses the border of the country of location the import duties become due and payable.
- Goods that are shipped into the FTZ are not subject to customs duty although customs authorities are free to do their surveillance; the owner has complete and unrestricted access to the merchandise at any time. Therefore he may utilise warehouse receipts for bank loans, assignments of title or for collateral securities.
- The merchandise in a FTZ remains the property of the seller, this create an opportunity for the seller to use available space to advertise its products.[20]
- Regional development: FTZs are frequently located in remote and relatively poor regions of the country because they facilitate industrial decentralisation and regional development (Schulze, 1997:18).
- Goods that are shipped into an FTZ may be altered, labelled, relabelled or remarked to meet the host country's requirements, or to avoid

[20] The title of the merchandise remains with the seller while the goods remain in an FTZ

penalties for failure to mark merchandise properly. [21]The storage of goods in warehouses situated within an FTZ could result into reduced insurance premiums.[22]

- Unlimited periods of storage are provided in FTZs that gives foreign traders more flexible delivery dates and time to wait for the best market conditions.
- Goods in excess of host country import quotas may be brought into an FTZ and held at the zone until the next quota period since there is no time element or pressure to move out the products. In most of the FTZs there are no quotas imposed.
- The presence of customs officers at FTZs facilities prompt recovery of duties or state taxes paid when merchandise enters the zone only to be exported at a later period (Schulze, 1997:19).

One of the disadvantages of a FTZ is the payment of customs duties on consumption and processing of import goods in the zone.

According to (Schulze, 1999:197) one of the main disadvantages of the European Union's free trade zones relate to the treatment of Community goods. Usually goods in the customs territory have Community status, but with regard to free trade zones, in terms of art 313 (2) of th e implementation provisions, goods transported to or from a free trade zone shall not be deemed to be Community goods unless it can be established that they have Community status.

Another disadvantage of the EU free trade zones concerns the reporting requirements with regard to non -Community goods. Stating that all activities involved in the entry and storage of goods on the premises of the operator have to enter the records immediately, in terms of art 176 of the Community Customs Code, except in cases of transhipment and short-term storage.

(Schulze, 1997:18).

[21] One example is the Panama Colon Free Trade Zone, where a multinational Japanese electronics firm repacks electronic items for re-exporting (Schulze, 1997).

[22] The calculation of the insurance is based on the value of the warehouse goods, plus freight charges and excludes duties and taxes.

3.3.4 Free Industrial zones

After the first FIZ was established in Magauez, Puerto Rico in 1962 the framework of the FIZ changed to a new modern concept, and is described as "a designated area, frequently near a po rt or an airport, which has a basic infrastructure of common facilities and services, is considered for customs purposes as outside of the territory of the host country, and where an incentive package is offered to potential investors for the establishment of manufacturing plants primarily oriented towards foreign markets."[23]

Therefore, a FIZ could be seen as a modern version of an FTZ, based on industrial purposes. Main reasons for choosing FIZs are to attract foreign direct investment, promotion of exports and to generate employment (Schulze, 1997:51).

A FIZ model was developed at Shannon, based on two concepts, the free trade zone and emerging industrial estates, i.e., "a tract of land which is subdivided and developed according to a comprehensive plan for the use of a community of industrial enterprises."[24]

Advantages offered by FIZs are complete infrastructure facilities, including the lease of suitable factory accommodation and permitting duty free access of raw materials, components and capital equipment and similar facilities for export.

FIZs don't have to be export-oriented, although most zones are. In the early 1980's, about eighty-five per cent of the goods produced in the Colombia's

[23] JD Amado 1989, (quoted from Schulze, 1997)

[24] Bredo 1960 notes that Americans prefer to use terms like "industrial parks", industrial districts, and "industrial tracts" to describe industrial estates. He prefer to use the term industrial estates, its less confusing and limiting, implying the possible provision of buildings and improved land (cited in Schulze, 1997).

FIZ were sold to the domestic market. Since the mid 1980's the government of Colombia has decided to expand FIZs to foreign markets.[25]

FIZs can also be very versatile due to the emerging of special sub sectors; these zones are built according to the firms' needs, which could not relocate under existing zones.

The objectives of FIZs can be summarised as:

- Promoting exports through searching for new markets for domestic products, or export diversification through the promotion of new trade.
- To generate foreign exchange: the objective is to create a positive effect on the host country through the inflow of hard currencies.
- Employment generation: FIZs could be useful in reducing domestic unemployment.
- Attraction of foreign direct investment: FIZs could attract foreign investors through lower production costs (Schulze, 1997:52).
- Industrialisation: FIZs try to create forward and backward linkages with the domestic industry.
- To develop rural areas, FIZs are often located in poor regions of the country because they could facilitate in industrial decentralisation and regional development.
- Deregulation of exports industries: FIZs aims to shield the Export sector from most of the protectionism of the host country.
- Open Market" policy testing: FIZs can be seen as "laboratories" were tests are done to determine if open market policies could work. That, if successful, could be applied later in the rest of the country (Schulze, 1997:53).

Schulze (1997:53) points out some incentives, which could influence a firm's decision to invest in a FIZ. They are:

[25] During 1985, a new FIZ act was introduced in Colombia, explicitly aiming " to promote and develop the process of industrialisation of goods destined primarily for foreign market" (Schulze, 1997).

- Duty free import regime: Especially MNEs that are vertically integrated, as imported materials constitutes a considerable amount of their inputs.

- Market access: FIZs are primarily export-oriented, however it could give the investor access to the domestic economy of the host country. Zones could help to expand business opportunities to reach global markets.

- Home market competitiveness: This could be accomplished by lower production costs, which are created by special advantages offered by governments. Which could result in a competitive edge for the transnational company's home market.

- Vertical integration: Due to the benefits related to free importing and exporting of raw-materials and semi-processed components in these zones, FIZs could be suitable locations for offshore manufacturing.

3.4 EPZs

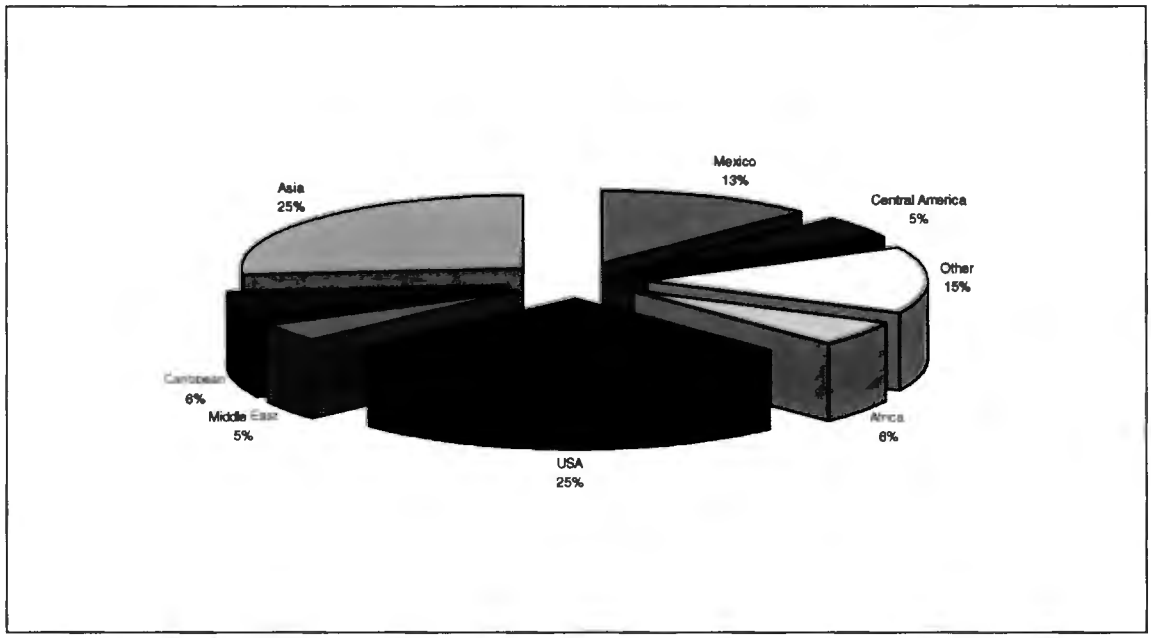
In this section the types of EPZs, the theory of EPZs and the incentives offered to local and foreign investors will be discussed.

3.4.1 Scope of EPZ world-wide

As a policy means of achieving greater economic liberalisation and growth, the concept of EPZs has gained noticeable significance during the past three decades (Ge, 1999:1). Most of the latecomers are established in less - developed countries and emerging economies. By opening up EPZs in countries, they help the economy to break a way from an inward-looking growth path, to facilitate international flows of trade, capital and technology, and to increase the pace of economic development and structural transformation (GE, 199:1).

According to a recent count, there were well over 850 zones of various kinds operating around the world, compared with just a handful in the 1960s (Slabber, 2000:16). Figure 7 indicates the various locations of EPZs around the globe.

Figure 10: EPZs in 1998



Source:ILO 1998

From Figure 7, Asia with 225 zones, and America with 213 zones, makes out half of the total EPZs in the world. Followed by Mexico with 107 zones, 13 per cent of total EPZs and other locations having 127 zones, and 15 per cent of total zones. The following countries shows a lesser amount of EPZ activities like the Caribbean 51 zones or 6 per cent of total EPZs, Middle East 39 zones or 5 per cent; of total EPZs, Central America 41 zones or 5 per cent of total EPZs and Africa with 47 zones, or 6 per cent of total EPZs.

3.4.2 Types of EPZs

EPZs occur in two forms, namely closed and open EPZs. An EPZ can be a fenced-off zone, usually next to a port, which by virtue of separate administration could be effectively independent of the host country better

known as a closed EPZ (e.g. the production carried out by foreign EPZs in South East Asia). Or it can be a region in a country (even, in the case of Mauritius, the whole island) where a firm qualifying for the scheme may set tle anywhere in that region better known as an open EPZ (Lighthelm and Wilsenach, 1992; Nel, 1994; Rogerson, 1993). The second form is the cheaper of the two, because it uses existing infrastructure, it doesn't need a separate new industrial area. Pre-existing factories have the potential of being incorporated into the scheme. DBSA (1992) notes that the individual firm operating in such a manner has been termed an export processing unit (EPU) or bonded warehouse (Ligthelm and Wilsenach, 1992; cited in Nel, 1994).

Advantages of Closed EPZs include:

- A 'one-stop' administrative centre with a minimum of bureaucracy representative of all relevant public sector institutions involved in EPZ administration and development could easily be established.
- An effective control and policing system to prevent the leakage of duty-free imports into the host country could be established.
- A package of services and facilities to EPZ firms, such as labour screening and recruitment, training, accountancy services, could be provided.
- There could be the possibility of creating agglomeration, economies of scale and positive clustering effects of interrelated industrial branches.
- A specified demarcated area could easily be excluded from the host country legislation, and policies such as minimum wages if necessary.
- Closed EPZs offer the advantages of yielding visible results in terms of a rapid increase in investment, employment and exports.

Disadvantages of Closed EPZs include:

- In order for existing local export-oriented industry to qualify for duty-free imports within a system of closed EPZs, it could imply the relocation of such industries at a high cost to the demarcated areas.

- The e -ante demarcation of specific areas for EPZs development could imply centralised decision-making in terms of where and what should be produced.
- It could imply extensive infrastructure and other development at a high cost where the required facilities do not exist or where existing infrastructure is already fully occupied.
- The designation of a limited n umber of EPZs does not necessarily support the optimum exploitation of comparative cost advantages in a large spatial economy such as South Africa's.
- The possibility for excluding closed EPZs from host country legislation such as wage legislation could be regarded as a method of circumventing existing legislation with a possible negative reaction from the trade unions.

Advantages of Open EPZs or EPUs include:

- EPUs imply no relocations of existing local export-oriented firms to closed EPZ areas in order to qualify for duty-free imports or any other incentives attached to a fenced-off area.
- They utilise existing infrastructure and buildings in the case of existing local export-oriented industries. In the case of new investment, existing infrastructure and buildings, where available, can be used.
- Freedom of locational choice implies the optimum utilisation of comparative advantages through a more market-related approach.
- Due to their decentralised nature, EPUs could enhance more extensive backward linkages wit h the host economy in utilising local raw materials and intermediate inputs especially in the case of resource -based industries.
- EPUs that lend themselves more to the creation of backward linkages within the host economy where other local firms could 'expo rt' their production as an input to EPU firms, could stimulate linkages with the host economy and enhance the export orientation of the manufacturing sector in general with a resultant increase in international competitiveness.

- Due to the difficulty of excluding EPUs from the host country labour legislation, labour unions could be more positive towards this approach.

Disadvantages of Open EPZs or EPUs include:

- EPUs are certainly more difficult to control and police in terms of leakages of duty-free imports into the rest of the host economy. This is particularly problematic where EPUs are not compelled to export 100 per cent of their production or where countries (such as in the case of South Africa) form part of a Customs Union agreement.
- In view of dispersed nature, it could be more difficult to provide EPUs with a 'one-stop' administrative centre. This could, however, be provided by regional or local organisations on a regional or metropolitan basis.
- An EPU-type development is less visible in terms of its results due to its dispersed nature.

EPZs are mostly created in delimited areas and in some cases the whole country is being granted with EPZ status (Nel, 1994b). According to Wall (1976:479) the government could then design policies to help individual companies to invest in the country's competitive advantage.

Some of the potential gains from an EPZ operation are static in nature. Once a zone is successfully established, for instance companies create jobs for local workers; the expanded export-processing activities in the zone contribute foreign exchange earnings to the host country (Ge, 1999:2).

Other gains are dynamic in the sense that they can only be realised over time through deliberate efforts, such as learning and absorbing foreign technologies, and transforming the pattern of economic growth from inward - looking to an outward looking one. By and large, the static gains have been evident, while the degree of dynamic gains varies greatly from case to case, as suggested by empirically based studies of the EPZs (Ge, 1999:2).

3.4.3 Theory of EPZs

A few theoretical studies have been done in the past to investigate the role of EPZs in LDCs. Hamada (1974) conducted an economic analysis of duty free zones using 2x2 Heckscher-Ohlin model.

The Hamada model assumes that the welfare effects of a zone are dependent on the factor intensity of the protected sector in the domestic economy. When the protected sector is capital intensive the removal of labour from the domestic economy increases production of the p rotected sector through the Rybczynski effect, thereby reducing welfare. If the sector is labour intensive the output of the protected sector falls while welfare increases (Devereux and Chen, 1995:704).

The Rybczynski theorem states that if imports are relatively capital intensive then the output will increase, worsening the distortion due to the tariff and leading to lower national welfare (Miyawigiwa, 1986:339). Foreign investment is subsidised in the Hamada's model, but not because of the absence of tariffs in the duty-free zone, but because of the existence of tariffs in the domestic zone (Hamilton and Svensson, 1992:63).[26]

The study concluded that foreign producers would locate in the zone only if they accepted a lower return than domestic capital, an d that an exogenous movement of foreign capital into the zone would lower the host country's welfare (Din, 1994:370). Miyawigiwa (1986:340) argues that Hamada's model is more appropriate to stimulate consumption in duty free shops at airports than traditional EPZs. Hamilton and Svensson (1982) extended Hamada's model to study the welfare effects of capital inflow either into the zone or into the rest of the economy in the host country, and the study showed that both types of capital inflow will lower the host country's welfare.

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[26] Therefore foreign investment according to Hamilton and Svensson (1992:63) is subsidised in the two following ways: Firstly, given the protection of the capital-intensive good in the domestic zone, domestic wages are artificially low. This, foreign investment is subsidised as companies have access to this low-wage labour. Secondly, given the diffe rence between

Miyawigiwa (1986) analysed the question of direct subsidies to the EPZ using a 3x3, model and derived conditions under which establishment of an EPZ can increase welfare of the host country. Specifically, it was shown that the welfare of the host country will increase if the ratio of the subsidy for the EPZ to the subsidy for the domestic import-competing sector via tariff protection is smaller than the ratio of the impact of the export subsidy on the output of the import-competing good to its impact on the output of the EPZ.

Young (1987) introduced imported intermediate inputs in the standard 2x2 model and considered the effects of reducing tariff on the use of imported intermediate inputs in the EPZ. The study showed that a reduction in tariff on intermediate inputs would attract resources from the domestic zone that can lead to deterioration in the host country's welfare.

Din (1994:371) introduced a three-sector model for a small developing country to study both the positive and normative aspects of foreign capital inflow in the EPZ taking into account the interdependence between the EPZ and the domestic zone in the form of local purchases of domestically produced intermediate goods by the EPZs.

Consider a small developing economy that faces exogenous prices of final goods and has fixed amounts of labour and capital. There are two zones in the economy: the domestic zone and the EPZ. The domestic zone produces two goods, X1 and X2. The country also produces a third commodity, X3. Assuming that X3 is exclusively produced in the EPZ that is established by an inflow of foreign capital. To study the implications of backward linkages created by the EPZs, an intermediate good is introduced in the model. Assuming that X1 is a pure intermediate good which is used in the production of X2. Sector 3 utilises labour and intermediate good as well as foreign capital, which is assumed to be exogenously given and sector specific.

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domestic and foreign prices there may be an additional subsidy element in that the wage at world prices is lower than the wage at domestic prices.

Domestic capital is mobile between the two sectors of the domestic z one while labour is mobile among all three sectors of the economy.

To sharpen focus, assume that the amount of an intermediate good required to produce a unit of final output is fixed in each final goods-producing sector.[27] It is assumed that the production function is linearly homogenous, and exhibits diminishing returns to changes in factor proportions. Furthermore, it is assumed that all the three commodities are produced at a positive output price vector and that perfect competition prevails in the economy. Since all the markets are assumed to be perfectly competitive and there are constant returns to scale, the zero profit condition in each sector implies that until unit cost is equal to the price of the output (see Din, 1994:372).

The study shows that if the intermediate good is internationally traded, then an increase in foreign capital inflow in the EPZs will trigger a resource movement effect, which culminates in higher (lower) production of the intermediate good depending upon whether it is capital (labour) intensive. However, results are not sharp if the intermediate good is non-traded. In this case, the study further shows that foreign investment in EPZs' processing activities may stimulate the domestic production of intermediate good depending up on the relative magnitudes of the price elasticity's of supply and demand for the intermediate good.

Furthermore, if the intermediate good is internationally traded then foreign capital inflow in the EPZs leaves national income of the host country unchanged. On the other hand, if the intermediate good is non -traded, then national income unambiguously increases provided the intermediate good is labour-intensive. This conclusion remains valid in the case of capital-intensive intermediate good under the addi tional assumption that sector 3 uses higher labour to intermediate input ratio than sector 2 (Din, 1994:379).

[27] This assumption is commonly made in studies, which deal with intermediate goods in a general equilibrium see Batra and Casas (1973) and Jones and Spencer (1989) (Din, 1994:371).

According to Ge (1999:3) studies done on EPZs have been confined to a static framework outlined in the international trade theory. The employment and welfare effects of opening an EPZ are the main concern of these studies. Authors have also recently brought to mind issues like technology transfer and structural change in EPZs and Ge (199:3) claims the static framework that they have used have undermined the significance of these analyses. Although these studies have touched certain aspects of EPZs, many questions are left unanswered. Uncertainty clouds the opening of an EPZ, whether or what conditions are needed to achieve the above mentioned dynami c gains in the host country and what the mechanism should be to ensure increased development.

Ge (1999:3) developed a model trying to determine what the effect of an EPZ would have on the export performance of the host country and also what conditions are needed for improvement.

To address the issues at hand, consider the following system. Before the establishment of an EPZ, an item in the world is produced mainly by a multinational enterprise (MNE) that possesses considerable monopolistic power and acts as a price setter. The same item is also produced by a group of competitive domestic companies in a Less Developed Country (LDC), where an EPZ is about to be opened up. The output produced by the domestic companies are sold either on the world market at the price set by the MNE, or on the domestic market at a price that is determined domestically. Exports by the domestic companies may account for a relatively small share of their total production, due to inadequate production technology, inefficient management and a lack of market access and marketing know -how. To improve the situation, an EPZ is established and various policy incentives are made available to foreign companies. These incentives, together with a lower cost of labour that is readily obtainable in the LDC, may be summarised into a single factor; the unit cost of production in the EPZ, c1. Denoting the unit cost of production attainable outside the EPZ by c2, we assume, without any loss

of generality, that c1<c2, and that both c1 and c2 remain co nstant over time. [28]

Attracted by the lower unit cost of production in the production in the EPZ, the MNE now diversifies its production into two separate locations: the EPZ and the rest of the world. At any period of time t, the output produced by its EPZ subsidiary is given by Q1(t), and the output produced elsewhere, Q2(t). The outputs from the two locations are sold in the world market at a price p*(t) charged by the MNE. Assume for simplicity that the EPZ production of this merchandise is carried out exclusively by the MNO subsidiary (Ge, 1999:4).

Increased learning through technology transfer contributes profoundly to economic development in LDCs; the model signifies these critical factors. This said, several policy implications from the model, in a c ontext of economic liberalisation and development are outlined below.

In recent years, foreign direct investment, in the form of multinational activities, has emerged as a main vehicle for transferring capital, technology, and knowledge to LDCs from devel oped or newly industrialised countries. Compared with other types of international capital flows, such as foreign portfolio investment and commercial lending, the activities of multinational organisations tend to be motivated by longer -term considerations and are much less volatile, as the recent Asian financial crisis would testify. In many cases, the opening up of EPZs has served as an effective means of attracting foreign companies. In order to maximise the dynamic gains that the EPZs may bring about, it is highly desirable to establish a strong linkage between the EPZ and the domestic zone (DZ).

The linkage provides a key channel through which various technologies may be diffused from the EPZs to the rest of the host economies. To strengthen

[28] The inequality c1<c2 may be interpreted as follows. When compared with the unit production cost attainable elsewhere, the policy incentives available in the EPZ, together with an improved regulatory framework, as well as physical and institutional infrastructure, tend to make the zone a more attractive location for foreign investment. This may hold, even when the cost of labour is the same in both locations.

the linkage, deliberate and consistent policy efforts ate crucial, especially those enhancing the openness of the EPZ to the DZ and the learning capability of local firms, employees and entrepreneurs. This requires further economic reforms of a wide range to be condu cted in the DZ. Without these efforts the gains from establishing an EPZ would likely to be limited. This helps to explain why some EPZ -operating countries have done better than others in achieving greater economic openness and productivity gains. Simply opening up a zone would not do the trick (Ge, 1999:20)

The first zone was established in Ireland in 1958 (Shannon EPZ [29]), and followed by Kandla in India, and Mayaguez in Puerto Rico in the 1960's (Sklair, 1985; Nel, 1994). The Kandla zone in India failed d ue to a lack of transportation and communications infrastructure, other failures listed are Senegal, Liberia and Zaire (McCarthy, 1986). Nevertheless, EPZs have spread to countries including Indonesia, Malaysia, South Korea, Taiwan, Egypt, Sri Lanka, Morocco, Tunisia, Zimbabwe, Jamaica and Namibia (McCarthy, 1986; Ryan, 1994:5; Schulze, 1999:170).

Ryan (1994:5) compared the Katunayake EPZ in Sri Lanka with the Jebel Ali Free Zone in Dubai, and notes that although they have different objectives they work on the same concept. Where Sri Lanka focused on the creation of jobs and earn foreign exchange, Dubai's objective was to import labour and to improve the port further to enhance its trade position.

EPZs were mainly established due to the high wages and prod uction costs that firms faced in their domestic economies. Combined with the declining communications and transport costs, it eroded the competitiveness of manufacturing firms in industrial countries (Schulze, 1999:170). McCarthy (1986:404) points out an e xample in Japan, where large multi -national

[29] There might arise a problem about the classification of the zone in Shannon in Ireland, FTZ or EPZ. Some authors see EPZ and FTZ as almost the same only a technical difference in trading operations but in this study it won't be used interchangeably.

organisations spread their primary production activities to South Korea and Taiwan due to the high wages in Japan.

Singapore followed the same road as Japan by spreading its manufacturing activities to build plants in Malaysia, China, Thailand, Philippines, Hong Kong, Sri Lanka and Vietnam due to lower labour costs in these countries (Ryan, 1994:6).

In a sense, EPZs represent an exercise in irony: in search of economic development, governments all over the world started to create geographically restricted zones that were free from the interventions which the same governments had implemented for the sake of perceiving economic and social development objectives.[30] According to Wall (1976:479) government policies directed towards the domestic market could distort the forces of competitive advantage through restricting the flow of resources.

EPZs in itself does not create the competitive advantage but help to eliminate most of the obstacles that make investors unwilling or reducing their ability to take advantage of the underlying competitive advantage of a country (Wall, 1976:479).

Basile and Germidis (1985) developed a four-phase life cycle of the EPZ, from the build-up of basic infrastructure and increasing FDI and exports, through a levelling-off and (hopefully) upgrading phase, to eventual integration of the zone into the local economy, by disinvestments or takeovers by domestic entrepreneurs (cited in Sklair, 1985:754).

Usually an EPZ is built with a government guaranteed loan repayable after 3 years with an interest rate of 10 per cent over a 25 -year period. The World Bank alongside other organisations helped to fund some of the EPZs and according to Ryan (1994:4) government should leave the financing or building of the infrastructure to the private sector and then leaving the promotion of

[30] See (EL Nel, 1994:100-101; McCarthy, 1986:400).

products to the management company of the particular zone. Funds generated from the rent of factories could then be used to pay the management company's staff salaries, and the funding for overseas promotion (Ryan, 1994:9). As the promotion of a zone continues, this could result in more FDI into the zone, and the larger the demand gets the bigger the exports will tum out to be. If this process continues, higher consumer demands could create the need for bigger factories or warehouses. This is where the third phase of the EPZ life cycle kicks in, namely the levelling and upgrading phase. The last phase refers to the condition where investments in the zone start to decline because of market saturation and as local manufacturers starts to benefit from the spill -over effects of the zone through knowledge gained from EPZ workers, or joint ventures the local manufacturers tend to buy foreign-owned EPZ companies as foreign investors enter new markets.

3.4.4 Incentives in EPZ

A wide variety of incentives are available in the various EPZs, for example:

- Special import provisions apply to goods used in the production of exports.
- Foreign exchange controls are limited or non -existent for firms in the EPZs.
- Profits can generally be repatriated.
- Infrastructure is provided and factory space is often subsidised.
- Firms often enjoy a tax holiday lasting on average five years.
- Subsidising of certain activities like electricity and rent (Lighthelm and Wilsenach, 1992).
- As the firms are labour-intensive and have assembly -type operation, they generally require abundant, cheap and disciplined labour. Labour and minimum wage legislation is sometimes suspended in the zones. However, in some countries lik e Pakistan and Mauritius, a stronger labour legislation exists. In Pakistan the govemment restricts the right to organise, and permits lower minimum wage legislation in EPZs. In

Mauritius the country's labour law applies unaltered throughout the island (Warr, 1989; Nel, 1994).

- Various financial incentives may be offered including industrial training and lowering the cost of technology and capital (e.g. capital grants for new machinery, research and development funds) (Schulze, 1999; Warr, 1989).

3.4.5 Spatial Considerations in Establishing an EPZ[31]

McCarthy (1986:404) notes that there are two dimensions of location that needs to be considered when an EPZ is going to be established. The first dimension focuses on the trade distance between the potential EP Z in the host country and its world markets, while the second dimension focuses on the geographical location of the zone in the host country.

The greater the distance between the host country and its world markets the longer it takes for the goods to arrive at its final destination. Another important aspect pointed out by McCarthy (1986:404) is the frequency and cost of regular sailings and flights to and from world markets. According to Wall (1976:484) the main reasons for establishing an EPZ at Shannon i n Ireland was because of the Trade Agreement between the United States and Europe with Ireland situated in the middle.

When choosing to establish an EPZ in a rural or urban area, lower wages in rural areas could be an attractive incentive; one should also consider the accessibility of rural regions and the high infrastructural costs of building EPZs in such an area (Miyawigiwa, 1993:200). As McCarthy (1986:404) points out, the major challenges (long distances, lack of regional goals, lack of infrastructure and communications) that developing countries had to face and in many developing countries still occur, could indicate that the social costs of establishing EPZs in many developing countries might be too high.

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[31] Although this study clearly indicated that there are differences in FTZs, EPZs and FIZs and as mentioned by other economist that EPZs and FIZs could be considered as specialised FTZs, the location study will apply for all kinds of FTZs.

The Bataan EPZ in the Philippines was devel oped in a rural mountain area with high infrastructural costs (no buildings, no electricity, no communications) and McCarthy (1986:405) argues that the costs invested could have been much lesser if the zone had been located near an existing port with the required facilities.

3.4.6 Criticisms against the EPZ Concept

One of the reasons for the adoption of IDZs (see chapter four) in South Africa may relate to some of the criticisms that have been expressed about the possible negative impact of EPZ on the wor king conditions of labour. In this light the aim of this section try to highlight some of the most important labour conditions that need to be considered by governments when implementing EPZs in the host country or any other export promotion scheme.

3.4.6.1 Gender in EPZs

In the past more women were employed in EPZs than men (Nel, 1994a: 4) This could be explained by the following facts; firstly, the EPZs produced mainly garments, textiles and electronic components, which are traditionally regarded as 'fe male jobs', and secondly women are 'hard working', easy to control and have nimble fingers. The fact that women are more productive in these jobs than men could also be a reason why employers rather choose women than men (Dror, 1984:713).

A more balanced gender employment was found in the EPZs of Shannon in Ireland, Singapore and the Malaysian air -conditioning industry. (Dror, 1984:713).

As the EPZs get more diversified by attracting more heavier industries, this could result in more manpower being needed , which could reduce the imbalance of employment which EPZs created in the so-called light industries.

3.4.6.2 Wages and labour laws

According to Emsley (1996:45), two myths exist relating to EPZs: Firstly, EPZs are seen as a sweat shop for labour where employers employ workers regardless of the their working conditions, and the environment and will relocate to other countries with lower wages at the first sign of a wage increase in the zone. Secondly, trade unions claim that EPZs have no contribution to sustainable industrial development. It is argued that EPZ companies do not establish linkages with the rest of the domestic economy and do not enskill the workforce. Emsley (1996:45) points out that this is not true in the case of the Malaysian experience and Schulze (1999) notes the same with the Mauritian economy that also followed the same export path by using EPZs. There are some valid arguments for this, and especially in countries other than Malaysia, following weak labour practices during the 1970's (Emsley, 1996:45).

Wages paid in Malaysian EPZs do vary, for example wages are higher in the electronic sector than the textile sector, and this could be a scripted to higher productivity increases in the electronic sector. However, wages in both sectors in EPZs were higher compared to what domestic companies paid in Malaysia.

Considering that some of the national labour laws (like prohibition of trade unions, compensation etc.) do not apply in most EPZ countries as one of the incentives offered by gover nments to investors, this could create an environment of exploitation depending on the character of the firms operating in the zones. In many Asian EPZs different laws relating to trade unions are found, in the Philippines an EPZ administrator deals with labour problems. In Thailand labour unions do exist but in some cases employers victimise union members in order to stop them from forming organised labour unions and according to Vlok (1999:48) even a worse situation occurs in China. People in Asia wanted jobs, and not communism with its oppressing nature (Ryan, 1994:8).

On "fair labour standards" Dror (1984:707) noted the following "lower mandatory labour standards should not enable one country to have a competitive edge over others".

Dror (1984) did a study on labour laws in Mauritius, Pakistan, the Philippines and Sri Lanka. Although this study focused on only four countries and as the author points out that more countries need to be studied in order to have a comparative analysis, it indicates that not in all of the EPZ countries' workers are paid lower wages than in the national economy, and some cases working conditions in an EPZ are better than conditions outside (Dror, 1984:717).

Amado (1989) noted that one of the purposes of EPZs should be to prot ect employees, referring to the unpleasant experiences in Latin American Countries in the past (Schulze, 1997:52). Ryan (1993:1) argues that the reasons why wages were reduced in Asian and some Latin American EPZs where due to the large supply of labour an d laissez- faire policies of most of the governments, rather having employment linked to exports, than no foreign investment and no jobs.

3.4.6.3 Technological Transfer in EPZs

The Newly Industrial Countries (NICs) of Asia did not have a significant natural base for the development of their manufacturing sectors compared to most developed countries (Jafta and Smith, 1995:). The Asian governments then decided to choose technology to increase their competitiveness (Fransman, 1984a; Chang, P, 1990; Berry et al, 1993; cited in Jafta and Smith, 1995:).

The focus was placed on niche -markets in order to establish a technological capacity, and by comparing the skills base of their labour forces with the technology types in use; Asian governments then used this i nformation to establish policies in four areas.

The first area points out the relation between the state and the market deciding on the technology choice to be used and if the government is going to intervene or a free-market approach will be adopted.

The second area indicates whose responsibility it is to develop the skills of the labour force and what education and training programmes are needed.

The third area focuses on the sources of technology such as accessibility of foreign technology to local fi rms, should foreign technology transfers accompany foreign investment, should institutional aid be introduced and if governments do introduce it, which technologies should benefit the most, and another aspect is the importance of promoting own technologies.

The last area includes non -economic factors influencing the choice of technology like the homogeneity of the population, cultural and religious factors.

Sklair (1985:756) notes the difficulty in establishing backward and forward linkages in Less Develo ped Countries (LDCs), even in the case of an advanced economy like Ireland. He implies that the vertical integration of international firms could have negative effects on the economies in which they invest directly.

The transfer of technology in EPZs was very low except for the Hsin Chu Industrial and Scientific Park in Taiwan and the Plassey Technological Park in Ireland (Sklair, 1985:756). The reason for the limited technology transfer to the host country is because foreign firms protect their technology and by transferring it would make no economic sense to them. This might explain the reason for the low technical know-how in Mexico (Harris, 1990:122).

According to Ge (1999:4) technologies could be transferred to domestic companies through various chan nels. These channels include information shared by past employees working in the EPZ, through subcontracting or joint

ventures between the foreign EPZ company and local companies, formal or informal personal contacts, business dealings, or trade fairs (Ge, 1999:5).

"The opportunity of learning from the foreign EPZ firm may, over time, help to enhance the productivity and international competitiveness of the domestic firms, and thereby accelerate export and economic growth in the host country. It is in this sense that the concept of EPZ may serve as a policy means of promoting trade and economic transition towards a fuller integration into the world economy." (Ge, 1999:5).

3.5 SEZs in Southern Africa

In this section two brief discussions will be given on the background and development of EPZs in South Africa and Namibia in the southern part of Africa.

3.5.1 Namibia's EPZ

The reasons for the establishment of an EPZ programme in Namibia were to create employment, the development of skills, and technology transfer (Nkuruh and Schimming-Chase, 1999:30)

In April 1995 the first EPZ Act was formulated and Namibia was the first Southern African country to establish an EPZ at Walvis Bay (Schulze, 1997:66). In May 1999, 61 companies from 19 countries received EPZ status and by that time 20 were in operation (Nkuruh and Schimming -Chase, 1999:30).[32] Investments into the EPZ programme amounted to 2,5 billion Namibian dollars, directing 84 per cent to the manufacturing sector (Nkuruh and Schimming-Chase, 1999; Schulze, 1999).

[32] Mr Williams Nkuruh is the General Manager of the Offshore Development Company (ODC) and Ms Esi Schimming-Chase is Senior Assistant Manager: Investment Promotion at the ODC (The Namibian Investor, 1998/1999:31).

In Namibia two companies are in charge of managing the EPZ programme, the Walvis Bay Export Processing Zone Management Company (WBEPZMC) and the Offshore Development Company (ODC) (Nkuruh and Schimming - Chase, 1999:30; Haufiku, 2000).

WBEPZMC was established in June 1996, shareholders include the municipality of Walvis Bay, 30 local companies and the government which has a 9 per cent share (Haufiku, 2000; Schulze, 1999:173). Services include the provision of tailor made factories ranging from 150 square metres to 10 000 square metres, administrative and secretarial services and shipping and forwarding services.

The WBEPZMC bought land from the government around the Walvis Bay and Swakopmund area in order to expand the industrial activities in the r egion. The biggest asset of the company is land. Revenue is earned through the leasing and selling of land. According to Haufiku (2000) heavier manufacturing industries will be located around the port of Walvis Bay while light manufacturing industries will be located between Walvis Bay and Swakopmund.

In July 2000, there were five companies operating in the port of Walvis Bay:
Namibian Press Tools manufacture car parts for Volkswagen and Audi,
Libra Bath Room manufacture bathtubs and showerheads,
Marine Robes manufacture fishing nets for the European and British markets,
Namibian King Lion manufacture garment jeans, and
Transvehicle also manufacture car parts for export.

According to Haufiku (2000) another 6 companies will later join the Walvis Bay Industrial Park, activities include the manufacture and export of clothing, pasta, flower, biscuits, veneer wood, salt, propel lien bags, nets for fruit and whiskey.

The Offshore Development Company was established in April 1996 as a private company in which the government has a minor share (The Namibian

investor, 1998/1999:5; Schulze, 1999:174). The ODC monitors, regulates and promotes the EPZ programme in Namibia that does not fall under the management of the WBEPZMC. ODC and Namibian Investment Centre (NIC) form the EPZ secretariat acting as a clearinghouse, handling investor's applications for EPZ status and working permits for foreign investors, and also providing bank loans and other supporting services to investors.

Two industrial parks were established in Namibia, the Walvis Bay Industrial park (with 5 companies operating in the park as indicated earlier) that falls under the management of the WBEPZMC. The second one is the Oshikango Industrial Park (with 15 companies being granted EPZ status) a project started by the ODC and financed by the Development Fund of the European Communities (the Namibian Investor, 1998/1999:5).

Various companies have been granted EPZs status to function as an EPU in Namibia. In Keetmanshoop an N$ 60 million ostrich leather an d meat processing facility was developed in August 1998. Out of Tsumeb (to process and export charcoal) or out of Swakopmund (to manufacture and export teddy bears), or out of Okhandja (smelt and export manganese to Angola) (Nkuruh and Schimming-Chase, 1999:30). Single factories are also found in Windhoek and one in Katima Mulilo and factories also headed for Otjiwarongo, Mariental and Gobabis (Nkuruh and Schimming -Chase, 1999:30; Schulze, 1997:67; 1999:175-176).

The development of a zinc refinery in the southern parts of Namibia could also further boost Namibia's economy (Nkuruh and Schimming-Chase, 1999:31).

The manufacturing sector has grown with more than 30 EPZ companies situated in Namibia, manufacturing: motor vehicle parts, bathroom accessories, foam mattresses, electric equipment, teddy bears, fishing nets and ostrich leather products, 9 EPZ companies in the processing industry: processing and polishing of diamonds and other gemstones. In the refurbishing and packaging industry 6 companies re -export warehouse activities.

3.5.2 SEZs Developing in South Africa

EPZs spread to Southern African countries in the 1990's.[33] South Africa does not have EPZs in the traditional sense. However, the government of the 1980's introduced several policies that coul d have resembled EPZs (Keet, 1996:354). These include: deregulation, which exempted companies in certain areas from labour and other laws; liberalisation programmes to reduce tariffs on inputs in the textile, clothing and motor industries; industrial decentralisation incentives, whereby government granted concessions and subsidies to companies prepared to invest in designated areas, especially the 'homelands'.[34]

The establishment of EPZs in South Africa dates back to previous studies done by McCarthy (1978) and Scheepers (1986) along with others (McDonald, 1994:1).

The Private Sector Export Advisory Committee (PSEAC) used the Scheepers Report of 1986 and concluded that a weak case was made for the establishment of EPZs in South Africa, due to international sanctions and South Africa's relatively poor location with respect to world markets (McDonald, 1994:1)

In the early 1990's the South African Special Economic Zones Association[35] were formed to investigate the possibility of establishing EPZs in South Africa.

After a number of studies (as mentioned above, and indicating some of them) on EPZs had been completed by the Export Processing Zone Council of the

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[33] Zimbabwe, Mozambique, Malawi, Namibia, Zambia and later followed by South Africa all showed a great deal of interest (Jauch, 1997:21). The Zimbabwean government established an EPZ ACT in 1996, eighty-seven applications for EPZs were approved and now forty-five EPZs are already in operation (see Newman and Pape, 1999:85).

[34] These decentralised areas were not located near harbours and airports, like EPZs normally are (Jauch, 1997:22).

[35] Members included Eskom, Rainbow Chickens, Sanlam Properties, Mondi, Spoornet, Renfreight, Boland Bank, Industrial Development Trust and Nissan (Jauch, 1997:22).

Department of Trade and Industry, a draft document entitled "Policy and regulating framework for the est ablishment of EPZs in South Africa" was established.

In February 1992, the Director General of Trade and Industries requested the Industrial Development Corporation (IDC) to investigate the relevance and possible contribution of EPZs to South Africa again (McDonald, 1994:1). The Department of Trade and Industry (DTI) and the IDC made certain concessions like (GEIS, EMIA, RIDP, etc.) available to potential investors locating in EPZs in South Africa. According to McDonald (1994:1) the incentives offered by t he government departments to investors were mainly the same as the existing incentives offered to exporters and that private business also had to cope with red tape problems due to possible deregulation and land allocation.

Table 6 shows nine possible si tes where EPZs could be established in South Africa (Nel, 1994a: 17). The objectives were to designate zones near a large international port and/or airport where regular sailings and/or flights exist and to ensure effective access to global trading and com munication markets. Exceptions were made in the South African case for the development of EPZs on the country's borders geared to serve the needs of neighbouring countries where international competition and timeousness was lesser (Nel, 1994a: 16). The gov ernment's recommendation in 1993 was that EPZs could only be placed within fifty kilometres from an international port or airport.

Based on the government's specifications the following sites were identified as potential EPZs (see table 6).

Table 6: Potential EPZ Sites in South Africa

EPZs sites situated near an international port and airport	EPZs sites situated near an international port only	EPZs sites near an international airport and an internal container terminal
Cape Town (harbour and D.F. Malan airport)	**East London** (harbour)	**Johannesburg / Central Rand** (Jan Smuts and City Deep)
Durban (harbour and Louis Botha airport)	**Port Elizabeth** (harbour)	**Pretoria** (Jan Smuts and Precon)
	Richard's Bay (harbour)	**Vaal Triangle** (Jan Smuts and VaalCon)
	Saldanha Bay (harbour)	

Source:Nel, 1994(a

Table 7 (next page) shows that a cost - benefit analysis was developed to determine the most suitable sites in South Africa. This matrix is based on one that has been used by the United Nations Industrial Development Organisation (UNIDO) and contains amendments made by Nel (Nel ,1994a:19). This analysis was done to prevent what happened in the Philippines (as shown in section 3.4.5).

Nel (1994a:19) "It should be pointed out that the assessment is based on subjective evaluation given the lack of resources and funds to undertake a more meticulous form of investigation. Consequently, any results can only be regarded as providing a very generalised indication of the prevailing trends and site suitability

Table 7: The Locational Suitability of South African Zones to Globally linked markets

Key Factors	Weight	C.T.	DBN	P.E.	E.L.	R.By	Sldn	JHB	PTA	Vaal
Internat.Transport	0,95	9	9	7,5	6,5	7,5	6,5	8	8	8
Transport Costs	-0,6	-	-	-	-	-	-	7	7	7
Available Skills	0,8	9	9	7	7	6	6	9	8	8
Available Sites	0,75	9	8	8	8	8	8	8	8	8
Diseconomies of Site	-0,65	7,5	8	6	6	4,5	4,5	8,5	8	8
Services	0,85	9	8,5	7,5	6,5	6,5	6	8,5	8	8
Infrastructure	0,85	8,5	8,5	8	8	7	6	8,5	8	8
Agglomeration	0,85	8	8,5	7	6,5	6	5	9	7,5	7,5
Resources	0.65	6,5	7,5	6,5	6,5	7	6	8	8	8
Situational Factors	0.75	8,5	8,5	7	7	7	7	7	6,5	6,5
Other Factors	-0.8	7,5	9	7,5	8	8	6	9	8	8
Totals (after wt.)	-	43,9	42,3	37,4	35,2	34,9	32,8	36,4	34,6	34,6

Source: Nel, 1994(a

Key:

Resources = availability of raw materials, water etc.

Situational Factors = living environment, climate etc.

Other Factors = labour issues, political issues (relative lack of importance).

Transport Costs = costs of transportation in South Africa.

Internat. Transport = accessibility to frequent, bulk international links.

Diseconomies of site = inefficiencies resulting from congestion etc.

C.T. = Cape Town, DBN. = Durban, P.E. = Port Elizabeth, E.L. = East London, R.By = Richard's Bay, Sldn.= Saldanha, JHB.= Johannesburg, PTA.= Pretoria, Vaal .= Vaal Triangle.

Note: Figures in the above columns are unweighted, those shown as totals represent the addition of tabulated data after weighting.

The attractiveness of Cape Town and Durban are dominant which reflects on their large port facilities, ideal site factors, well -developed infrastructure and services. The Pietersburg Witwatersrand and Vereeniging (PWV) area in contrast has the advantage of infrastructure, agglomeration and services but

suffers from distance to the harbours, the possible diseconomy of the spatial extent of the area and the unrest (a factor plaguing Natal also). Port Elizabeth has shown a reasonable performance and given the city's location, infrastructure and under -utilised capacity proven to be a very suitable site (Nel, 1994a:20).

Other centres were also identified in South Africa as possible EPZs sites (see table 8). These sites were called sub -continentally oriented EPZs sites and had reasonably well developed infrastructure and due to their location to international borders having the potential to serve the needs of the Southern African markets (Nel, 1994a:17).

Table 8: The locational suitability of Sub-Continentally Oriented EPZ sites

Key factors	Weight	Up.	Maf.	Mes.	LT.	Piet	Nel.	Kom.	Fich.	Lesy.
Internat. Transport	0,95	6, 5	8	8,5	7,5	7	8	8	6	6
Internal. Transport	0,75	7	7	7	7	7,5	7,5	7,5	6	6
Transport Costs	-0,6	8	7,5	8	8	7	6,5	6,5	7	7
Available Skills	0,8	6,5	8,5	7	6	7	6,5	5,5	6,5	6,5
Available Sites	0,75	8	8	8	8	8	8	7	8	8
Diseconomies of Site	-0,65	3	4	3	3	4	4	2,5	3	2,5
Services	0,85	6	7,5	6	6	7,5	7,5	4,5	5,5	5
Infrastructure	0,85	6	7,5	6	6	7,5	7,5	5	5,5	5
Agglomeration	0,85	6	7,5	5,5	6	7	6,5	4,5	5,5	4,5
Resources	0,65	6	7	7	7	7,5	7	7	6,5	6
Situational Factors	0,75	5	6	5	6	7	7	5	6,5	6
Other Factors	-0,8	5	7	6	6	6,5	6,5	6,5	6,5	6,5
Totals (after wt.)	-	34, 8	41,1	36,6	35,9	40,7	40,8	32,8	33,2	31,1

Source: Nel, 1994a

Key:

Resources = availability of raw materials, water etc.

Situational Factors = living environment, climate etc.

Other Factors = labour issues, political issues (relative lack of importance).

Transport Costs = costs of transportation in South Africa.
Internat. Transport = accessibility to frequent, bulk international links.
Diseconomies of site = inefficiencies resulting from congestion etc.

Up. = Upington, Maf. = Mafikeng, Mes. = Messina, L.T. = Louis Trichardt, Piet. = Pietersburg, Nel. = Nelspruit, Kom. = Komatipoort, Fick. = Ficksburg, Lady = Ladybrand.

Note: Figures in the above columns are unweighted, those shown as totals represent the addition of tabulated data after weighting.

According to Table 8 a distinctive gap exists between the most well pla ced and developed sites for sub-continental trade, namely Mafikeng, Nelspruit and Pietersburg (Nel, 1994a:20). The developed infrastructure, services and their distance from international borders make these locations favourites to be chosen. Messina and Lo uis Trichardt are not as advanced as the others, but could still play their part optimising their location and facilities advantages to expand their markets.

A logical conclusion was made to what market the EPZs should penetrate, the location of an EPZ at Upington to serve Namibia, one at Mafikeng serving (Botswana and north), Messina serving (Zimbabwe and north), Louis Trichardt serving (Zimbabwe and north), Pietersburg serving (Botswana, Zimbabwe and north), Nelspruit serving (Mozambique and Swaziland), Ficksburg serving (Lesotho) and one at Ladybrand also serving (Lesotho) (Nel, 1994a:19).

To attract FDI to South Africa through an EPZ as vehicle Ryan (1994:3) suggested that the EPZ management company should do the marketing instead of the general media and advertising agencies and according to a study done internationally, it shows that it is uneconomical to use the general media.

During this time no national investment promotion agency existed and overseas embassies acted as promotion centres. The prob lem was that the

'commercial' officers in most embassies lacked marketing skills (Ryan, 1994:3).

During a parliamentary sitting on EPZs in 1993, the International Trade Advisory Council (ITAC) suggested that the South African government had to wait before proper recommendations could be made (McDonald, 1994:1).

Amongst the concerns of the ITAC members were the following: Firstly, although various geographical regions showed a strong support for EPZs, many industry sectors were opposed to it. [36] Secondly, the government's incentive 'package' was totally inappropriate. Thirdly, the tax holiday issue wasn't addressed in the initial proposals on EPZs, and was considered by many to be essential for the success of EPZs. Lastly, the question of deregulation has n ot been adequately addressed, especially in regard to labour legislation, wage rates, conditions of employment in EPZs and health and safety standards.

The National Economic Forum (NEF) was established in October 1993 and consisted of representatives of b usiness, labour and the government. The aims of the forum were to enhance the economic restructuring in South Africa. In the last version of the NEF Task Force meeting, which was held in November 1993, it was suggested that a tax holiday at a zero rate for the first ten years should be implemented and that normal depreciation and wear and tear allowances would be granted (McDonald, 1994:2).

If a tax holiday was granted it was argued that EPZs shouldn't be able to claim under GEIS, EMA or RIDP. The rationale behind this is that if companies do not contribute to the fiscals by paying taxes, they should not receive any grants on tax expenditure either (McDonald, 1994:2). Some experts believed that a tax holiday could be more easily monitored than the open-ended GEIS policy. If a tax holiday would be granted investors have the advantage of paying no duties, surcharges or taxes so the benefits to business are

immediate. In contrast under GEIS, exporters who qualify for rebates only after paying all the relevant d uties and surcharges then receive the benefits that often leads to a cash flow constraint (Anon, Financial Mail, 65, 16 September 1994).

In 1993 the government cabinet approved the creation of EPZs in South Africa, however in 1994 the new government left the concept alone (Jauch, 1997:22).

South African problems affecting EPZs:

The South African government suggested that the EPZ programme should be financed by the private sector, but many of the international institutions (like the World Bank and International Finance Committee) which provide funds to the private sector, has not provided funds to EPZs before (Ryan, 1994:8).

Labour unions like COSATU were against EPZs. They feared that labour and environmental standards would be sacrificed in attracting foreign investments and they were convinced that EPZs would not lead to sustainable economic development (Ryan, 1994:9; Jauch, 1997:23).

Ryan (1994:10) noted lab our unions feared the establishment of EPZs because of the government's approval for deregulation within the EPZ relating to wages, safety and health issues. According to McDonald (1994:3) wages were not the real problem, but that of the productivity of w orkers. He suggested that training of workers, and better relations between businesses, labour and government, were needed in return for acceptable wages and a commitment to better training.

The establishment of an EPZ based on a low –cost workforce could be all the greater, if it could be located near East London, Pietersburg and Mafikeng, areas characterised by high unemployment (Emsley, 1996:46). The Malaysian

[36] The clothing industry's wages were to high to be competitive with other international countries (Ryan, 1994:2).

experience has shown that working conditions and wages could improve over time.

Virtually all-new industrial countries (NICs) used low -wage, labour-intensive activities, and gradually over time moved to industries where higher skills are required and better wages are paid. Davies (1995:15) notes that although there is resistance from certain parties to adopt a labour intensive approach for South Africa, "economic realities indicate the reverse". South Africa's labour laws and policies do not act as disincentives to labour use. However, labour / management practices and relations have clearly created a high wage environment that encourages companies to reduce labour and discourages labour-intensive production.

Local manufactures also feared the introducing of EPZs because they lacked international competitiveness see (chapter1). The risk of loosing their local market share to foreign competitors competing in the same country and also the significant incentives offered traditionally by most of the government to EPZs (as shown in section 3.4.4) were argued to be some of the major concerns for local producers which predominantly produces for the domestic market.

Manufacturers using EPZs, as an excuse to change will still have to adapt to raise quality and keep prices constant because of the effects of tariff reduction and the lowering of subsidies (Ryan, 1994:2).

Ryan (1994:10) says that introducing a policy that states that EPZ companies have to export 100 per cent of its products could solve manufacturers' fears of losing domestic market share.

According to Lighthelm and Wilsenach (1992) two problem areas could arise if EPZ development should be sited in South Africa. Firstly, member countries of the South African Customs Union (SACU) could regard duty-free imports by South African export-oriented firms as an erosion of the customs union pool in view of the fact that they would reduce their portion of income from the

Customs Union pool. Secondly, other countries in Southern Africa could perceive an EPZ-type development as negative, in that South Africa will be further strengthened at the cost of industr ial development in the rest of Southern Africa through such an initiative.

3.6 Summar

In this chapter, a theoretical analysis of SEZ in its various forms was given because IDZs derives from the more general concept of SEZ. Chapter 2 concluded that the use of selective intervention through the incentives offered as part of EPZs could contribute to the competitiveness of the manufacturing sector. Specifically arguing that selective industrial policy could be consistent by supporting exports of manufactured goods in a manner that is WTO - friendly, through supporting technology transfer to South Africa, and through support for SMMEs, spatially oriented support measures, competition policy and special economic zones.

Section 3.2 defined the various concepts of SEZs. SEZs have been given various names in the international trade literature to describe the main types of activities performed in these zones. Section 3.3 discussed the generic free trading areas namely FTAs, FPs, FIZs and FTZs and showed their prominence for developing countries as reflected in the case of Mauritius.

The importance of FTAs in general, and for South Africa, was discussed. It was argued that the recent free trade agreement between South Africa and the EU could be seen as a landmark und erstanding between the developed and the developing world.

In section 3.4 the types of EPZs, the theory of EPZs and the incentives offered to local and foreign investors were discussed. It was shown that most of the latecomers that establish EPZs are les s-developed countries and emerging countries with well over 850 zones of various kinds operating around the world.

It was shown in this chapter that numerous theoretical studies have been done in the past to investigate the role of EPZs in LDCs. It was ar gued that Hamada's model is more appropriate to stimulate consumption in duty free shops at airports than traditional EPZs. Hamada's model was extended to study the welfare effects of capital inflow either into the zone or into the rest of the economy in t he host economy. It was showed that both types of capital inflow would lower the host country's welfare. The question of direct subsidies was analysed using a 3x3 model and it was shown that the welfare of the host country will increase if the ratio of the subsidy for the EPZ to the subsidy for the domestic import-competing sector via tariff protection is smaller than the ratio of the impact of the export subsidy on the output of the import-competing good to its impact on the output of the EPZ.

The standard 2x2 model used intermediate inputs and this model concluded that a reduction in tariffs on intermediate inputs would attract resources from the domestic zone that could lead to deterioration in the host country's welfare. A three-sector model was also introduced and the study showed that if the intermediate good is internationally traded, then an increase on foreign capital inflow in the EPZs would trigger a resource movement effect which culminated in higher (lower) production of the intermediate good dep ending upon whether it is capital (labour) intensive. It was also argued that the results were not sharp if the intermediate good is non-traded.

Therefore, the main concerns of these studies were the effects of welfare and employment when opening an EPZ. In regard to this a model was developed to determine the effect of an EPZ on the export performance of the host country and what conditions were needed for improvement. The study showed that increased learning through technology transfer contributed significantly to economic development in LDCs and several policy implications from this model in the context of economic liberalisation and development were also outlined. It was argued that EPZs in itself does not create the competitive advantage but help to e liminate most of the obstacles that make investors unwilling to take advantage of the underlying competitive advantage of a country.

A variety of incentives are available in the various EPZs ranging from import provisions to a number of financial incentives including lowering the cost of industrial training and new machines.

In section 3.4.5 the spatial considerations in establishing EPZs were discussed. Showing the importance of the trade distance between the EPZ in the host country and its world markets and the geographical location of the zone in the host country. It was argued that it is better to establish an EPZ in an urban area than a rural area due to the high infrastructural costs of building EPZs in such areas.

The South African government has decided not to opt for EPZs because of the criticisms expressed in this study and therefore decided to adopt IDZs rather than EPZs (see chapter four).

Section 3.5 gave a brief discussion on the background and development of SEZs in Namibia and South Africa. It was noted that South Africa did not have EPZs in the traditional sense. Several policies in the past could have resembled EPZs namely: deregulation, which exempted companies in certain areas from labour and other laws; reducing tariffs on inputs in the textile, clothing and motor industries; industrial decentralisation incentives, whereby government granted concessions and subsidies to companies prepared to invest in designated areas, especially the homelands. Previous studies on the establishment of EPZs in South Africa have been done.

Chapter 4:

Industrial Policy and IDZs in South Africa

4.1 Introduction

In chapter 3 the various forms of Special Economic Zones were given and included free trade areas, Free Ports, Free Trade Zones, Free Industrial Zones and Export Processing Zones. It was concluded that South Africa would not choose Export Processing Zones due to criticisms against the EPZ concept and will introduce Industrial Development Zones (a special variant of SEZs) instead. IDZs form part of the government's SDI programme and will be discussed in sections 4.3 and 4.4.

The layout of this chapter is as follows. In section 4.2 a brief overview of the development of industrial policy in South Africa is given. In section 4.3 the Spatial Development Initiatives programme is discussed with reference to South African SDIs. Section 4.4 presents an overview of the programme of IDZs. The chapter concludes in section 4.5 with a summary.

4.2 The Development of Industrial Policy in South Africa

4.2.1 The Homeland Polic

According to Drewes (1993:1) South Africa's physical space can be grouped into three zones or regions i.e. the metropolitan region, the intermediate region and the peripheral that is the largest area in most developing countries like South Africa.

The intermediate region lies between the metropolis (which forms the core of the regional layout) and periphery (which forms the outer region) with homogeneous characteristics.

The metropolis consists of places like Pretoria -Witwatersrand-Vereeniging (PWV), Durban and Cape Town. The periphery consisted of places like former homelands.

Drewes (1993:1) noted that in terms of the geographic characteristics of the intermediate region, it has much in common with Friedman's (1966) upward-transitional r egion. He further claims that the intermediate region is also influenced by other factors than just "morphological growth processes" and includes migration patterns, relocation of economic activities, regional development policies and the spatial distribution of economic activities.

According to Black & Wellings (1986:1) industrial development in South Africa in the 1950's were more aimed at "separate development" than decentralisation on sound economic grounds.

The Tomlinson report [37] (1955) indicated tha t the policies imposed by the National Party (1948) were politically motivated. The Commission investigated three possible industrial development policies, firstly the industrial development in the White areas but close to the borders of the Bantustans, secondly the industrial development within the Bantustans but close to the borders of the White areas and thirdly industrial development within the Bantustans but as far away as possible from the borders.

The Tomlinson Commission recommended that the last two policies should be introduced to promote black and white workers to work together to foster economic development (especially industrial development) in South Africa. Houghton (1956) suggested that industrial development centres should be established in the border areas as well as within the Homelands, but deep into the interior (cited in Drewes, 1993:128).

This was rejected by the government "supporting the industrial development under white supremacy near Bantustan borders, but on the White side" (see

Drewes, 1993:128). The Natural Resources Development Council (NRDC) in 1959 identified certain areas for industrial development near the borders of the Bantustans. In 1960 a border region programme was implemented whereby certain growth points were identif ied in the border region areas. Verwoerd (1960) defined border areas as "...those localities at regions near the Bantu areas, in which industrial development takes place through European initiative and control, but which are so situated that the Bantu workers can maintain their residences and family lives in the Bantu areas, and move readily to their places of employment" (Drewes, 1993:129).

4.2.2 The National Physical Development Plan

In 1960, the government's decentralisation board introduced a National Physical Development Plan aimed at the arrangement of the physical development in South Africa according to specific development and political ideas (Drewes, 1993:131; Rwigema, 1995:522). This growth strategy (also using the information that the regional border programme presented) used main towns, growth poles and metropolitan regions to develop the white areas and growth points for the development of the Bantustans. [38] This strategy formed part of the government's decentralisation programme selecting certain industrial growth points near black homelands for the promotion of manufacturing activities (Rogerson, 1998:192).

According to Bell (1973) the function of these growth points was twofold: "Firstly to provide people in the surrounding labour supply ar eas of the Bantu homelands with the opportunities of commuting to jobs in manufacturing industry in growth centres, and secondly to diffuse benefits throughout the

[37] This commission was appointed to conduct an enquiry to set up a framework to develop the social economic needs of the Bantustans (Drewes, 1993:127).
[38] 'Main towns' purpose was to serve as economic links between regions and act as administrative centres. 'Growth poles' were defined "as towns or urban complexes with potential growth and could be developed further without much incentives" for examples see Drewes (1993:132). The primary objective of these growth poles was to expand the existing infrastructure to stimulate industrial activities.

surrounding areas via some sort of income and employment multiplier mechanism" (cited in Black & Wellings, 1986:2).

Bell (1973) argued that of the 87 000 jobs generated at growth points only 11 600 jobs (approximately 13 per cent) were created by the government (cited in Black & Wellings, 1986:4).[39]

In 1967 a Physical (later became the Environment) Planning Act was introduced to provide stricter control over industrial expansion in the metropolitan centres of PWV, Port Elizabeth -Uitenhage, Bloemfontein and Cape Town (Black & Welling, 1986:3).[40]

According to Black & Welling (1986:3) there were fou r reasons that could explain the policy's impact on job creation in the metropolitan areas and it's insignificant contribution to industrial development in the Bantustans. In the first place, industrialists could respond to legislation in several ways besi des relocation: (a) by deciding not to expand at all; (b) by expanding with the use of non-African labour and (c) by increasing production through the substitution of capital for labour. Secondly, some companies (in the textiles and clothing industry between 1968 and 1978) decided to close down their operations rather than running potentially uncompetitive businesses on site or face the risks of relocation. Thirdly, companies were able to expand operations in Natal where metropolitan areas were free from controls. Finally, the incentives were generally not considered attractive enough to compensate for the disadvantages of growth point locations.

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[39] Between the period 1960 and 1980 roughly 150.000 jobs were decentralise to border growth points, an annual average of 7.500 while on average 115.000 black people were entering the labour force in these areas every year (Black & Wellings, 1986:4).

[40] In terms of the Act, restrictions were placed on both the proclamation of industrial land (Section 2) and extensions to existing factories (Section 3), both sections being designed to regulate the employment of Africans (Black & Welling, 1986:3). In 1971 the government changed the Act, confining Section 2 to the PWV area only and the restrictions on industries (defined as "locality-bound" or as white labour-intensive) were lifted (Black & Welling, 1986:4). The Physical Planning Act of 1967 was replaced in 1991 by a revised Physical Planning Act, providing a means for more public participation and the admittance of Section 3 (Drewes, 1993:141).

4.2.3 The Good Hope and Regional Industrial Development Plans

In the 1980's similar policies and programmes wer e introduced to stimulate industrial development in South Africa including the Good Hope Plan of 1981 and the Regional Industrial Development Programme (RIDP) of 1982.

The Good Hope Plan was introduced because the 'homelands' failed to develop their own economies despite of the fact that R6 billion were spent by the government to develop these regions.[41] The Good Hope Plan was divided into long run and short -run incentives. The short-run incentives consisted of labour incentives, rental and interest concessions and relocation costs. While the long-run incentives consisted of transport rebates, electricity concessions, housing subsidies, training allowances and tender preferences (see Rwigema, 1995:522).

The Regional Industrial Development Board (1992) noted that the main aim of the RIDP of 1982 was to create prosperity through the creation of jobs by establishing industries outside the PWV centre and the Durban 'core area' (see Drewes, 1993:148; Rwigema, 1995:522 -523; Rogerson, 1998:192). Modifications were made to previous amendments while the major priority of the RIDP program still remained in line with past policies namely to further expand industrialisation in Bantustans. In the first place, eight functional regions situated near Bantustan borders were chosen according to the level of assistance. The second modification referred to the reduction of growth points by the government. Thirdly, the upgrading of incentives to place greater emphasis on long -term assistance and payment of short -term incentives in cash rather than tax concessions to prevent cash flow problems. Fourth,

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[41] Rwigema (1995:524) indicates that South Africa is not the only country that used subsidizing policies to develop lagging areas and to weaken the dominan ce of metropolitan areas. After the Great Depression countries like England, Scotland and Wales subsidized industries in lagging regions. France and Italy also used industrial incentives in declining areas and went further to limit growth in certain areas where economic activities were creating spatial inequalities.

attempts were made to mobilise private sector funds for the continued development of growth points (Black & Welling, 1986:4).

Addleson (1990) argued that the South African governmen t's use of subsidizing lagging regions (homelands) and controlling metropolitan regions could have imposed a significant opportunity cost to the South African economy (cited in Rwigema, 1995:526). Industrialists in metropolitan areas were taxed and restricted from expanding in order to support manufacturers in the homelands. According to Rwigema (1995:526) more jobs were destroyed than created in the lagging regions, firms that relocated to the lagging areas were merely relocating existing jobs to these reg ions. He further notes that some companies received subsidies unnecessarily because they would have relocated in lagging areas anyway without any incentives offered to them. According to Black and Wellings (1986:2), the decentralisation policies of the past had not created much employment opportunities or through local multiplier effects. Never the less, the RIDP of 1982 had also shown some success relating to growth points in rural peripheries, such as Isithebe (Kwazulu), Fort Jackson or Phuthithadjaba and Butterworth (Transkei) which recorded significant manufacturing expansion growth rates (Black & Wellings, 1986:6; Rogerson, 1998:192).

Drewes (1993:137, 144) pointed out some of the shortcomings of these programmes, and in May 1991 a new apolitically RID P was implemented by the govemment.[42] According to Rogerson (1998:192) this amended programme focused on issues like 'deconcentration' and the continuous development of industries away from major metropolitan areas (especially the Pretoria-Witwatersrand-Vereeniging (PWV) region). One of the main features of the RIDP of 1991 was the removal of former industrial concessions made by government for the establishment of industries near Homeland growth

[42] The Panel of Experts (POE) (1989) argued that the previous industrial policies in South Africa had limited success with regard to "self -sustaining growth at industrial development points" while RSA (1991) referred to the growth centre's inability to develop and integrate the South African economy (cited in Drewes, 1993:146). Platzky (1995) notes that the recommendations made by the POE could be interpreted as lobbying metropolitan capital and ignoring 'the millions of jobless (rural) women who were in some way assisted by the RIDP' (cited in Rogerson, 1998:192).

points and was replaced by a uniformly system of incentives a pplicable to manufacturing plants in every region outside of the PWV, Durban and Cape Town metropolitan areas. The RIDP provided a tax free, start -up cash grant payable over two years, for investment of up to R15 million and equal to 10 per cent of the investment in each year and a relocation fee of R1 million was also granted for foreign investment projects (Hanival and Hirsch, 1998:23). According to Rogerson (1998:192) research particularly in Kwazulu-Natal has shown that the decline in RIDP incentives a fter 1991 has not been accompanied by the closure of industries that many observers had predicted.

In 1993 a simplified RIDP was introduced because small manufacturers could not benefit much from the former program. The SRIDP had a smaller tax -free establishment grant over two years worth 10.5 per cent of assets up to maximum of R2.5 million, a three year tax free profit / output incentive worth 125 per cent of profit before tax and a foreign relocation allowance (Hanival and Hirsch, 1998:24). The SRIDP was different from the other RIDPs because it gave incentives to invest almost anywhere except the PWV and Durban "core". In 1996 a steering committee of NEDLAC was appointed to evaluate the 1991 RIDP and the 1993 SRIDP and their findings showed that both ha d limited success in meeting their objectives (Hanival and Hirsch, 1998:24).

Rogerson (1998:192) noted some of the criticisms against past industrial programmes namely that they were expensive, politically motivated, uneconomic and ineffectual.

4.2.4. The Tax Holiday Scheme

The Tax Holiday Scheme (THS) replaced the RIDP in October 1996. This scheme was administered by DTI and made available to local and foreign firms investing in plant and machinery exceeding R3 million (Hanival and Hirsch, 1998:25). Th e scheme consisted of three elements which provided potential industrialists with two year tax holidays for each component complied with: spatial location, human resource remuneration as a proportion of value - added, and industry type. A foreign investment grant was also made available

to companies that brought in new industrial equipment. The aim of the scheme was to encourage labour intensive investment in priority manufacturing sectors and production in specific regions (Bloch and Lewis, 1998:728).

4.2.5 The Manufacturing Development Plan

The Reconstruction and Development Programme (RDP) of the South African government which aimed at providing basic needs for the poor and as Rwigema (1995:528) notes, especially for the lagging areas lacking adequate social services could be a step in the right direction, but he further indicates the importance of lagging areas to be self-sustaining.

In June 1996, the government released a macroeconomic strategy called the Growth, Employment and Redistribution (GEAR) plan (RSA, 1996). According to Rogerson (1998:187) the GEAR strategy could play a significant role in meeting challenges like providing 'basic needs, developing human resources, increasing participation in the democratic instititutions of civil society and implementing the RDP in all its facets'. As Rogerson (1998:189) notes, another aim of the GEAR strategy is to change the import -substitution manufacturing sector into an outward oriented manufacturing sector that is globally competitive as indicated in section 1.1.

The Manufacturing Development Programme (MDP) was implemented in November 1996, and replaced the Regional Industrial Development Programme (RIDP) of 1991 (Rogerson, 1998:192). Altman (1997) notes that the main objective of the MDP is to promote new investment in the South African manufacturing sector and to replace the past industrial programmes of the apartheid years (cited in Rogerson, 1998:193). The scheme only applied in certain areas in cities like Johannesburg and Durban, while the rest of the areas are spread across South Africa (see Rogerson, 1998:193). The MDP is divided into two sections, promoting investment in large enterprises and small businesses. Large enterprises could receive tax holidays for a period of up to

six years for approved projects.[43] The MDP uses a package of supply -side measures to promote private investments (see Rogerson, 1998:193). The MDP tax holiday programme was largely targeted to support GEAR on export manufacturing and to stimulate private sector industrial investment (Rogerson, 1998:194). Various criteria were used to select 'proper locations' for industrial development, and one of the main emphasis on choosing locations, was to build on existing advantages and industrial areas not choosing "new Greenfield sites" like in the past industrial policies (Rogerson, 1998:194).

According to Rogerson (1998:194) the South African government wants poor people to move to industrial areas where jobs are being created rather than taking jobs to locations with high unemployment. Altman (1997) notes that the MDP is not 'primarily a spatial programme' but its core objectives are investment promotion and job creation (cited in Rogerson, 1998:194). According to Rogerson (1998:194) this programme could also have a negative impact on rural communities that enjoyed some support under the RIDP of 1991.[44]

Potential beneficiaries of the tax holiday are locations that had not received government support previously (like areas in Gauteng), large secondary centres and places located in SDIs a nd Industrial Development Zones (IDZs) (Rogerson, 1998:194). Industrial policy in South Africa over the past years, indicate a move away from incentive based location programmes towards building on existing industrial agglomerations (clusters) (Nel, 2000:17).[45]

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[43] Apart from the fact that firms have to be new (entities and manufacturing concerns) with assets like land, buildings, machinery and equipment having to exceed R3 million, a firm also has to implement three components in order to receive this concession. First a human resource component was designed to encourage employment and training. Second is an industry component that targets an ex tended list of so -called priority industries (see Government Gazette R1989, 29 November, pp. 4 -6). Third is a spatial component that is focused on the geographical distribution of industrial development and define a set of qualifying locations (Government Gazette R1989, 29 November 1996;Rogerson, 1998:193).

[44] Like the RIDP of 1991 the MDP of 1996 continued the trend whereby state involvement (subsidies to industrialists relating to production costs) are removed in former poor communities that were historically disadvantage (Rogerson, 1998:194).

[45] Clusters are agglomerations of activities that complement and enhance the existing economic base (Nel, 2000:17).

4.3 Spatial Development Initiatives

4.3.1 Origin and Motivation

SDIs are broad geographical areas within which different economic activities can take place (Newman, 1998:42).[46]

The SDI program originally started in South Africa with the aims to reduce unemployment and increase growth in neighbouring countries in Southern Africa. However, the South African DTI also established a regional SDI programme in 1996, aiming to stimulate regional markets and development (Howorth and O'Keefe, 1999:1).

The SDIs are different to the RIDPs in that they are aimed at generating long-term, internationally competitive growth and development, and at restructuring the apartheid space economy (Hanival and Hirsch, 1998:26). Bloch and Lewis (1998: 728) argue that the main focus of SDIs are to encourage investment in less-favoured and therefore less-developed regions in South Africa.

The SDI programme is part of GEAR, and ties in with its economic strategy and policies. It is a practical implementation of the government's ec onomic strategy as set out in its GEAR policy (RSA, 2000; Rogerson, 1998:189).

According to (Hanival and Hirsch, 1998:26) SDIs could be justified by two theoretical concepts. The first is based on the notion of regional agglomeration that refers to the t endency of industries to be concentrated in relatively confined geographical areas. This happens because almost every industry is dependent on a range of other industries, associated institutions and service providers for its continued success. Bloch and Lewis (1998:732) noted that "Agglomeration alone, however, will not catalyse or sustain successful regional-level industrial development" and they argued that

[46] Newman (1998) notes that in the SDI, specific locations called nodes are identified for various activities including industrial manufacturing; tourist services and agricultural production.

institutional development should play a greater role in achieving the targeted objectives. Secondly, SDIs are theoretically consistent with development literature that stresses the necessity for government to contribute to the basic infrastructure, such as roads, water and electricity, in order for private investors to invest in profitable industrial concerns

According to Howorth and O'Keefe (1999:13) there are two debates that have to be addressed to give a clear understanding in what direction the SDI programme will head. Firstly, private capital could drive the spatial-focused initiatives to deliver employment and local economic growth and development in a country with two separate economies (essentially one White and one Black). Secondly South Africa should preserve its regional integrity, while establishing an economic region with the ability to p rovide both a regional production and consumption base, and to integrate into the global economy.

According to Jourdan et al, (1997) SDIs have four reasons for a spatial focus, firstly limited state resources, as a result of the apartheid inheritance, deb t servicing and a protected economy. Secondly, SDIs is the result of South Africa's new industrial strategy of replacing import substitution with international competitiveness (see chapter one). Thirdly, SDIs spatial nature concerns the zones of historic under-investment.[47] Lastly, the spatial focus is the result of geological resources that, as the raw materials for economic activity, are geographically defined (cited in Howorth and O'Keefe, 1999:2).

SDIs are functioning as public -private partnerships where the government acts as a kick-starter (the South African government retains up to 10 per cent) aiming to leave the profit- and growth-motivated private sector to drive the initiatives (ITRISA, 1997:158; Nel, 2000:2).

SDIs attempt to limit state investme nt in specific areas to encourage private investment. The need for private investment is necessary as neither the

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[47] These zones are a result of a number of factors created by the apartheid government and included Bantustans and areas affected by the civil war (Howorth and O'Keefe, 1999:2).

government nor local communities have adequate finances (Ryan, 1998). Existing and new SDIs will be predominantly located on, or linked to South Africa's coastal regions (Howorth and O'Keefe, 1999:2).

According to Rogerson (1998:189) the government's bias towards coastal regions can be seen as an attempt to reduce the economic dominance of the Gauteng province that was formed due to past industrial policies as indicated in section 4.2.

Industrial and agri-tourism forms the dominant SDIs in South Africa (Howorth and O'Keefe, 1999:3).[48] Currently South Africa has twelve SDI programmes at varying stages of development (RSA, 2000).

4.3.2 Objectives

There are five key objectives of SDIs (Jourdan et al, 1997):

- To generate sustainable economic growth and development in relatively underdeveloped areas, according to the inherent economic potential of the locality (e.g. natural resources, transport potential or labour pools).

- To generate long term and sustainable employment for the local inhabitants of the SDI area and for the area in general.

- To maximise the extent of private sector investment and lending into the SDI area.

- To exploit the spin-off opportunities that arises from the "crowding-in" of private and public sector investments.

[48] Industrial SDIs focus on geological deposits, transport corridors and labour pools. While Agri-tourism SDIs are tourist developments that open up previously underdeveloped areas of significant potential (Howorth and O'Keefe, 1999).

- To exploit the under-utilised locational and economic advantages for export-oriented growth of the SDIs. In terms of this objective, government is giving specific att ention to an effective package of supply-side measures, a revamp of the regulatory framework to facilitate export strategy, trade treaties and the restructuring of major import conditions.

Seven of South Africa's SDIs have identified nearly 800 investment opportunities worth US$ 32,4 billion with the capacity to create 85 000 jobs and are currently marketing these projects to potential investors through a variety of mechanisms.

Harrison and Todes (1996) note that corridors " have a chequered history ranging from architecture and town planning to economic geography and regional economics" (cited in Driver, 1999:17). The Southern African Development Co-ordination Conference[49] (SADCC) used transport corridors or port-transport systems to create alternative exp ort routes other than South African ports. When the Southern African Development Community (SADC) corridor program replaced the SADCC the emphasis changed towards the economic development of the region in general (Driver, 1999:17). According to SADC (1998) , "The transformation of the transport corridors into development corridors is a landmark for SADC's long -term development strategy" (cited in Driver, 1999:17).

While transport corridors focus on building roads, development corridors are focusing on building infrastructure[50]. According to Kessides (1993) a positive correlation exists between infrastructure and economic growth (cited in Driver, 1999:16).

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[49] Established in 1980 with its main aim to reduce other Southern African countries dependence on South Africa (Driver, 1999:17).

[50] Infrastructure could be divided into "economic infrastructure" and "social infrastructure". Economic infrastructure includes transport (roads, railways, ports), telecommunications, power, water and sanitation and irrigation. While social infrastructure include schools, hospitals etc (Driver, 1999:18).

4.3.3 SDIs in South Africa

The following sections provide a birds -eye overview of the various SDIs that have been identified by the South African DTI. The purpose is not to provide an exhaustive or critical analysis of these efforts at this stage, but to substantiate the argument that the SDI initiative is a significant and required industrial policy interv ention by the South African govemment, and that it departs significantly from earlier industrial policy approaches that were discussed in section 4.2.

4.3.3.1 The West Coast Spatial Development Initiative

The West Coast of South Africa, stretches from the industrial centre of Atlantis in the south to the farming town of Vredendal in the north. Investment possibilities have been identified in heavy industry (steel), tourism, agriculture and agri-processing, fishing and Mari culture. Africa's largest port at Saldanha is situated in the heart of the West Coast, and could enhance the area's reputation as one of the most diversified export regions on the continent.

Key projects include a number of mining and mineral processing projects that are already underway at Saldanha. Including the Namakwa Sands project that mines titanium slag and other minerals from the heavy sands in the region; and Saldanha Steel, a US$ 1,5 billion steel producing facility. Other projects have also been identified in the iron and st eel industry and mineral beneficiation.

A range of projects in the food processing industry have been identified in a region that is rich in agriculture (produces wheat, tea, grain and fruit products) and forms the centre of the South African fishing industry.

The West Coast has a number of national parks (wildlife, rock art and fossils) recognised as being important to the world ecology. Projects are underway to upgrade the West Coast road, and to provide tourist facilities in the region.

The establishing of an IDZ at Saldanha, a harbour town, has been proposed.

4.3.3.2 The Fish River SDI

Unlike many of the other SDIs in South Africa that have large agricultural and tourism components, the Fish River SDI is fundamentally an industrial development initiative trying to regenerate the industrial and economic hubs of the Eastern Cape which have declined over the past years (Nel, 2000:18). The main industrial components of the Fish River SDI are in the motor industry, wood industries, wool, mohair and textiles. The SDI focuses on the existing industrial base and seeks to expand on the existing competitive advantage of the area (Nel, 2000:18). Particularly the areas surrounding Port Elizabeth and East London have been earmarked (DTI, 2000).

At Coega, about 20 kilometres North of Port Elizabeth, an IDZ will be established. Portnet is developing the purpose-built deep-water industrial port at Algoa Bay. The transport of bulk products and inputs required to produce them will rely on the location of a ne arby harbour (Nel, 2000:19). If the projects are located far from a port, transport costs could make the projects invalid. A proposed industrial park will also be located next to the harbour (DTI, 2000).

According to Nel (2000:18) existing infrastructure (physical and manpower) would serve as a compliment to the Coega project. The dominance of the motor industry in Port Elizabeth means that the strategic importance of the Coega IDZ is very high (Nel, 2000:18). The motor industry has struggled to become internationally competitive and lacking effective upstream industries.

East London has a well -established river port city on the South Africa's southeast coast. It is centrally located between the large South African markets of Gauteng, Durban and Cape Town. It also acts as a gateway to the international markets of the East and West.

4.3.3.3 The Wild Coast SDI

The Wild Coast SDI runs alongside the Indian Ocean coastline in the Eastern Cape of South Africa. Beginning from East London in the south, through to Port Edward on the border of the Kwazulu-Natal, in the north.

Key projects include: The following nodes have been identified for the development of projects and facilities in tourism: Mkambati and Mtentu nature reserves; Resort town of Port St Johns; Tourist attractions of Coffee Bay and the Hole in the Wall and Dwesa and Kwebe Nature Reserve. The building of a Nelson Mandela Cultural Centre (museum etc.) and various ranges of forestry and agricultural projects.

4.3.3.4 The Pietermaritzburg SDI

This SDI aims to combine public and private resources to create sustainable development in a manner, based on the realisation of the competitive and comparative advantages offered by the area. It further aims to achieve this through the establishment of clusters , and the promotion of investment projects.

Key Projects include the following. The footwear industry is the single largest manufacturing employer in Pietermaritzburg. It employs 4,800 people directly. This is almost a quarter of the economically active p opulation in the area. Being a highly labour intensive industry the job creation potential is significant. Opportunities have been identified including an 'upper' leather tannery and a business park for small shoemakers on land at Khan/Org Greytown Reads. This will have implications for upstream industry.

The wood products and furniture industries together employ 2,370 people. The linkages in the cluster are weak and the individual industries viz, saw milling, wood panel manufacturing, fixtures, and fasten ers, are poorly developed. There is scope for the upgrading of products if they are to become globally competitive.

The aluminium industry is comprised of 112 companies employing a total of 3,448 people. Much of the industry is capital intensive, but ther e are opportunities for small businesses, particularly in the sub -contracting field. There is a clear absence of upstream and downstream activity, including painting, anodising, design, training and information systems. The advantages presented by close pr oximity to material suppliers are outweighed by poor technical support and long lead times. IDC studies identified viable projects as: tubes and side plates; packaging; building, construction and factory transport and camping equipment.

4.3.3.5 The Richards Bay SDI

This SDI is centred on the Richards Bay / Empangeni area in northern Kwazulu-Natal and is situated on the East Coast of Southern Africa. It is also the nearest port to Southern Africa's largest consumer market around the Johannesburg / Pretoria area.

Richards Bay has a large array of raw materials, and with it, the second lowest electricity in the world. The region is particularly well endowed with tourism and recreation, existing facilities and opportunities. It includes world famous game rese rves, safari lodges, tropical coastlines, indigenous coastal forests, historical and cultural sites and Southern Africa's "great lakes" region centred around the St Lucia Lake which is a World Heritage Site.

The Port is becoming an increasingly popular st op for cruise liners with passengers who want to reach these tourist attractions, and the need for tourist facilities and services in the region creates many opportunities.

Richards Bay Port is Africa's largest and thus far it is only 40 per cent developed. Currently the port handles 56 per cent of South Africa's total sea cargo. Excellent road, rail and international airport communications also serve the area.

Key Projects include the expanding and upgrading of industries through infrastructure projects, SMME's, tourist attractions and the development of a purpose-built development zone, close to the harbour (currently being evaluated for development).

4.3.3.6 The Lubombo SDI

The Lubombo SDI was officially launched during November 2000 and takes its name from the Lubombo Mountains and runs through South -East Africa including areas like Eastern Swaziland, Southern Mozambique and the Northern part of the South African province of Kwazulu -Natal. Sub-tropical plants and one of the world's most breathtaking coastlines surround the Lubombo mountain range.

Key Projects include the following. A tar road is being built through the SDI to link the major South African coastal road, the N2, to the Mozambique capital of Maputo. Secondary roads, linking the SDI to other major South African and Swazi business centres and tourist attractions are being upgraded.

Ensuring the full cooperation of all levels of government in the three countries to ease and protect investment into the region. This includes reducing border controls between Swaziland, Mozambique and South Africa and ensuring the easy movements of tourists and goods between the three countries. A team of experts, from all three countries, are now implementing a malaria control programme.

4.3.3.7 The Phalaborwa SDI

The Phalaborwa SDI will begin at Nelspruit in Mpumalanga into the Northern Province towards Tzaneen in the west and Phalaborwa in the east. This SDI will link up with the Maputo Corridor, having access to Maputo and international markets.

Key projects include the following: In forestry; to expand tourism in forested areas (exposing the wildlife and different cultures). A planned new road and gate to the Kruger National Park could attract more foreign and local investments in the region.

In manufacturing; to increase charcoal manufacturing. In agriculture; the processing of agricultural products for niche markets and infrastructure projects fostered to develop niche markets in mining, cultural and transport activities. Projects for mining and mineral processing, new product development, further processing and small-scale mining, are opportunities for economic empowerment.

4.3.3.8 The Gauteng SDI

The Gauteng SDI consists of five major projects aimed to disperse economic activities in the Gauteng province more effectively.

4.3.3.8.1 The Germiston-Alberton Special Economic Zone

This area has experienced a low economic growth rate in recent years while situated in a high density of manufacturing enterprises. Requiring more investment in advanced technology, higher productivity and lower freight costs to increase industrial growth. The aim of the project is to test and develop the knowledge and experiences in industrial adjustment and regeneration in order to help other fragile industrial areas in the province.

Key projects include: providing information, strategies and tools to stakeholders to increase international competitiveness, value and technology levels and the services sector.

The anchor project is the establishment of a manufacturing support a nd investment centre, a manufacturing advice centre (MAC) in the East Rand as a private sector initiative with government support.

Research projects have been done on: chemicals, plastics and packing industries and on metals and fabrication; benchmarking case studies of industry retention and regeneration; investigation into the spatial issues affecting industrial revitalisation in the zone; detailed business retention survey of local businesses.

4.3.3.8.2 The Johannesburg International Airport Economic Zone

The Airport provides access to international markets particularly for high value, low bulk goods and well-located and well-priced land is available.

Key projects include: Firstly to attract private and public investment to develop infrastructure, business information, services and facilities. Secondly, building one or more industrial development zones near the airport. Identifying catalytic private investments in industrial projects to encourage public investment and thirdly the implementation of prop osed institutional development projects.

RSA (2000) identified various investment possibilities in the following sectors and sub-sectors:

- electronics, information and telecommunications production and distribution;
- airfreight distribution and logistics;
- plastics, packaging, pharmaceuticals and toiletries;
- tourism and associated opportunities, and
- aerospace, avionics and related industries

4.3.3.8.3 The Newtown Economic Zone

The project is designed to develop and stimulate in vestment in the western parts of Johannesburg focusing on mixed industries.

Key Projects include the establishment of management infrastructure and capacity with the access to finance to buy land, to release the economic and social objectives of the project.

The following work has been completed: available information and recommendations on measures to optimise investment; implementation strategy; creative industry mapping and market appraisal; project marketing document; land pooling study; Newtown Development Agency business plan; planning and urban design framework, and traffic modelling and road infrastructure and access study.

4.3.3.8.4 The Gauteng Innovation Hub Project

It is a transport passage starting from the south west of Johannesburg to the north east of Pretoria along the N1.

Key Projects include: The promoting of private and public investment in physical and telecommunications infrastructure, human resource development and key nodes along the corridor.

The establishment of business incubators comprising of: education institutions, the private sector, Research and Development capability, the creation of venture capital funds, training and other business services.

4.3.3.8.5 The City Deep Container Terminal and IDZ

City Deep is an inland container port with a well-developed rail and road infrastructure, under-utilised land and factory space, and container terminals. Freight distribution, transport and logistics industries form the core business of the terminal.

Key Projects include: The promotion of new investment among local firms and for the zone to become the nexus of a national logistics platform linking

seaports to Gauteng and to reduce the transport costs of goods in and out of the SADC economies.

The following studies are currently underway (RSA, 2000):

- A planning and development framework including a 25 -year infrastructure investment plan.
- An environmental management plan.
- An economic sector analysis and market survey.

4.3.3.9 The Platinum SDI

The North West Province plays an important role in the SDI process by linking other provinces and countries with each other. The Platinum SDI runs from the north of Pretoria, in South Africa's Gauteng province, through the North West province towns of Brits, Rustenburg, Swartruggens and Zeer ust, joining the Trans-Kalahari highway in Lobatse, Botswana (RSA, 2000).

There are also direct links to important tourism, industrial and agriculture processing activities in the North West province, and to the Mabopane - Centurion Development Corridor aro und Pretoria. The Platinum SDI also forms part of the Coast-2-Coast SDI that links Maputo Port in Mozambique to Walvis Bay in Namibia.

Key projects in the mineral and mining sectors (over the short -to-medium term) include: the platinum group of metals, go ld, diamonds, slate and nickel etc.

Around 200 potential projects and project opportunities in tourism, manufacturing, agriculture and mining have been identified. These projects are worth more than R730 million and have the potential to create 9000 jobs over the short-to-medium term.

A number of tourism projects will be introduced to investors, aiming to create tourist facilities and accommodation in the region. Other investment opportunities that have being identified are: livestock processing, automoti ve and food clusters.

According to (Howorth and O 'Keefe, 1999:3) the success of the SDIs largely depends on two factors, namely political commitment and momentum and if this process is slowed the tendency could be that investment will stop which could mean the end for the SDI development objectives.

A number of problems and criticisms of the government's initiatives have been encountered (see Kepe et al; 1998, Jourdan and Lund, 1998, Mhlati 1998). Howorth and O'Keefe (1999:5) believe that one of the majo r criticisms is the seemingly antagonistic relationship between GEAR and RDP.[51]

Department of Trade and Industry is using a GEAR approach to economic development (i.e. fast -tracking, globalising and liberalising) and the Department of Land Affairs are pred ominantly adhering to an RDP policy (redistribution and community issues) (ANC, 1994; RSA, 1996).

The SDI process has improved coordination between ministries in the higher tiers of government but there is still confusion and conflict in some lower levels of local and regional government (Howorth and O'Keefe, 1999:5).[52]

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[51] This is relevant to the SDI process because it concerns both economic investment through the DTI and also land issues through the Department of Land Affairs (Howorth and O'Keefe, 1999).

[52] Local and regional government have suffered from a lack of capacity and uncertainty of objectives have caused political bickering and so metimes led to the hijacking of the SDIs by local elites (Howorth and O'Keefe, 1999). These problems are partly due to the apartheid legacy that left the ANC with a weak local government sector that were frequently over - stretched. Problems accrue when loca l authorities are expected to move beyond the traditional conception of their role as service providers, towards seeing themselves as important local economic actors, both as consumers and producers of goods and services, and as facilitators of investment and job creation (Driver, forthcoming).

4.3.4 SDIs Elsewhere in Southern Africa

According to the South African DTI (1998) the objective of the Southern African SDIs are similar to those of the South African programme, although a distinguishing feature is the emphasis placed on the promotion of regional economic integration (cited in Howorth and O'Keefe, 1999:6).

There are 11 possible development corridors or SDIs in Southern Africa, including the Tazara, Nacala, Beira, Maputo, N amibe, Lobito and Malange development corridors and Lubombo, Coast to Coast, Walvis Bay and Okavango SDIs (Howorth and O'Keefe, 1999:6).

- The Beira Development Corridor of the Beira Corridor Group. The development corridor involves Mozambique, Zimbabwe, Ma lawi, Zambia and Botswana, has potential in mineral exploitation, agriculture, forestry, fishing, resource beneficiation and transport infrastructure (ITRISA, 1997).

- The Benguela Development Corridor connecting Angola to the copper mines of the Shaba Province of the Democratic Republic of Congo, and Zambia (ITRISA, 1997).

- The Namibe Development Corridor to Menonmgue in Angola that covers the 300 - 400 km to the iron resources at Kassing (ITRISA, 1997)

- The Malange Development Corridor in Angola has rail an d road infrastructure Projects (ITRISA, 1997).

- The Trans -Kalahari Transport or (Coast -2-Coast) Corridor between Namibia and Botswana, which is proposed as an extension of the South African Rustenburg SDI linking Gauteng with Walvis Bay and Maputo (ITRISA, 1997).

- The Nacala Development Corridor connecting Mozambique to Malawi and Zambia via Chipata which has potential for agriculture, forestry, mining and tourism-based industries (ITRISA, 1997)

- The Tazara Development Corridor that connects Tanzania, Zambia, the Democratic Republic of Congo and Angola via the Benguela Development Corridor (ITRISA, 1997:159).

They have eight objectives (ibid, 1998):

- To increase the rate of regional and national economic growth and development;
- To generate long term and sus tainable regional and national employment;
- To enhance the levels of economic integration of the Southern African economies;
- To promote greater complementarily in economic strategies between Southern African countries as opposed to the currently unnecessary competitive structures of production that exist;
- To enhance intra-regional trade;
- To increase international competitiveness of Southern African export goods;
- To promote a more equitable spatial location of industries within Southern Africa based on inherent development potential;
- To mobilise increased flows of FDI.

4.4 The IDZ Programme

4.4.1 Description

IDZs are envisaged to be industrial estates linked to an international port or airport containing a controlled duty free area. According to Newman (1998:42) the difference between SDIs and IDZs is that "SDIs are broad geographical

areas within which different economic activities can take place, while IDZs are specific, smaller areas, targeted for industrial export manufacturing."

IDZs should not be se en as EPZs, which are independent bonded areas where less rigorous environmental and labour standards are often employed, while IDZs are subject to South African environmental and labour legislation (Nel, 2000:2).

IDZs intend to provide facilities and ser vices tailored for export-oriented industries therefore designed to attract FDI for export -oriented manufacturing (Hanival and Hirsch, 1998:29).

4.4.2 Motivation

Factors promoting the establishment of IDZs around the world are the need for platforms that provide a business environment offering speedy decision-making, attractive benefits, high quality inputs at competitive rates and standards for labour and the environment that give easy access to world markets (RSA, 2000).

IDZs could serve as a catalyst for the development of strategic resource intensive industries as well as the clustering of related industries. The vision that South Africa has for IDZs is a hybrid model, spanning light manufacturing and assembly through to capital-intensive natural resource based industries (RSA, 2000).

IDZs are supported by developments in many emerging and less developed countries where it is becoming increasingly difficult to attract manufacturing FDI without offering foreign investors further incentives (Hanival an d Hirsch, 1998:29). Section 1.2 and section 3.1 showed the importance of FDI for South Africa to boost growth, employment, exports, and increased competitiveness in the manufacturing sector was stressed. Section 3.4.6.2 also pointed out that in South Africa there is wariness of the conventional model of EPZs - particularly relating to the perceptions that labour and environmental issues

are neglected in these zones, which would undermine industrial development and industrial relations in South Africa.

It is being argued that the model is putting pressure on zone development which links domestic industries with those located in zones.[53]

New investments could benefit from IDZs through:

- An attractive regulatory regime and investment facilitation services provided by zone operators,
- Duty free imports of capital goods and inputs,
- Value added tax (VAT) exemption for exports, and
- Access to government's incentive mechanism compliant with WTO guidelines.

The location of an IDZ could play an important role in achie ving international competitiveness advantages.[54] Environmental management plans need to be in place to ensure that environmental standards will be maintained for every zone and be compliant with national legislation.

Developing human resources through co-ordination of recruitment and training services for each zone is underway. Labour legislation could play a big role in the success or failure of development zones. Therefore the need for a stable and productive industrial relations environment is needed if South Africa wants to become a major partner in trade.

4.4.3 Global Context of IDZs

The dynamism of export-oriented Asian economies coupled with the increasing problems faced by countries pursuing inward -oriented, import substitution based policies, has led to an increased focus on global markets

[53] Zone development aims to optimise the use of existing infrastructure, generate employment and the transfer of technology (RSA, 2000).

and globalisation as a means of stimulating economic growth and development.

Global integration (globalisation) can be described as the process whereby markets and production in different economies become increa singly interdependent due to the dynamics of trade in goods and services, and the flows of capital and technology. This interdependence is becoming increasingly evident on analysing the:

- Higher growth in world exports as opposed to world production which highlights the increasing importance of international trade;
- Higher levels of foreign investment (especially foreign direct investment) in emerging countries including South Africa;
- Increased levels of cross border mergers and acquisitions; an increased international joint ventures, licensing, subcontracting.

To understand the context and environment within which South African manufacturers will seek to compete internationally, it may be necessary to firstly provide some insight into the current global trends, examining the trends in production and trade. Secondly, the changing composition of world trade is discussed. The third aspect highlighted is that of regionalisation and regional integration, together with the shifting pattern of world trade.

4.4.3.1 Trends in Global Trade

The past two decades have witnessed significant growth in world trade *vis-à-vis* growth in world production. This has resulted in a doubling of world exports as a proportion of world output. Moreover, there has been a shift away f rom trade in raw materials towards higher value added goods.

In almost every year of the post-war period (1950 to 1994) the growth in world merchandise trade had exceeded that of output (IDC database, 1997). Over

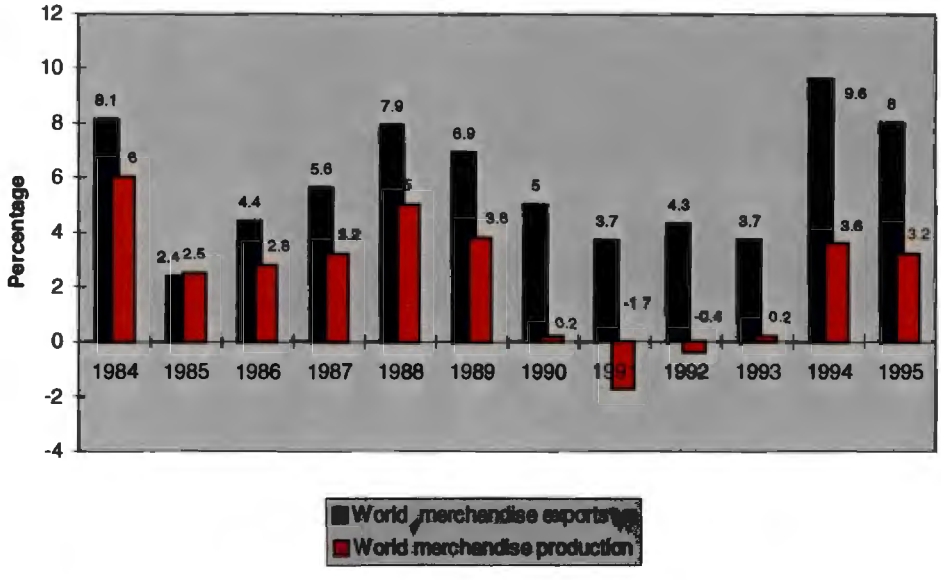
[54] Advantages like lower transport costs, quicker reception of imported goods an d faster

this period, in real terms, world merchandise outputs increased five-fold, with world merchandise exports increasing by more than fourteen times (IDC database, 1997).

Over the last decade, this trend has been maintained. Figure 11 indicate that in every year since 1984, the growth in world exports have continuously outstripped that of world output.

In the early 1990's, when world merchandise production remained constant, and declined in 1992 and 1993, exports maintained a steady growth. In 1994, world merchandise exports recorded its highest growth since 1984 of over 9 percent, with world production increasing by only 3 per cent. Although the export growth for 1995 was lower than 1994, it nonetheless outstripped the growth in world merchandise production.

Figure 11: Growth in World Exports and Production:1984-1995



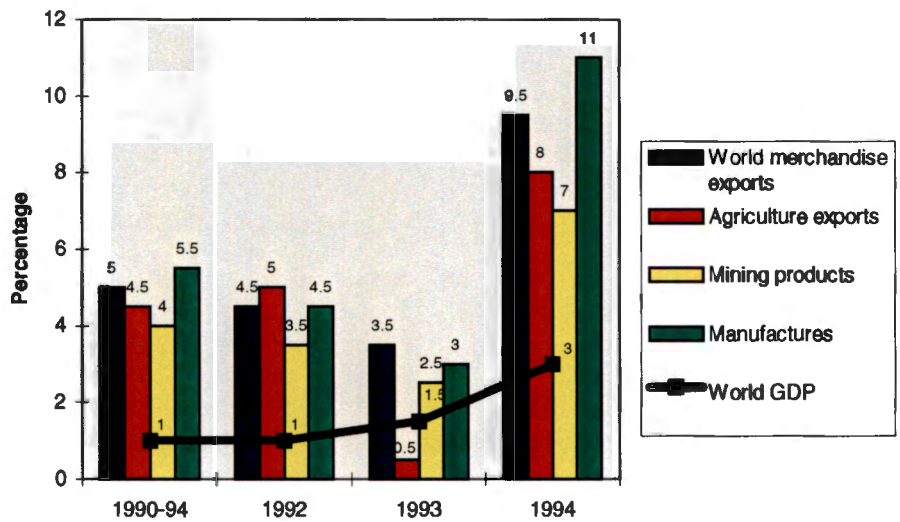
(Source: WTO, 1996)

delivery of goods to export markets (RSA, 1999).

This trend is maintained even on disaggregating merchandise trade into agriculture, mining and manufacturing. World trade is thus rising at a faster pace than world production.

Figure 12 and Figure 13 lights the growth in merchandise exports on a disaggregated level *vis-à-vis* growth in world gross domestic product. It can be seen from Figure 12 and Figure 13 that the growth in the level of exports has outperformed growth in production in the various sectors of the economy. Over the period 1990 - 1994, agricultural production grew by 0.5 per cent, whilst trade in agricultural products increased by approximately 5 per cent. The phenomenon of trade growth outstripping growth in production is evident for all major product groups. In manufacturing, when production declined in 1991 and 1992, there was nonetheless growth in the level of exports.

Figure 12: Percentage Growth in the Volume of World Merchandise Exports by Major Product Group



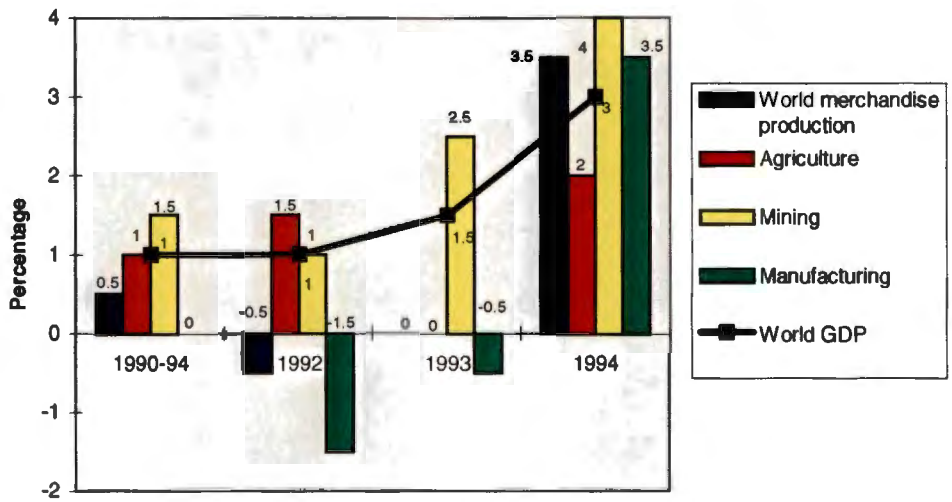
(Source : WTO, 1996)

The higher growth in the level of exports vis-à-vis production has been a tendency over most of the past 45 years. Coupled with the evolution of other elements of global integration this suggests a certain momentum. It is therefore anticipated that globalisation will continue. However, this is

dependent on several other factors that have been identified as the driving forces behind global integration. These factors include:

Developments in government policies (especially regarding trade liberalisation policies and capital inflows); technological innovations that reduce transport and communication costs; and evolving strategies of firms and individual investors, which are both driven and facilitated by the first two developments.

Figure 13 : % Growth in the Volume of World Merchandise Production by Major Product Group



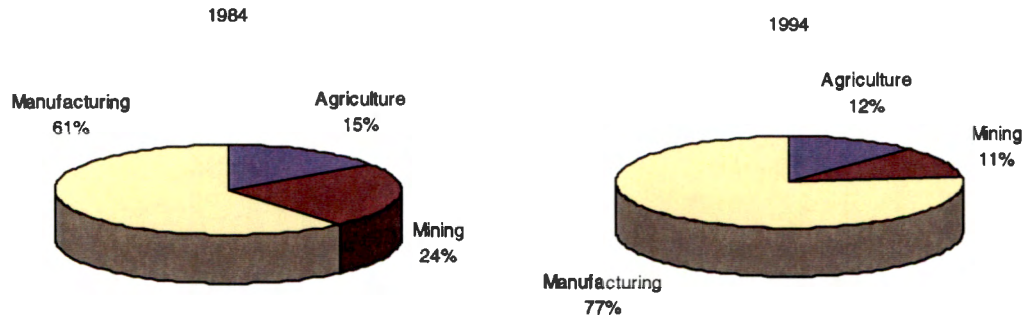
(Source : WTO, 1996)

Although it is expected that the dominance of trade over production will continue, it is important to understand the exact nature of trade. There is a fundamental shift towards trade in higher value-added beneficiated products.

4.4.3.2 The Composition of World Trade

Understanding the composition of world trade and trends over the past decade might be useful for countries to avoid focusing in production and trade on areas which are losing international importance.

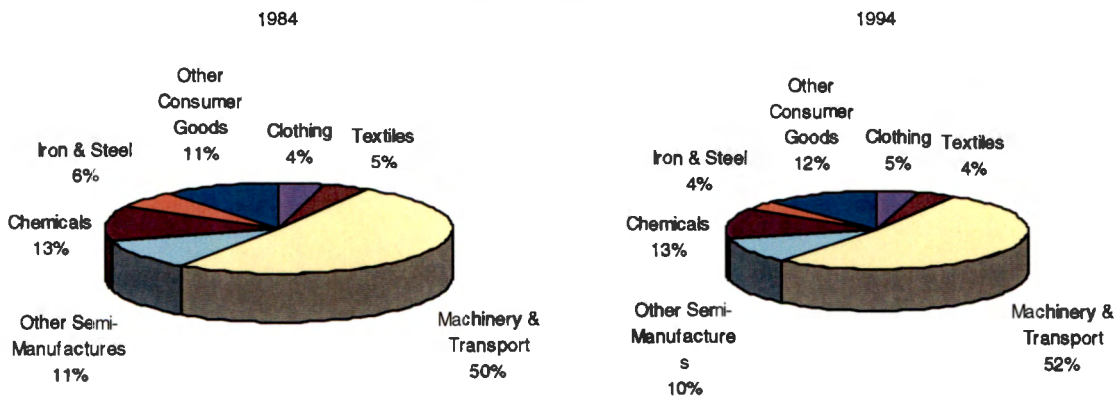
Figure14 : Composition of World Merchandise Exports (1984 - 1994)



(Source : WTO, 1996)

Figure 14 above indicates that agricultural products are a smaller component of the total world export basket in 1994 (12 per cent) as opposed to 1984 (15 per cent). It also shows that a significant shift has taken place from trade in mining products to manufacturing. Manufactured products share of the export basket increased from 61 per cent in 1984 to 77 per cent in 1994. This amount to an increase in the share of manufactured products of approximately 16 percent in this period. This was accompanied by lower levels of mining exports, with mining exports declining from approximately 24 percent in 1984 to around 11 per cent in 1994.

Figure 15: Composition of World Manufactured Merchandise Exports (1984 - 1994)



(Source : WTO, 1996)

Figure 15 shows that as far as the composition of manufacturing exports are concerned, there is evidence of further shifts away from the lower value added products to higher value added ones. Basic metals such as iron and steel (low

value added goods) recorded a marginal decline in its contribution to world exports, whilst other higher value added goods exhibited larger shares of the total export basket. Chemicals, semi-manufactured goods, clothing and other consumer goods all had marginal growth, whilst machinery and transport increased its share of the export basket from just under 50 per cent to approximately 52 per cent. This is indicative of a shift away from trade in low value added goods to trade in higher value added products.

Due to the changing composition of world trade, trading patterns have also shifted. Countries that predominantly focused on exploiting their natural resources and raw materials (generally developing economies) in the world markets have become l ess important in international trade. However, developing countries are increasing their focus on exporting value added products.

Developing countries as a group account for a small percentage (low and middle income economies account for approximately 19 per cent of world output in 1995) in world manufacturing output. Although their output and exports of manufactured goods have grown more rapidly than that of their industrialised counterparts, it must be recognised that this was from a very small base. Fur thermore, the share of their manufactured exports relative to primary commodity exports have also increased substantially over the past three decades, particularly in the developing economies of Asia, Europe, the Middle East and the Western Hemisphere.

Between the developed economies, trade is increasingly taking place along horizontal, intra-industry lines, with countries simultaneously exporting and importing similar types of products. Firms that develop a product and fill a particular market niche in on e country, discover markets in other countries in which there are consumers with similar tastes and incomes. The potential for intra-industry trade may be greatest where the scope for differentiation is the highest i.e. highly sophisticated manufactured go ods such as machinery, pharmaceuticals and instruments. These are the types of product ranges in which developed economies have increased their levels of exports. Trade in

manufactured goods outpaced that of primary commodities, and trade in sophisticated products have increased to an even larger extent. For instance, the share of high-tech products in world manufactured goods trade increased from 21.4 per cent in 1973 to 28.6 per cent in 1988 (IDC Database, 1997).

4.4.3.3 Economic Integration

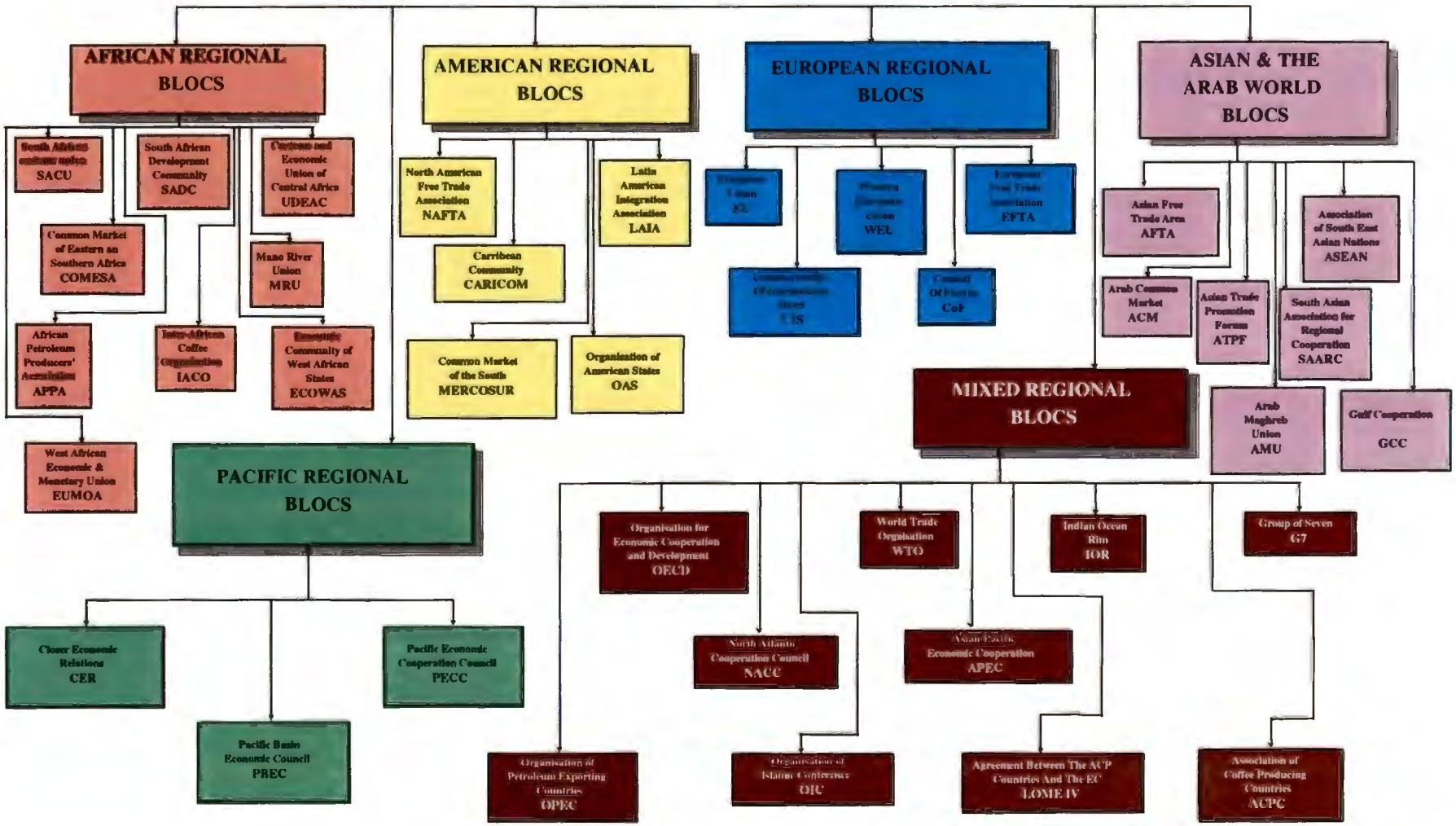
An area in international trade that has been growing in importance is that of economic integration, which has been proposed as an alternative to trade liberalisation or as a way to lock in trade liberalisation.

Economic integration should be seen as participating co untries reducing (sometimes even removing) trade restrictions amongst themselves whilst holding these restrictions intact against the rest of the world. In its broadest sense, economic integration can be understood as the unification of distinct economies into a single larger one. It can take on various forms depending on the "closeness" of cooperation. Ranging from the simple removal of tariff barriers to the elimination of all trade impediments.

Despite increasing efforts to liberalise the global trading system, the emergence of trading blocks is on the increase. At the end of 1994, the GATT had been notified of 108 regional agreements, of which 33 were formed in the last 5 years. Almost all of the GATT's over 120 member countries were linked to one such grouping (IDC Database, 1997).

A reason cited for the revival of economic integration has been the difficulties encountered during the Uruguay Round of trade negotiations. Several countries undertook or contemplated new regional integration initiatives as an "insurance policy" in the event of failure of the Uruguay Round of negotiations.

Figure 16: World Regional Trade Blocks



To date, there are 35 different regional blocs as is evident from Figure 16 above. All continents have re gional agreements between the different countries, with several trade blocs in America, Europe, Asia, the pacific and Africa. In Africa, 8 trade blocs exist, some with overlapping memberships. South Africa is a member of two of these regional groupings (SACU, SADC). It is clear from Figure 16 that economic integration is a concept that has substantial support globally.

The widespread support for economic integration might be justified with reference to the perceived benefits for its member countries. Firstly, there may be an increased efficiency brought about via an increase in specialisation in accordance with comparative advantage. Secondly, due to the increase in the size of the market, economies of scale may be easier exploited, and higher production levels achieved. A larger market size could improve international bargaining power, and thereby possibly improve the terms of trade. Thirdly, due to the increased levels of competition, efficiency may arise. Gains may also be attributed to changes affecting the amount and quality of the factors of production due to technological advances. The aforementioned gains arise largely at the level of a customs union or free trade area. Should one progress beyond customs unions, then gains may arise due to factor mob ility between the participating countries (capital, manpower and resources tend to be more efficiently utilised, since capital tends to move to labour-rich or resource based regions); and the co-ordination of monetary and fiscal policies, the goals of full employment and higher growth rates, and more equitable income distribution becoming unified targets.

4.4.3.4 Transports and Logistics for Global Competitiveness

In the previous sections it was shown that the global context is characterised by the following:

- Moves towards high-value added manufacturing
- Regional integration
- Trade liberalisation

In such a context it is not individual ("footloose") firms that are competitive as such, but whole supply (or value) chains. As such transport and logi stical considerations are important in the locational decisions of manufacturing firms.

For a developing country such as South Africa, that is located geographically distant from its major exports markets (the Far East, Europe and the USA) geographical considerations may raise pertinent questions about the suitability and nature of export-led growth and its accompanying or supportive policies. A recent survey on the relationship between shipping costs and manufacturing exports pointed out that the evidence suggests that high -shipping costs countries will find it more difficult to promote export-led development, even if they reduce tariff rates, remove quantitative restrictions and follow prudent macroeconomic policies.

Thus, transport costs could be a sig nificant factor adversely affecting the competitiveness of South African exports on global markets. If it can be established that this is the case, incentive measures based on geographical considerations, as well as regional economic integration initiatives[55] that promotes "seamless" transportation across borders may acquire urgency. One such measure might be the creation of an IDZ/GTP for manufacturing development.

4.4.4 THE NEW ECONOMIC GEOGRAPHY AND TRANSPORT COSTS

The "new economic geography" may be de scribed to embrace two main research programmes, namely an investigation into the spatial agglomeration of economic activity, and an investigation into the dynamics of regional growth convergence.

[55] Particularly for the landlocked countries in Southern Africa that are part of the Southern African Development Community (SADC) the incidence of transport costs could be an important motivation for fast-tracking regional integration agreements. Suleman (1998:15) states that landlocked countries, in particular, face very high costs of shipping, since they must pay road transport costs across at least one international boundary in addition to sea freight costs.

In both of these programmes, the linkage between trade ba rriers (especially transport costs) and export performance can be argued to be deserving of attention. For instance it is a well -known problem that African economies attract the smallest percentage (around 2 per cent) of all outward -bound foreign direct investment (FDI), and has had a diminishing share of global exports (around 1.2 per cent). Also, Africa as a region (with the exception of Botswana and Mauritius) has had the most dismal economic growth rates of all regions since the Second World War. In Afr ica's case, the global spatial agglomeration of economic activity (as witnessed in low FDI and domestic fixed investment) and lack of convergence with trading partners (as witnessed in low growth) may have an explanation rooted in its geography.

This fact has not always been recognised by policy makers. An understanding of how African economies function and why Africa is marginal has begun to establish a form of consensus that Africa's poor economic performance is due to its lack of openness. Sachs and Wa rner constructed an index of openness based on five tests[56] and established that openness is significantly associated with economic growth, and that Africa as a region is the least "open" of all regions. Most often the economics literature ascribes inappropriate domestic economic policies as the cause of Africa's lack of openness. Recently, Gallup, Sachs and Mellinger identified a number of geographic features that may further contribute to the lack of openness of African economies. They show that Africa have (a) a very high concentration of land in the tropics, (b) a population heavily concentrated in the interior[57], (c) more than a quarter of the population in landlocked countries, (d) far from the closest core markets in Europe, and (e) with low population densities in the coastal and interior regions.

[56] An economy is judged to be "open" if (a) average tariff rates are below 40 per cent, (b) average quota and licensing coverage of imports less than 40 per cent, (c) the black market exchange rate premium is less than 20 per cent, (d) there are no extreme controls on exports; and (e) it is not a socialist country. According to these tests of Sachs and Warner (1995; 1997) South Africa is "open" to international trade – although geographical factors (natural trade barriers) may limit the real openness.

[57] They find that only 19 per cent of Sub-Saharan Africa's population lives within 100 km of the coast.

An important effect of the above geographical features that may result in a lack of openness to international trade is that it all raises transport costs – both domestic transport costs (i.e. within a countr y – particularly landlocked countries) as well as international transport costs (such as higher shipping charges).

However, this do not necessarily mean that there is very little that African countries can do in the way of policy and management to increas e the openness of their economies and thereby change the global spatial agglomeration of economic activity in their own favour, or increase the rate of growth convergence with other economies. The gist of the "new economic geography" is precisely that whilst physical geography might matter in the way described above factors such as increasing returns to scale, agglomeration economies, product differentiation as well as transport costs can lead to a "highly differentiated spatial organization of economic activity...even when the underlying physical geography is undifferentiated" (Gallup, Sachs & Mellinger, 1998:12). In this, the "new economic geography" follows the "new trade theory"[58]. It suggests that institutions and regulations in the African transport sector, as well as management techniques such as logistics management and logistics technology - which depend on the level of human capital in these countries -may be important explanations for high transport costs faced by African countries.

The GTP concept d iscussed in section two of this report provides an institutional response to stimulate the spatial organisation of high-value added manufacturing by providing a platform for the realisation of economies of scale, agglomeration advantages and competitive distribution costs.

4.4.5 Objectives

IDZ should be seen in South Africa to be:

[58] Traditional trade theory assumes away geography and thus transport costs. It has only been recentl that international trade theory has begun to modify its models to include transport costs.

- An instrument for the development of strategic resource intensive industries, vertical integration and increased value added manufacturing activity.
- An initiative to optimise the use of existing infrastructure.
- A contribution to employment generation.
- A method for leading edge technology and technological transfer and to obtain foreign exchange by attracting FDI.
- A catalyst for facilitating SMME participation in exports.

Various strategies are proposed to realise the above through utilising the infrastructure and duty-free status of the IDZ area. For instance, the following approaches may be followed at all or various IDZs:

- Labour intensive light manufacturing and assembly th at incorporates unskilled, skilled, technical and managerial personnel to produce higher value products and services.
- Manufacturing activities linked to the local industry that incorporate substantial levels of local inputs, downstream manufactures, components and/or services.
- Boosting of the export services sector that requires higher skill levels and value added.
- Capital intensive and natural resource based primary industries.

4.4.6 Proposed IDZs in South Africa

This section gives a birds -eye view of th e various IDZs that have been tentatively proposed for South Africa. Before being awarded final IDZ status by the Manufacturing Development Board (MDB) of the DTI, each of these areas are expected to first apply for an interim IDZ operator permit. In such an application the economic feasibility and motivation for that area to be declared an IDZ must be provided. Chapter five provides such a template application by critical analysing the factors that may affect the success of MIA to be an IDZ.

4.4.6.1 Saldanha IDZ

Saldanha Bay is situated on the West Coast of South Africa and being the largest natural harbour and biggest port in South Africa makes it an attractive site for zone development to take place.

The port of Saldanha has 1350 hectares of land avai lable for industrial development. An agricultural region that produces tea, wheat, grain and fruit products, and a well-developed fish industry will surround this zone.

Anchor industries located near the industrial zone are: *Namakwa Sands*, a heavy minerals processing facility producing titanium slag, pig iron, zircon, rutile. *Saldanha Steel*, a steel mill producing 1,25 millions tons of hot -rolled steel coils per annum. *Duferco DSP*, a steel processing facility producing cold-rolled steels coils.

Key projects include: *Zinc Smelter*: Zinc concentrate is being transferred from Gamsburg along the Sishen -Saldanha railway and this makes Saldanha a preferred location for a zinc smelter.

Magnesiu : Mintek has developed a process that produces high recoveries of magnesium vapour and reduces metal refining costs. [59] The use of large furnaces, availability of dolomite at Vredenburg and the low cost of electricity favour Saldanha for the production of magnesium for exporting.

Titanium Sponge: A 5 kt/a stand -alone titanium sponge operation could be economically sustainable in Saldanha, a study by Mintek concluded. If this plant could form part of a titanium dioxide pigment production facility, it could be economical at 2 kt/a.

[59] The Advanced Thermal Magnesium Process (ATMP) operates at atmospheric pressure (RSA, 2000).

Hot Briquetted Iron: Factors that could create an opportunity to produce HBI for export are:

The availability of iron ore from Iscor's Sishen mine, and natural gas from the Kudu gas fields off the Namibian coast (RSA, 2000).

The availability of metal processing initiatives has increased due to rece nt investments.

Steel Pipe Manufacturing: The possibility of gas and oil along the West Coast of Africa could provide an opportunity for steel manufactured products such as pipes from Saldanha. RSA (2000) points out two examples: Firstly, A 2050 km pipeline required from Chad, through Cameroon, to the West Coast and secondly the Kudu gas pipeline from Namibia to Cape Town.

Catalytic Converters: South Africa currently supplies 8 per cent of global demand and SA could become the main supplier. Members of the SA catalytic converter industry, DTI and others, are negotiating with producers of the main components of a catalytic converter; this investment could be worth US$75 million.

Steel Service Centre: Value-adding activities have to be implemented by the South African merchant sector to ensure its survival. One -stop-shop service centres has still to be developed.

Marine Container Manufacturing: A large and growing world demand for marine containers could expand current production capacity in South Africa.

Automotive Components and Ductile Iron Castings: Namakwa Sands is producing 120 000 tons per annum of pig iron. Pig iron is a by -product, relatively pure with a low presence of manganese.

Namakwa Sands is exporting its goods to the following industries:

- European automotive manufacturers,

- Ductile iron pipe manufactures,
- Foundries and
- Machine and equipment manufactures (RSA, 2000).

Cold-formed open steel sections: Duferco DSP's galvanised cold rolled steel could produce the following open sections: angel, channel, lipped channel, doorframes, etc.

4.4.6.2 Coega IDZ

The Coega project dates back to the 1970's when it was proposed that a deep-water harbour should be built at Coega, 20 kilometres north of Port Elizabeth. In June 1996 plans were drawn up for the resurrection of the harbour and Gencor announced its intention of establishing a new zinc refinery in the Eastern Cape (Nel, 2000:16). The Coega IDZ and port form part of the Fish River SDI with East London and Port Elizabeth forming the nodes (Nel, 2000:18).

According to Nel (2000:19) the deep-water port at Coega has three competitive advantages: First, Coega is situated in the middle of Durban and Cape Town making it geographically well placed within South Africa. Second, the port would be one the busiest international sea routes and could provide access to the Americas, Europe and the Pacific and Indian Ocean Rim. Lastly, the palaeo-channel at the mouth of the Coega River means that dredging costs can be kept to a minimum and the port can be developed at Coega more cost effectively than at other sites within the Fish River SDI.

Investments into Coega are estimated to be around R3 500 million and could even reach as much as R4 000 million. The building of the port is expected to cost R1 000 million with infrastructure requiring another possible R500 million. In addition to these costs another R150 million could be needed for marketing, management and development for the first five years (Nel, 2000:20). The projected impact of the development of the Coega project between 1998 and 2005 on GDP and total employment are as follows:

Table 9 and table 10 indicate the preliminary results of the Economic Impact Assessment (KPMG, 1997) due to the Coega IDZ. The KPMG report divides the impacts into the construction phase, operations phase and impacts as a result of induced tourism. The economic assessment projected the impacts between 1998 and 2005 based on the investment programme associated with the anchor tenants. For a list of anchor tenants see (Nel, 2000:19).

Table 9 indicates Coega's contribution towards the Eastern Cape's GDP will be R7 281 million, while South Africa in general would receive R10 319 million.

Table 9: GDP Contribution as a result of the Coega IDZ

1998-2005	GDP (R million) from Construction, Operations and Induced Tourism
South Africa	10319
Eastern Cape	7281
Total	17600

Source: KPMG, 1997

In table 10 (below) one notes that the total employme nt could be approximately 40 000. While employment in the Eastern Cape will employ the most in the construction phase (11 500 jobs) followed by operations (9500 jobs) and to a lesser extent tourism (800 jobs) and for South Africa in general the same applies.

Table 10: Total Employment Impacts of the Coega IDZ

	Construction 98-00	Operations 98-00	Induced Tourism
South Africa	14 500	9 500	800
Eastern Cape	11 500	2 500	650
Total	26 000	12 000	1450

Source: KPMG, 1997

KPMG further estimates that the total net contribution to the national fiscus could be R5, 65 billion and would be generated mostly through income tax

(individual and company taxes) and indirect taxes (such as VAT) (Nel, 2000:21).

KPMG undertook the Cost Benefit analysis, and indicated that the benefits from phase one would be greater than the cost of investment for phase one. According to Joubert (1998) the study also indicated that even at high discount rates, the project's return would remain positive (cited in Nel, 2000:21).

Nel (2000:27) notes that the Coega IDZ should focus more on attracting small and medium sizes enterprises with mixed and related economic activities.

4.4.6.3 The East London IDZ

East London is a river port city on the south east coast of South Africa. Motor and Te tile industries are the major industries in East London. Further possible locations of industries in the IDZ are: high technology, manufacturing and food processing.

The key project is to develop and upgrade new and existing infrastructure and in the first phase 500 hectares of land will be developed and this could expand to 1700 hectares in the near future. Possible tenants could be in the petrol chemical, motor, textile or the electronics industries (RSA, 2000).

4.4.6.4 An IDZ near City Deep Container Terminal

According to Clancy (Creamer's engineering news, 2000) this industrial zone could provide manufactures with direct access to container terminals and intermodal freight transport services.

Possible investments could be made in the Transport and lo gistics industries and manufacturers of transport-sensitive products.

4.4.6.5 An IDZ next to the Johannesburg International Airport

According to Spiropoulos (2000) "The airport and a proposed adjoining IDZ will allow manufactures of high -value low-bulk goods and perishables access to international markets."[60]

IDZ next to the Johannesburg International Airport could attract the following investments: tourism, transport and freight, electronics and information technology, fresh produce for international markets, plastics and packaging, and aerospace and avionics.

4.4.6.6 The Durban IDZ

A key project that has been proposed is the construction of an IDZ next to the to be newly constructed King Shaka International Airport at La Mercy (north of Durban) Airport.

It has been proposed that Durban International Airport (DIA) should be relocated to a site at La Mercy, to the north of Durban. The development of 'King Shaka International Airport' at La Mercy is estimated to cost R1.6 billion and create about 11 500 direct new job opportunities. According to ACSA this will take place by 2010[61], but provincial government is putting pressure for the relocation to commence sooner, by 2007 at the latest. It is due to (a) the need to expand the Port of Durban towards the area currently occupied by DIA; (b) make available industrial land for the expansion of Durban's petro -chemical cluster that is of national strategic importance[62], (c) the inadequacy of the

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[60] John Spiropoulos is the project manager of the Gauteng Innovation Hub, see (http://www.sdi.org.za/Profies/gauthub.htm).

[61] Final feasibility studies show that the passenger/cargo numbers are, apparently, not sufficient to warrant the relocation of DIA from the present site (Durban South) to La Mercy (Durban North). If a move is made prior to then (2010), it will have to be subsidized to the tune of at least R1.1 bn.

[62] The findings of the CSIR's recent (1999) Strategic Environmental Assessment (SEA) give impetus to plans to relocate the airport from its current site near Isipingo to La Mercy by recommending that future development of the area extending from the tip of the Bluff to Umbogintwini should be industrial.

current DIA (too short a runway). Part of the La Mercy relocation plan entails selling the current airport site to raise some of the R1.1 billion that ACSA would require to move DIA.

Furthermore, the relocation of DIA to La Mercy will create opportunities for:

- Tourism promotion
- High-tech industrial development in e.g. electronics and pharmaceuticals that are currently lacking in KZN;
- Horticultural exports;
- High-quality office parks and retail facilities

The relocation of DIA to the site at La Mercy – and to be known as King Shaka International Airport – has the further advantage of being located on the Durban-Richards Bay Spatial Development Initiative (SDI). Such an IDZ will enable the rapid movement of goods by air and road / rail to and from Durban and Richards Bay. The latter regions are the major manufacturing areas of KZN and contain a significant share of South Africa's export oriented manufacturing firms.

The optimal development of South Africa's manufacturing export potential will require that the cost disadvantages facing manufactured exports from KZN be addressed. Surveys have established that cost disadvantages are the most serious constraint faced by exporters in KZN. In line with recent national policy directives (see e.g. the Moving South Africa Report of the DOT) these cost disadvantages could be addressed through improving transport and logistical services (especially 4PL services) and transport infrastructure.

4.5 Summary

This chapter gave an overview of the past development of industrial policy in South Africa followed by a short overview of recent industrial developments with reference to the South African SDIs. Section 4.2 discussed the

development of industrial policies in South Africa. This section showed that the homeland policy and the various RIDPs showed little contribution to industrialisation in most areas of South Africa.

In section 4.3 the Spatial Development Initiatives were discussed with reference to the South African SDIs. It was shown that the SDI program is different to the RIDPs in that it is aimed at generating long -term, internationally competitive growth and development, and the restructuring the apartheid space economy. The theoretical concepts of SDIs are based on the notion of regional agglomeration showing that almost every industry is dependent on a range of other i ndustries for continued success. Secondly, SDI are theoretically consistent with development literature that stresses the necessity for government to contribute to the basic infrastructure, such as roads, water and electricity, in order for private investors to invest in profitable industrial concerns.

Section 4.3.4 listed the SDIs elsewhere in Southern Africa and it was noted that eleven SDIs or Development Corridors are being developed in Southern Africa. Their objectives were also given in this section.

It was also emphasised that IDZs must not be seen as EPZs, which are independent bonded areas where less rigorous environmental and labour standards are often employed, while IDZs are subject to South African environmental and labour legislation.

IDZs are supported by developments in many emerging and LDCs, where it is becoming increasingly difficult to attract manufacturing FDI without offering foreign investors further incentives. It was argued that the dynamism of export-oriented Asian economies coupled with the increasing problems faced by countries pursuing inward-oriented, import substitution based policies, has led to increased focus on global markets and globalisation as a means of stimulating economic growth and development.

To understand the context and environment within which South African manufacturers would seek to compete internationally, this section argued the importance of providing insight into the current global trends in production and trade. The past two decades have witnessed significant growth in world trade vis-à-vis growth in world production. This has resulted in a doubling of world exports as a proportion in world output. Moreover, it was also noted that there has been a shift away from trade in raw materials towards higher value added goods. Developing countries have increased their focus on export value added products.

Secondly, the changing composition of world trade was discussed. It was noted that world trade is rising faster than world production. Understanding the composition of world trade and trends it was argued that countries needed to avoid focusing in production and trade where areas were losing international importance.

The third aspect highlighted the importance of regionalisation and regional integration, together with the shifting pattern of world trade. It was argued that economic integration could be used as an alternative to trade liberalisation or as a way to lock in trade liberalisation. Economic integration should be seen as participating countries r educing trade restrictions amongst themselves whilst holding these restrictions intact against the rest of the world. The support for economic integration was justified with reference to perceived benefits for its member countries. Firstly, there may be an increased efficiency brought about via an increase in specialisation in accordance with comparative advantage. Secondly, due to the increase in specialisation in accordance with economies of scale may be easier exploited, and higher production levels achieved. Thirdly, due to the increased levels of competition, efficiency might rise. Gains may also be attributed to changes affecting the amount and quality of the factors due to technological advances.

The previous sections showed that the global contex t was characterised by the following moves towards high -value added manufacturing, regional integration and trade liberalisation. In such a context it is not individual firms

that are competitive but whole supply (or value) chains. It was argued that transport and logistical considerations are important in the locational decisions of manufacturing firms.

For a developing country such as South Africa, that is located geographically distant from its major exports markets (the Far East, Europe and the USA) geographical considerations may raise pertinent questions about the suitability and nature of export-led growth and its accompanying or supportive policies. It was also noted that the relationship between shipping costs and manufacturing exports pointed out, that the evidence suggests that countries with high-shipping costs, will find it more difficult to promote export led -led development, even if they reduce tariff rates, remove quantitative restrictions and follow prudent macroeconomic policies. Therefore it was stressed that transport costs could be a significant factor adversely affecting the competitiveness of South African exports on global markets. If this turns out to be the case then it was suggested that South Africa should introduce incentive measures based on geographical considerations, as well as regional economic integration initiatives that promotes "seamless" transportation across borders. One such a measure might be the creation of an IDZ / GTP for manufacturing development.

Section 4.4.5 showed the various objectives of IDZs. This section also proposed a number of strategies to realise these objectives.

The port of Saldanha has 1350 hectares of land available for industrial development. Anchor industries that are located near the industria l zone are: Namakwa Sands, Saldanha Steel and Duferco DSP. Eleven key projects are planned for this area.

The Coega IDZ and port form part of the Fish River SDI with East London and Port Elizabeth forming the development nodes. It was argued that the Coeg a IDZ should focus more on attracting small and medium size enterprises.

The major industries in East London are the motor and textiles industries. The key project is to develop and upgrade new and existing infrastructure and in the first phase 500 hectares of land will be developed and this could expand to 1700 hectares of land in the near future.

An IDZ near the City Deep Container Terminal could provide manufacturers with direct access to container terminals and intermodal freight transport services. The establishing of an IDZ next to the Johannesburg International Airport this IDZ could provide manufacturers of high-value low-bulk goods and perishables access to international markets.

An IDZ could be built next to the newly constructed King Shaka Inte rnational Airport at La Mercy. It has been proposed that the Durban International Airport (DIA) should be relocated to site at La Mercy, north of Durban. This IDZ could enable the rapid movement of goods by air and road / rail to and from Durban and Richa rds Bay. It was argued that the optimal development of South Africa's manufacturing would require the cost advantages facing manufactured exports from Kwazulu-Natal to be addressed.

Chapter 5:
A Case Study of the Potential Impact of the IDZ Programme

5.1 Introduction

The objective of this study was to evaluate the potential of Industrial Development Zones, as a selective policy measure, to improve the International competitiveness of the South African manufacturing sector (see chapter 2). This evaluation has been done using a literature study into the international experience with Export Processing Zones (see chapter 3). It was shown that although South Africa had considered the establishment of EPZs as a possible outward policy, but due to its criticisms such as gender, wage and labour laws and technology transfer that were inadequate, it was not further developed. Therefore the government of 1994 decided to introduce IDZs as a possible development policy, which formed part of the special economic zones found worldwide. These zones will be subject to South Africa's national labour laws and various incentives will be offered to potential investors (see chapter 4).

The layout of this chapter is as follows: In section 5.2 a brief overview is given of the regional economic concept in the North West province. Section 5.3 gives a description of the Mafikeng International Airport (MIA) project. Section 5.4 considered the possible benefits and feasibility of an IDZ at Mafikeng. Section 5.5 mentioned the shortcomings of the IDZ programme in the Mafikeng context. Section 5.6 concludes with a summary

5.2 Regional Economic Context

South Africa is a middle-income developing country with an abundant supply of natural resources, well-developed financial, legal, communications, energy

and transport sectors, a modern infrastructure, and a stock exchange that ranks among the ten largest in the world. At the same time, the challenges which the country faces, are to create a strong and balanced economy in order to eliminate poverty, develop a dynamic human resource capacity, facilitate the creation of a prosperous Southern African region and engage the world economy in a sustainable manner. In section 1.1 it was argued that countries are best placed to benefit from opportunities offered by globalisation through policies that support outward -oriented trade, investment and exchange rate policies. South Africa could address these challenges through sound macroeconomic policies that are based on economic reasons a nd not on political grounds as indicated in chapter 4.

The challenges posed by the development gaps in North West Province require innovative, fresh and ambitious joint approaches by entrepreneurs and government. These challenges are briefly:

- Real per capita GGP growth in North West has been negative over the period 1980-1991.
- Personal income per capita is only about 60 per cent of the South African average.
- Unemployment, at 36.6 per cent of the labour force (in 1995), exceeds the South African average. Unemployment is currently probably around 42 per cent.
- The province has a significantly higher relative rural population compared to the average for South Africa (60 per cent).
- Male absenteeism and non-school attendance are higher in North West than in South Africa on average (13 per cent).
- Population growth in North West province is significantly higher than the national population growth rate (3.5 per cent p/a).
- The availability of health care facilities and staff are less in North West than in South Africa on average. [63]

Since 1994 the provincial government has taken various initiatives to address poverty and basic needs. In many cases government only addressed symptoms, rather than causes, of poverty and underdevelopment. Aware of this, the government has been increasingly scrutinising avenues for the overall long-term restructuring of the North West's economy. Changes and progress in manufacturing in the North West manufacturing sector have helped with the restructuring progress as shown in section 2.4.9.

The development of Mafikeng International Airport (MIA) represents a significant step in the North West Province's strategy for restructuring of the province's economy. Based on the realisation that the province's natural resources – minerals and agriculture – are depreciating sectors subject to uncontrollable external influences – the provincial government has recognised the imperative to start initiatives to place the province on a long-run development path that is ultimately sustainable. Section 2.4.9 showed that the province's manufacturing sector contribution to the domestic economy increased from 8,4 per cent in 1991 to 12,8 per cent in 1996 and with the MIA project in place this could further increase the manufacturing sector's contribution.

Such a sustainable development path can only be achieved if the province can succeed in becoming internationally competitive. From chapter 3 and 4 it can be concluded that the North West Provincial Government, and the business sector in North West province is of the opinion that the province can only be competitive if:

- An environment can be established that assists firms in achieving cost-competitiveness;
- Firms can rely on supply chains that are fast and reliable so that they can engage in just-in-time production techniques;
- Speed to market is facilitated by supportive infrastructure for business.
- Transport and logistical systems are reliable, efficient and cheap;

[63] All the information in this chapter with regard to the North West province was gathered from

- The overall transaction costs in the local economy is low;
- There is equal access to basic investment incentives for firms;
- The access to the whole supply chain is easy and competitive.

To put these in place, the North West has identified for itself a future niche in the transport and trade facilitation sectors. This is due to its strategic central location in Southern Africa – in the middle of the Coast-to-Coast SDI. Given this, and the existence of an under -utilised airport of international status at Mafikeng, the provincial government decided to call for tenders for the commercialisation of the airport in May 1999. By October 1999 the African ARC was awarded the tender, and the various agreements finalised in February 2000.

Soon afterwards, following from recommendations in the master plan developed by the African ARC, the provincial government regist ered an interest in obtaining IDZ-status for the MIA. After registering this interest, a meeting was held between the AARC and the Department of Trade and Industry (Manufacturing Development Board and IDZ programme) on 15 May 2000. During this meeting atte nded by Mr. F. Truter from DTI and Mr. J. Spiropoulos from Special Places, the AARC was encouraged to formally submit an application for a temporary IDZ Operator Permit.

After further consultation with the provincial government, the Cabinet Committee on E conomic Affairs discussed this application. After this it was forwarded to the Executive Committee of the Provincial Government for final approval.

5.3 Description of the MIA Project

5.3.1 Background

The Mafikeng International Airport (MIA) has been an under-utilised facility for a number of years. The Provincial Government, however, sees the airport as

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the following sources see Human (2001) and Molefe (2001).

an anchor project in job and wealth creation, not only in Mafikeng, but also for the North West Province and South Africa as a whole. Therefore, the Nort h West Provincial Government through the Department of Transport, Roads and Public Works called for tenders in May 1999 to commercialise all aspects of the MIA.

Studies dating back to 1994 revealed that Mafikeng as a sub -continentally EPZ site had reasonably well developed infrastructure, and due to its location to international borders, has the potential to serve the needs of the Southern African markets (see section 3.5.2). It was argued that Mafikeng due to the above mentioned advantages would be the b est suitable site to serve Botswana and the northern parts of Southern Africa.

The African Airport Redeployment Company (African ARC) was awarded the tender. The existing facilities, infrastructure and services at MIA offer an ideal opportunity for public-private partnershipping to the mutual benefit of the North West Province, the country and region at large.

5.3.2 Operating Concept

The project-operating concept is based on a dedicated project office with project teams for every sectoral investment project. Optimal redeployment of MIA will be effected through the compilation of a master plan.

The purpose of the master plan is to prioritise all current issues and to formulate strategies that are capable of addressing these issues in a structured way.

The master plan is to be used to:

Invite tenders from interested airport management and operations companies from all over the world to become involved with the redeployment of the MIA. Attract sectoral investments related to transport, aviation, trade an d

manufacturing. Serve as business plan for applying for an IDZ Operator Permit.

The redeployment should as a matter of urgency, relieve the Provincial Government of the funding and financing responsibilities for the operation and maintenance of MIA. The transfer of the funding responsibilities from the public to the private sector has the additional benefit of focussing private sector know -how on Mafikeng and the associated commitment to bring sectoral projects to the area.

Section 4.4.3.4 argued that for a developing country such as South Africa, that is located geographically distant from its major exports markets (the Far East, Europe and the USA) geographical considerations may raise pertinent questions about the suitability and nature of export -led g rowth and its accompanying or supportive policies. It was further shown that the relationship between shipping costs and manufacturing exports pointed out that the evidence suggests that high -shipping costs countries will find it more difficult to promote export-led development, even if they reduce tariff rates, remove quantitative restrictions and follow prudent macroeconomic policies.

In light of this the long -term objective is to create a strategic network of transport and logistical support facilities and services that are capable of adding value to the sectoral investment projects. The capital-intensive nature of transport and related infrastructure necessitates optimal utilisation, productivity and minimum demand volumes to ensure lowest costs.

The overall objective is to designate the airport as mainly a hub for air cargo operations for non -scheduled air services, nationally, regionally and internationally. The status of the airport will be further enhanced by the decision of Government to establish the South African Aviation Academy and Training Institute (SAAATI) at the Air Force Base adjacent to the MIA.

The strategic aim and rationale of the African ARC project office for MIA is to foster economic cooperation and partnershipping and in the proce ss create

sustainable long-term employment, to mobilise and maximise private sector investments that will optimise social and economic benefits for the city, province, country and region.

The designation of Mafikeng International Airport, as a concentrate d point for the consolidation and distribution of air cargo with specialised support services will ensure seamless and cost effective movement. The benefits of such an operating environment include the following:

- Enhancement of short transit times
- Operational efficiency
- Trade facilitation; and
- Lower transaction costs.

This approach will ensure that the benefits attributable to the area will be galvanised and combined to exploit the underlying economic multipliers. The African ARC project office serves as a one stop information and investment support centre and provides investors access to the full package of all monetary and fiscal incentives available from the Department of Trade and Industry, tailored to meet the specific needs and requirements of every sectoral project. The importance of a one -stop service centre was shown in chapter 3 in attracting investors with the minimum red tape.

The project-operating concept is supported by a structured methodology that furthermore provides for ongoing appraisal. The key steps of the project methodology can be listed as follows:

- Project conceptualisation and contextualisation in a project register,
- Project specification, facilitation and promotion,
- Project design and tender specification,
- Project tender adjudication,
- Project funding options and preferred investment regimes, and
- Project oversight, audit and ongoing quality control.

The approach and overall project philosophy are based on the following investment principles:

- Set aside principle (Equity participation for local businesses),
- Promotion of local content and local sourcing of inputs,
- Most favoured region treatment (MFR),
- Revealed comparative advantage (RCA),
- Central sectoral order board (CSOB),
- Regional upward mobility programme (RUMP).

5.3.3 Basic Infrastructure Availabilit

Studies in section 3.5.2 showed that the basic infrastructure in Mafikeng was well developed referring to the airport, roads and railways. Adding to this the North West Province has the following strong points for industrial development within an IDZ:

5.3.3.1 Factory Space

North West Province still has a large stock of available factory space at very competitive rates. Rental costs vary from US$ 0.75 to US$ 2.50 per square foot per month, depending on the area and availability of space. This is well below countries such as Mozambique (US$ 5.00 when available) and Botswana (US$ 3.60).

5.3.3.2 Electricity

All urban and industrial areas have adequate electricity for domestic and industrial usage. Sufficient capacity exists for new c onnections, and new hook-ups are normally affected within one week after application. By international standards, North West Province's electricity rate is very low – US$ 0.052 /kWh. The South African average is US$ 0.064 /kWh.

5.3.3.3 Telecommunications

Telkom SA provides modern telecommunications – through a telephone/fax and cellular telephone network, Vodacom and MTN. Telephone rates of US$ 1.50 per minute to Europe are cheaper than in all of South Africa's competitor countries. (In Botswana it is US$ 4.04 per minute). In addition various private sector companies such as Internet Africa provide Internet access. Most larger towns have their own pages on the World Wide Web through which useful local information can be obtained.

5.3.3.4 Cost and Quality of the Labour Force

National labour legislation applies in the North West Province. It should be noted that South Africa (and North West Province) does not have a statutory minimum wage, and wage determination is left to bargaining between employers and employees through the industrial councils.

Currently, labour in North West Province work at an effective average of 46 work hours per week. This is second longest on the continent, after Kenya with 48 hours, and is a higher number of hours than that worked in South Africa's neighbouring countries such as Botswana and Zimbabwe, and even longer than that in a country such as Thailand (40 hours).

The cost of labour in the North West Province is relatively cheap. A survey of industrial firms suggests that the average monthly salary rate for unskilled labour is the equivalent of US$ 200. This is significantly lower than that of its neighbouring province, Gauteng (US$ 360). This could be an important competitive advantage for the North West province to attract local and foreign direct investment (see chapter 3).

5.3.4 The Airport and Land-use Plan

The asphalt runway, 4500 m long and 45 m wide with 7.5m shoulders can accommodate the largest commercial aircraft in use at present. The

passenger terminal is aesthet ically pleasing and of sound construction. Internal partitioning is of drywall construction and can be changed to suit specific requirements. Expansion possibilities are virtually unlimited.

The general airport layout allows for the construction of airsid e facilities such as parallel taxiways and aircraft parking stands as well as commercial development such as general aviation, cargo and maintenance facilities.

Land adjacent to the airport is available for the development of associated facilities, and more land could be made available if required.

No development has taken place in the noise zones around the airport and strict control will be imposed to ensure that external development is in line with the airport development.

An asphalt taxiway of 23 m w ide with 10.5 m shoulders links the runway with the concrete apron at the terminal building. Asphalt taxiways have also been constructed between the runway north of the terminal building, and the general aviation area, as well as south of the terminal area, and the former Air Force Base on the opposite side of the runway.

The layout of the facilities on both sides of the runway allows for parallel taxiways in accordance with International Civil Aviation Organisation (ICAO) Code E airport standards.

The length and geometric layout of the runway and associated facilities allows it to be classified as a Code E airport, capable of handling the largest commercial aircraft presently in use.

The terminal building is essentially a single story structure with a fe w offices provided on the first floor level. All passenger facilities and most offices are situated on ground level. The building is generally in good condition although a certain degree of maintenance will have to be carried out.

The building is equipped with sophisticated equipment such as X -ray machines, metal detectors and a baggage claim conveyor belt. Future development of the terminal building will depend largely on volume, types and mix of air traffic.

The following components and infrastructural elements including support services have been provided for:

- Helipad
- Air Traffic Control services
- Runway/taxiway services
- Fuel services
- Maintenance facilities
- Adequate Electrical supply
- Bulk Water supply
- Dedicated Sewage facility
- Cross directional road connections
- Multi-medium communication services
- Security arrangements

The master plan of Mafikeng International Airport is based on a phased land use plan (short, medium and long term) with north -to-south and east-to-west nodal points supported by multi-modal road, rail and air transportation services.

The master plan and its associated land use plan focuses on the economy of Mafikeng and its surrounds at a sectoral and spatial level. It seeks to promote the optimal use of existing infrastructure a nd to attract new investments in strategic, sustainable and competitive industries, in a location that offers comparative advantages.

5.4 Possible Benefits and Feasibility of an IDZ at Mafikeng

5.4.1 Benefits for the Region

The vision for Mafikeng International Airport is of a multi-modal transport and trade hub for Southern Africa.

IDZ status is necessary in order to:

- Serve as a clear signal to potential investors that the South African Government is serious and committed to the optimal utilisation of the airport and its surrounding;
- Enable the provincial government and African ARC to be able to offer potential investors the optimal and best package of investment incentives available in South Africa.

Section 1.1 noted the importance of FDI for South A frica, therefore the need for the right incentives are ever increasing. It is argued that if the MIA could receive IDZ status it could better incentives offered to investors, whereby increasing the much-needed level of FDI to the province.

The African ARC has already committed significant resources to the compilation of the master plan (business plan). With additional government funding for the upgrading and provision of critical infrastructure to the amount of R30 million, the master plan indicates that a n amount of R1, 7 billion in investments can be leveraged. Like the lifecycle of the traditional EPZs, the IDZ programme also need to focus on public and private investments to ensure its growth and success (see section 3.4.3).

These are:

- Airport operations management services company,

- Multi-modal transfer point,
- Break bulk freight services,
- Provincial bonded warehouse,
- Trade facilities and systems,
- Administrative facilities for the aviation industry,
- Fuel tank farm,
- Industrial park and residential housing,
- Aircraft maintenance facilities,
- Container repair services,
- Aircraft parking facilities, and
- Aviation Academy.

The redeployment of MIA and the listed sectoral and infrastructural projects have a combined investment value of more than R 400 million ove r the next ten years.

With provisional IDZ operator status the AARC will endeavour to focus initially on securing two anchor projects, namely:

- The establishment of SAAATI, the South African Aviation Academy Training Institute, as the first and only aviation academy for Africa. The SAAATI has been approved by the National Cabinet of South Africa, and in terms of its business plan should generate profits in excess of R60 million annually once in full operation.

- The establishment of an aircraft maintenance and refurbishment plant by HAECO/TAECO. TAECO is the only successful maintenance company in the world. The shareholders of TAECO are Singapore Airlines, Japan Airlines, Cathay Pacific Airways and Boeing. The African ARC is in possession of an official lett er of interest by TAECO to invest at Mafikeng International Airport, bringing investment of roughly R1 billion to South Africa.

5.4.2 Arguments in Favour of Mafikeng International Airport

In section 3.4.5 the spatial considerations in establishing indu strial sites were mentioned. The first dimension focused on the trade distance between the potential EPZ / IDZ in the host country and its world markets. Applying this to Mafikeng, it shows how well situated it is to the Namibian (Walvis Bay), Gauteng (South Africa) and Botswana markets. The second dimension focus on the geographical location of the zone and it shows that the Mafikeng is situated in a rural area and the MIA project might just change all of that in the long term.

The North West Provincial Government believes there are nine fundamental reasons for granting an IDZ operators permit to the AARC. These are briefly:

- The airport and IDZ's position in South Africa's cross continent supply chain.
- The quality and quantity of existing infrastructure.
- The potential role in the Southern African region.
- The potential role in the freight needs of central and western South Africa.
- The potential role in the unlocking of the potential of the Northern Cape-region.
- The possible contribution towards the establis hment of an aviation industry cluster in South Africa to complement the other IDZ (e.g. around JHB International Airport) and save South Africa on foreign exchange.
- The exploitation of growing international linkages between Mafikeng and other global expert cities, e.g. the City of San Antonio (USA).
- The significant contribution of the projects to empowerment in South Africa.
- The significant political-business alignment around the project.

These nine reasons can be briefly explained:

5.4.2.1 The Supply-Chain Motivation

The Mafikeng International Airport (MIA), if developed fully, offers a new supply chain for international trade, serving a range of companies in the Central African region.

Particularly as far as South Africa's future transport logistical c hain development is concerned, the MIA offers the scope for greater development towards Southern Africa's Western Seaboard. Section 4.4.3.4 noted that transports costs could be a significant factor adversely affecting the competitiveness of South African e xports on global markets. It was recommended that incentive measures should be based on geographical considerations, as well as economic activity.

In this regard it is worth stressing the point made in the Department of Transport's Moving South Africa Report (MSA) that any 20 -year strategy for transport in South Africa should consider the following:

- The transport -corridor capacity of the Eastern Seaboard is over stretched.
- The harbours on the Eastern Seaboard e.g. Durban and Richards Bay are operating at over capacity.
- Transport costs can be up to 60 per cent of the total costs of exports of goods from South Africa.
- Long turnaround-times at congested Eastern Seaboard ports contribute significantly to these costs.
- It is in South Africa's long-term interest to develop Western Seaboard ports.
- Using Western Seaboard ports could reduce delivery times to Europe and U.S. by seven to ten days.

To be an optimal player in this supply chain, the Northwest Government and African ARC (Pty) Ltd. will:

- Maintain the international status of the MIA and promote the airport as a non-scheduled cargo hub;
- Seek to declare the airport a dry -port and erect bonded warehouse facilities;
- Promote intermodalism in transport through integration of rail, road, break bulk facilities and air;
- Develop supporting business and financial services at the airport to provide one-stop facilities for exports;
- Integrate the development of the Platinum Spatial Development Initiative with the Airport.

To summarise, what gives the MIA-IDZ an added adv antage is its central location in the Southern African market and specifically:

- The expected almost exponential increases in trade between South Africa and the rest of the SADC countries.
- The need for dry ports and faster export times to Europe.
- The current over usage of Durban, Richards Bay and Cape Town as ports and the potential of ports in the Northern Cape (e.g. Buchu Bay) to service this need.
- The growing importance of Walvis Bay as a regional port.
- The need for Botswana to exploit its mining potent ial towards the eastern parts of the country closely adjacent to North West Province.
- The increasing congestion in Gauteng Province.
- The unique geographical and archaeological profile of the province.

5.4.2.2 The Infrastructure Motivation

Mafikeng International Airport has been existence for 15 years. It is a C5 - International Airport. The runway is the second longest in South Africa (4,5 kilometres) and is suitable for all forms of international traffic.

The land availability at the airport is a distinct advantage. More than 10 000 kilometres is available for development. The African ARC has developed a land-use plan that clearly indicates the vast potential of the airport (see below).

It is the policy of National Government to optimally utilise all stat e assets. Therefore, the vision of the African ARC (Pty) Ltd. not only gives practically expression to this, but will contribute towards sound fiscal management in the Northwest Province.

Currently an amount of R3 million is being spent on refurbishing the airport. A detailed airport specification is included in the appendix A (master plan).

5.4.2.3 The Regional Development Motivation

Regional integration arrangements such as Southern African Development Community (SADC) also have an important role to pl ay in promoting growth and social upliftment. Advantages of the integration process include the promotion of trade between member states, the development of a larger, more secure market for investors, and the capacity to create political and economic synergies between member states. The long -term development strategy of SADC is to add infrastructure to the various transport corridors (see section 4.3.2).

Intra-regional trade in SADC has improved substantially and is currently estimated at over 21 per cent of total trade. It is envisaged that with increasing cross-border investments emanating from within the region, this figure could rise to over 30 per cent.

South Africa is a signatory of the SADC Free Trade Protocol, and has accepted regional integration in Southern Africa as a desirable goal for regional development and political stability. The major trade route between Gauteng and Botswana and Namibia runs through Northwest Province.

Currently the border post at Ramatlabama is the second most important i n Southern Africa for rail freight.

Transportation linkages and supply chain economics have long been recognised to be significant obstacles in the integration of regional economies.

The multi-modal and intermodal transport facilities that will be create d by the Mafikeng IDZ will boost the economies of scale of both road and rail transport infrastructure. For instance

The Export Processing Zone (EPZ) being developed at Lobatse (the Lobatse 2000 project) currently lacks an international airport. Being onl y 48 km from Mafikeng International Airport, the latter will offer a natural port for exports from Botswana. The increased traffic between Lobatse and the Airport (IDZ) and between the IDZ and the Platinum SDI will make viable the upgrading of key infrastructure in the supply chain such as the Lobatse Border post and the road and rail linkages between Mafikeng and Zeerust and Zeerust and Lobatse.

The EPZ at Walvis Bay and Walvis Bay Harbour will develop substantially if the Mafikeng IDZ leads to greater vo lumes of traffic towards Walvis Bay. Creation of an IDZ with bonded warehouse (i.e. inland port) facilities may expedite this. The African ARC already has been in discussion with the Namport authorities. The latter wholly support the development of Mafiken g International Airport as envisaged in the master plan of the African ARC.

5.4.2.4 The Freight Transport Motivation

The Northwest province is a significant producer of bulk products for the world market – e.g. gold, platinum, maize, sunflower seeds and oils, granite and marble and beef.

A similar production structure and export profile is found in the neighbouring Northern Cape Province and Southern Namibia. If the MIA development can

take-off, it may boost the development along the entire central to we stern hinterland of Southern Africa. This could help to form a well -established supply chain and encourage the clustering of industries in these areas (see section 4.3.3.9).

The development of MIA opens up new possibilities for value -added manufacturing of these bulk products such as

- Value-added agro -processing (export beef, pork, sunflower oils, flavourants and colorants, etc.)
- Mineral beneficiation (jewellery, auto-components, farming equipment, pharmaceutical ingredients).

By utilising MIA for non-scheduled cargo flights, it may be possible to increase the exports of these goods, especially towards the landlocked countries of central and east Africa.

5.4.2.5 The Aviation Industry Cluster Motivation

Perhaps one of the most important reasons for posi tively considering this application, is the need in South and Southern Africa for an aviation industry.

The entire African continent lacks an aviation industry. In the 21st century, with the rapid growth of international aviation in trade, tourism and the general "shrinking" of the globe through the process of globalisation, this might be a significant disadvantage - and could be one of the most serious obstacles to the African Renaissance.

Developing an own aviation industry in South Africa for South Af rica and the African continent, will not only create job opportunities locally, but will also save South Africa vital foreign exchange. Currently commercial pilots and others in the industry are trained at high forex costs outside the country, and a significant portion of (expensive) aircraft parts as well as maintenance are incurred in foreign currency.

Mafikeng may develop an aviation cluster around the MIA-IDZ due to

- The establishment of the SAAATI (see above). It may be pointed out that in France, when the aviation academy was moved from Paris to Toulouse, it was only a matter of time before the entire French aviation industry re-located to Toulouse.
- The creation of an aircraft maintenance service provider (TAECO) at the airport as a second anchor project.
- The establishment of light and experimental aircraft manufacturing at the airport.
- The ideal topographical and meteorological conditions for aviation.
- The hosting of the 2001 International Glider Plane Exhibition at MIA (has been confirmed).

With SAAATI and TAECO as anchor projects, it is clear that the MIA -IDZ is not competition to any of the currently mooted IDZs in South Africa – in fact given its emphasis on trade and transport services and aviation, it is likely to be a useful and strategic complement for the other IDZs – particular to that around Johannesburg International Airport.

5.4.2.6 The Global Linkages Motivation

To successfully manage and develop a "global transpark" as is intended for MIA-IDZ, international best practice needs to be followed. In addition to using the best available domestic expertise, the City of Mafikeng has already established crucial linkages with the City of San Antonio in the US (site of one of the largest of the US inland dry ports) as well as with the Orlando A irports Company.

In terms of the City of San Antonio, the City of Mafikeng is currently on its shortlist of African cities with which to enter into cooperation agreements. Obtaining this expertise and establishing these linkages will contribute towards South Africa's international competitiveness. As such the intended

MIA-IDZ will further the aims of the Manufacturing Development Board. Section 3.4.6.3 showed the little effect that EPZs had on the host country's economy and as mentioned above the IDZ prog ramme want to create technology transfer through co-operations.

In general, the challenges of globalisation offer many opportunities for the MIA-IDZ, through:

South Africa has adopted an outward-looking, free-market based approach to economic growth, development and international trade.

By March 1999, 28 bilateral investment treaties had been signed by South Africa. Since commencing with the programme to conclude investment treaties, South Africa has adopted a highly modern and advanced constitution, which ensures an open, transparent and market -driven investment environment, with positive government encouragement of investment.

South Africa has concluded a FTA with the European Union (EU) (see section 3.3.1). The agreement will result in the abolition of tariffs on more than 90 per cent of trade – currently worth more than R 10 billion a year – between the 15 EU countries and South Africa within 12 years. The trade negotiations involved more than 10 000 products. It should be noted that Europe is the biggest source of investment for South Africa, and accounts for almost half of South Africa's total foreign trade. Seven out of ten of South Africa's top trading partners' are European countries.

The SDI programme (see section 4.3.1) is a short -term investment strategy adopted by South Africa's Department of Trade and Industry that aims to unlock inherent economic potential in specific spatial locations in Southern Africa. It uses public resources to leverage private sector investments. Spatial Development Initiatives (SDI's) are a proven strategy for boosting investment and kick-starting development in regions of South Africa with a high potential for economic growth. The SDI programme consists of ten local SDI's and four Industrial Development Zones (IDZs) at varying stages of delivery. To date,

the current portfolio of SDI's have identified 518 investment opportunities valued at R 115,4 billion with the capacity to generate more than 118 000 new jobs. The Mafikeng International Airport will significantly be nefit from the Coast-to-Coast Trans-Kalahari Highway, spanning across the African continent from Maputo to Walvis Bay.

5.4.2.7 The Empowerment Motivation

The MIA -IDZ will be developed by a consortium lead by previously disadvantaged groups. Its success w ill be a major triumph of the new South Africa.

Furthermore, the success of the MIA -IDZ will contribute to economic development in one of South Africa's poorest provinces; where up to 60 per cent of the population is estimated to live in poor, rural area s with little economic prospects.

5.4.2.8 The Political Support Motivation

All role-players in the region support this application for MIA-IDZ status. These encompass the North West Provincial Government (who started the process by putting out the MIA o n tender for commercialisation), the City of Mafikeng, the Barolong Boora Tshidi Tribal Authority, the African ARC (business) and the overall community.

At a presentation to the representative Provincial Development and Growth Forum (Areageng) in Mafikeng on 3 April 2000, the project was whole endorsed by representatives from business, labour, civil society, and local government across the North West Province.

5.5 Shortcomings of the IDZ Programme in the Mafikeng Context

The lack of immediate support industries relating to the anchor projects could slow the process of clustering and lead to ineffective supply management in the province.

It's unclear how much the MIA would benefit local business given that most of the projects are capital intensive and machinery and equipment that is needed will be highly sophisticated therefore not produced locally or at least in the province produce (mostly imported).

The Redeployment of the MIA-programme has not received IDZ status (currently) and if this program is not granted IDZ status the province will find it very difficult to provide attractive incentives to both foreign and local investors. MIA-programme will only benefit certain comparative advantages in the province, due to its location towns in the northwest region of the province like Bloemhof, Christiana, Wolmaranstad, Orkney etc. will receive little direct developments from the MIA. These towns will mostly prefer markets like Bloemfontein, Klerksdorp and Kimberley.

Lack of advertising and marketing of Mafikeng as a development or growth pole, resulting in manufacturers and entrepreneurs not knowing of the potential that this region could provide and a lack of skilled labour force in the Mafikeng region. Lack of a clear development path that the MIA-project will have on the rest of the province and how it could help benefit other rural areas in the province.

A lack in the attracting of local inputs and resources, and appropriate labour-intensive industries, to this proposed project. The capital-intensive nature of transport infrastructure requires large investments and if not mostly financed through FDI this could become a daunting task. Using existing state assets does not mean that it is the best plan available.

5.6 Summar

This chapter used Mafikeng International Airport as a case study to determine the potential impact of the IDZ programme.

Section 5.2 showed the challenges that the North West province needs to address indicating that the provincial governments has treated symptoms rather than causes. It was recommended that the province needs a long -run development path that is sustainable by becoming internationally competitive in order to meet the challenges that face the North West economy.

Section 5.3 gave a description of the MIA Project. The Af rican ARC will manage the master plan using a project office with project teams. It was shown that the main objective of the airport is to function as a hub for air cargo operations for non -scheduled air services, nationally, regionally and internationally. The basic infrastructure (factory space, electricity, telecommunications and cost of labour) makes the North West an attractive location for future industries. The Mafikeng International Airport is suitable for international flights like large commercial freights. A large amount of land is available for further developments.

Section 5.4 indicated the possible benefits and feasibility of an IDZ at Mafikeng. The importance of the granting of the IDZ status was shown for providing an optimal package of ince ntives to investors. The number of projects planned could attract R1, 7 billion in investments in a much -needed province. Section 5.4.2 gave the arguments in favour of granting the MIA IDZ status. Section 5.5 gave the shortcomings of the IDZ Programme in t he Mafikeng Context.

Chapter 6:

Summary and Conclusion

South African manufacturing firms lack international competitiveness combined with significant development challenges (high national unemployment and poverty) shows that South Africa has a hard task on hands. The purpose of this study was to evaluate the potential contribution of Industrial Development Zones to the international competitiveness of South African manufacturing firms. This was done through examination Export Processing Zones, South Afri ca's SDI programme and a case study on Mafikeng International Airport in the North West province.

As a conclusion to this study, section 6.1 provides a summary of what has been done, why and how it was done with concluding remarks. Section 6.2 contains recommendations pertaining to the SDI -IDZ program and the scope for further research.

6.1 Summary and conclusion

It was pointed out that due to trade liberalisation and globalisation, most manufacturing firms in South Africa are subject to growing pressure s to become internationally competitive (section 1.2). In particular, it was argued that the manufacturing sector requires more FDI and needs to generate more exports (section 2.1).

Section 2.5 pointed out that FDI in South Africa is essential to help i ncrease the international competitiveness of South Africa's manufacturing firms. It also showed that MNEs could play an important role. The most significant impact of foreign subsidiaries on host countries is their contribution to output and employment. So uth Africa needs FDI in training and development, high technology and infrastructure, primary education and vocational training and

the importance of the SA -EU FTA to help with these challenges were mentioned (section 3.3.1).

It is recommended that Sou th Africa should increase the value in exports, which are currently exporting mostly raw materials while importing high value-added goods. Concluding that the level of FDI in export related industries is to low and it was recommended to attract more FDI, conditions that facilitate FDI needs to be improved to use the resources and technology of the world market to improve its economic situation. In reaction to this the DTI of South Africa introduced a range of programmes to address these challenges mentioned above: the Export Assistance scheme (section 2.6.2.1), technology transfer (section 2.6.2.2), SMME (section 2.6.2.3), spatially -oriented support (section 2.6.2.4), competition policy (section 2.6.2.5) and special economic zones (section 2.6.2.6).

Section 2.6.1 argued that it is largely due to the wrong industrial policies in the past that the South African manufacturing sector is currently not sufficiently internationally competitive. It was suggested that a more appropriate industrial policy should focus on integrating the South African manufacturing sector into the world economy and that the spatially or location based support programmes that are allowable under WTO -rules could be necessary to address the low level of competitiveness in the South African manufacturing sector.

Section 2.2 indicated that SA's manufacturing sector is busy restructuring while some are finding it difficult, others that have not received much protection in the past, finding it easier to cope in the new global economy. South Africa's manufacturing sector's uncompetitiveness contributed to import substitution policy, although it showed remarkable figures in the beginning. SA's contribution as a nation was undermined by the following factors amongst others: inferior and racially skewed provision of education; curtailment of skills accumulation through inefficient and discriminately employment practices; regional industrial development policies (section 4.2) that distorted locations decisions; general worsening of the economy since

1973; and industrial milking of government rather than providing services to members (section 2.3).

Section 2.6.4 showed that selective targets for industries in locationally specific areas helped countries like Korea, Japan and Singapore. The study recommended that the South African government should promote co - operation between different industry players, rather than engaging with them on a purely individual basis. Although the SA restructuring process has been relative successful it was recommended tha t SA's comparative advantage through better intra and inter firm cooperation, and without it, it's unlikely that businesses will work together to enhance their competitiveness.

It was argued that the competition policy in SA should help domestic firms to participate effectively in international competition and to move up the value chain. Competition policy to protect consumers from abuse from market power, and help to fair competition, will lead to new innovations. Recommendations were made towards the re lationship between market forces and competition policies: Firstly, SA will not need an attractive competition policy because trade and investment liberalisation would act as regulations of the domestic economy. Secondly, the large oligopolistic structure in SA supports strong competition and promotes international competitiveness and that an interventionist competition policy that interferes in this market structure could have dreadful efficiency consequences. Thirdly, competition should deal solemnly with efficiency issues and not broader questions of development meaning that competition policy should not be subverted to industrial policy.

EPZs and its variations were critically examined and it was suggested that SA should implement IDZs (a special varian t of EPZs). The main criticisms against the EPZ concept were particularly related to gender in EPZs (section3.4.6.1); wages and labour laws section (3.4.6.2) and technology transfer in EPZs (section 3.4.6.3).

Governments of developing countries argue t hat they will rather protect the domestic economy, than subjecting local firms to foreign competition through trade liberalisation. In light of this, it was suggested that a possible alternative for providing neutrality could be isolated and restricted areas where free trade could take place without subjecting local firms to foreign competition (section 3.2). This idea has changed over the past decades in most developing countries implementing special economic zones to promote trade in their countries (section 3.4.1).

The development of past industrial programmes was discussed in section 4.2. This study concluded that the Homeland policy (section 4.2.1); the National Physical Development plan (section 4.2.2); the Good Hope plan and Regional Industrial Development plans (section 4.2.3) and the Tax Holiday scheme (section 4.2.4) did not meet their overall objectives, or failed to promote industrialisation in South Africa in the best possible way.

It was shown that SDIs are different to the RIDPs in that the y are aimed at generating long-term, internationally competitive growth and development and at restructuring the apartheid space economy. It was argued that IDZs could serve as a catalyst for the development of strategic resource intensive industries as well as the clustering of related industries (section 4.4.2).

The location of IDZs, environmental management plans, developing human resources through coordination of recruitment and training services argued if in place could help to enhance the success of the SDI-IDZ programme in South Africa (section 4.4.3).

It is expected that the dominance of world trade over world production (especially in higher-value products) will continue. It was recommended that one should understand the composition of world trade to avoid focusing in production and trade on areas, which are losing international importance (section 4.4.3). Given this developing countries are increasing their focus on exporting value added products, showing that their growth rates are higher than their industrialised counterparts.

It was argued that economic integration might be justified with reference to the perceived benefits for its member countries. Firstly, there may be an increased efficiency brought about via an increase in specialisation in accordance with comparative advantage. Secondly, due to the increase in the size of the market, economies of scale may be easier exploited, and higher production levels achieved. A larger market size could improve international bargaining power, and there by possibly improve the terms of trade. Thirdly, due to the increased levels of competition, efficiency may rise. Gains may also be attributed to changes affecting the amount and quality of the factors of production due to technological advances.

For a developing country such as South Africa, that is located geographically distant from its major export markets (the Far East, Europe and the USA) geographical considerations may raise pertinent questions about the suitability and nature of export-led growth and its accompanying or supportive policies. It was shown that the relationship between shipping costs and manufacturing exports pointed out that the evidence suggests that high -shipping costs countries will find it more difficult to promote export-led development, even if they reduce tariff rates, remove quantitative restrictions and follow prudent macroeconomic policies (section 4.4.3).

Thus, transport costs could be a significant factor adversely affecting the competitiveness of South African exports on global markets. It can be established that if this is the case, incentive measures based on geographical considerations, as well as regional economic integration initiatives that promotes 'seamless' transportation across borders may require urgency.

In reference to the new economic geography and transport costs, it was argued that in Africa's case showing dismal economic growth rates (except for Mauritius and Botswana) since the Second World War and could mainly be ascribed to Africa's geography and its lack of openness. Showing that Africa's geographical features could result in a lack of openness to international trade that results in rising transport costs. The new economic geography suggest

that institutions and regulations in the African transport sec tor, as well as management techniques such as logistics management and logistics technology could be explanations for high transport costs. Africa needs to address these issues to gain costs efficiencies.

It was argued in this dissertation that the MIA could serve as a useful dry port in serving the Western side of Namibia, Botswana and Gauteng. The main advantages of the MIA programme were its infrastructure and its location (section 3.5.2 and section 5.3.3).

6.2 Recommendations

This study showed that most manufacturers lack international competitiveness but with regard to this a lot of restructuring has taken place since. The South African SDI-IDZ concept is aimed to restructure South Africa's industrialisation in reducing Gauteng province dominance in GDP. This is done by promoting sites alongside the coast and in the interior parts of South Africa. IDZs could provide necessary incentives like infrastructure, one-stop services and various tax incentives for potential investors.

Labour Unions like COSAT U give their cooperation in SA's new open economy path. It might seems if SA's labour laws are to strict and could scare off a vast majority of possible investors it also could be argued that the investor who would decide to invest would suit not only his one cause but South Africa in the long run with its development path.

It was indicated that some developing countries let MNOs abuse and mistreat local workers in the name of so called development but also mentioned that some countries labour laws varied and so the level of exploitation as well. Local manufacturers if not guided by them, could benefit from the support of the government not in form of subsidies or past incentives, which turned out to be ineffective. Helping manufacturers with product promo tion, market

information, providing information about suppliers, customers, markets, distributors and competitors, could do this.

The following recommendations are made:

- Like in the case of the MIA project South Africa should attract the local community by the development of IDZs therefore the necessary training programs should be in place.
- South Africa with its rich amount of raw materials need to increase the value of these 'products', and manufacturers needs to focus on niche markets to expand their markets.
- The South African government should provide appropriate incentives to investors.
- Transport costs also needs to examined and what affect it will have on manufacturers moving to IDZs.

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