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The impact of the Motor Industry Development Programme on the competitiveness of automotive component manufacturers

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration

13 November 2008

South Africa is now well and truly part of the global economy after emerging from an inwardly looking era a mere 14 years ago. The change was felt by all South Africans, and most certainly also by local companies who entered the global market with their goods or services. This study investigates the way in which the South African automotive component manufacturing industry has entered the global market and adjusted to become globally competitive. This study is done in light of the presence of the Motor Industry Development Programme (MIDP), a sector-specific industrial policy that aims at making the South African automotive industry more competitive by enabling them to export. The study has shown that the MIDP is succesful in making component manufacturers more competitive, but that its methods for doing so are varied and in some cases not direct or perhaps even intentional. The study has also illuminated the role that original equipment manufacturers (OEMs) play in enabling the MIDP to affect component manufacturers and in enabling the component manufacturers to sell its products profitably in the global marketplace.

DECLAR

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I declare that this research project is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Business Administration for the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university.

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Leo Kok

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Date

Thank you to God Almighty for carrying me through this project amidst work and family pressures.

Thank you to Dr. Raj Raina for his guidance throughout and his and help in clarifying the topic and goals of this study.

Thank you to the companies included in the study for their willingness to be included in this study and the way in which they so freely gave information and time.

Thank you to the friendly staff at the Information Centre, who was always more than willing to assist with almost anything.

Thank you to Dr. Clive Smith for his insights into the proposal and the academic process and for his continued interest.

Thank you to Dr. Johan van Zyl and (soon to be Dr.) Norman Lamprecht, who assisted in the final testing of the propositions, for the data provided and for the help in the initial formulation of this topic.

Thank you to my wife Truida who has stood by my side for two long years.

Thank you to my family for their support and interest.

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AIDC – Automotive industry development council

APDP – Automotive Production and Development Programme

CBU – Completely built up vehicles

CKD – Completely knocked-down vehicles

DFA – Duty-free allowance

ECE – Export credit exchange

ERP – Effective rate of protection

FDI – Foreign direct investment

IEC – Import/Export complementation

IRCC – Import duty rebate credit certificates

MIDP – Motor Industry Development Programme

MITG – Motor industry task group

NAACAM – National Association of Automotive Component and Allied Manufacturers

NAAMSA – National Association of Automotive Manufacturers of South Africa

OEM – Original Equipment Manufacturer

OES – Original Equipment Supplier

OICA – International Organisation of Motor Vehicle Manufacturers

PAA – Productive asset allowance

PGM – Platinum group metals

SKD – Semi-knocked down vehicles

SVI – Small vehicle incentive

TNC – Trans national corporations

WTO – World Trade Organisation

1. Introduction to the research problem

1.1. Introduction

The history of targeted industrial policy in the South African automotive sector is almost as old as that of the industry itself. From the entry of Ford and General Motors in the 1920s in reaction to a fear of punitive import duties from the local government (Hartzenberg and Marudzikwa, 2002), some form of protection or industry stimulation and support has held in the industry up to the present day. The government's involvement in this industry became more structured during 1961, when the first of a series of targeted sector-specific industrial policies were introduced (Black, 2001; Barnes, 1999). This practice continues today in the form of the Motor Industry Development Programme (MIDP) and will continue at least until 2020, following the most recent introduction of the Automotive Production and Development Programme (APDP), which will follow on from the MIDP from 2013 onwards (Venter, 2008a).

The mere presence of an industrial policy in the local automotive sector illustrates many of the views thereof and of the relative importance of this sector to the South African government. The first set of policies between 1961 and 1989 is clear evidence of this, as well as the widely held view that import-substituting policies (high tariff barriers, artificial market support) were the best way of supporting the market (Hartzenberg and Marudzikwa, 2002; Kaggwa, Pouris and Steyn, 2007). This view was also held by many other developing countries (Humphrey and Memedovic, 2003). The shift towards export-

promoting becoming more pronounced in 1995 (Black, 2001), again supports the deduction that the automotive industry is viewed as an important industry by the South African government, but it also clearly illustrates that the global focus has moved away from traditional protected markets and import substitution policies towards more open and trade-related policies (Black, 2001; Barnes, 2000a).

The industrial policies for this sector off course apply to the whole automotive industry, which includes component manufacturers and so-called original equipment manufacturers (OEMs) – the final producer in the value chain (Barnes, 2000b). This all-inclusive policy approach has meant that component manufacturers and OEMs developed in lockstep with each other and that both sectors of the industry suffered from the same levels of unproductiveness and low levels of competitiveness that prevailed prior to 1989. In this market, production and local sourcing was artificially protected and stimulated and hence the companies active in this industry became inefficient and, given the fact that they relied on artificial market support, also globally uncompetitive (Venter, 2008b).

The current rendition of automotive industrial policy, the so-called Motor Industry Development Programme (MIDP), followed in the footsteps of the post-1989-phased policy in its attempts at redressing some of these inefficiencies and both forcing and incentivising the industry to become exporters of automotive related products. This approach again underscore several underlying beliefs, most notably that of many countries in the modern age that

trade an best way of developing an economy. It also speaks of the belief that exporters have to compete against similar products from many other regions and countries and as such they have to be of the same standard and of similar or better cost when compared to other competitors in the same global market. Trade, and more specifically exports, therefore become a driver for competitiveness.

In support of the perceived linkage between trade and competitiveness are the main goals of the MIDP, which guided the OEM-industry towards the rationalisation of their production lines in order to produce products on a much larger volume-scale and to export a portion thereof. The MIDP's goals do off course also apply to the component manufacturing industry, but certain policy tools have not been made available and any prescribed minimum local content regulations were also scrapped under the MIDP (Lamprecht, 2006). This dramatic change in the industrial policy stance in this sector followed despite the clear statement of the South African government that this industry in its entirety was viewed as important and in need of modernising for the final goal of global competitiveness (Pitot, 2008).One can therefore state that the MIDP has the same export promoting goals for the component industry, yet the way in which it affected the component industry and forced them to become more competitive is different to that of the OEM-industry.

The study of local component manufacturers' reactions amidst this varying goal of the MIDP is within the ambit of this study.

The research problem is both timely and important. The department of trade and industry has recently completed its second review of the MIDP and the successor to the plan, the new APDP, is scheduled to replace it when the programme is officially terminated in 2012 (Venter, 2008a). The analysis of the MIDP in preparation to the creation of the APDP has informed many of the requirements of the new plan and hence an understanding of the working of the MIDP and its influence or impact on the automotive sector or the component manufacturing sector specifically will help one better understand the approach of the APDP and more relevantly help one understand whether the MIDP was as successful as many of the market analysts believe it to be (Barnes and Morris, 2008).

On a broader scale an analysis of the MIDP and its impact on the competitiveness of the component-manufacturing industry will serve as a timely and relevant case study of the use of targeted industrial policy. One can easily criticise the industrial policies preceding the MIDP, as they are no longer aligned with the dominant thinking on sector-development, yet by most accounts the MIDP has achieved the objectives that were set by the South African government (Barnes and Morris, 2008). This is especially pertinent when measuring export levels, which is at the core of any export-promoting industrial policy but the reasons behind the move towards exports differ between OEMs and component manufacturers (Barnes, 2000a). It is believed that a study of the impact of the MIDP on the component manufacturing sector

allows for [illegible] or otherwise, of industrial policy on a sub-sector of a specific industry.

On a broader level one can use the analysis of a policy such as the MIDP to glean a better understanding of the competitive forces at work in the automotive industry, especially given the global nature of this industry and the fact that South Africa now truly forms part of it. If one remains mindful of the integrated nature of this industry, with component manufacturers in the main tiers supplying directly to OEMs, and OEMs in turn supporting and directing the development of component manufacturers, whilst being a conduit for their products through fully built-up vehicles, a study of one part of this industry will give one a better understanding of the nature of the industry as a whole, as well as of the industry in South Africa.

Lastly it becomes important to understand the use of an industrial policy in a sector such as the South African automotive sector. This sector has a long history in the country, but it is still not perceived as a natural manufacturing hub (Hartzenberg and Marudzikwa, 2002). Concerns surrounding the viability of this sector include its distance from the largest international markets (Black, 2001), its relatively underdeveloped supporting industries (Barnes and Morris, 1999) and the high relative costs of these supporting industries (Venter, 2008b) and the fact that the industry has been supported or protected by some form of government policy for the largest part of its history (Hartzenberg and Marudzikwa, 2002; Black and Bhanisi, 2007).

The scenario described above illuminates a few facts that are pertinent to this study. South Africa has an automotive industry that is held in high esteem by the country's government and as such is supported by the MIDP, a targeted industrial policy. The policy was however not only created as a way of supporting a key manufacturing industry, but also served to redress certain inefficiencies in the market that developed under the preceding series of industrial policies (Barnes, 2000a).

Following from the two goals of the MIDP mentioned above is the widely held view that export promotion is the most sound way of addressing these concerns, as it forces manufacturers in this industry to both rationalise their production and to build product of international quality that can sell profitability in this global market against major competitors from other countries or regions. The MIDP, as will become clear in a full analysis of this policy in the following chapter, does however offer a staggered reduction in import tariffs in order to protect the industry, whilst supporting them to become internationally competitive (Barnes and Kaplinsky, 2000).

It has further become evident that the component-manufacturing industry was subject the same policies as the OEMs since 1961 and was directly coupled to the OEMs that existed under those policies (Black, 2001; Barnes and Morris, 1999). This, combined with the MIDP's aim of redressing the past inefficiencies, leads to the assumption that the component industry should be subject to the

same M change these inefficiencies. This has however not happened, as many of the incentives and tariff protection instruments were not available to the component industry nor did it apply to them (Flatters, 2002; Barnes, 2000b).

The study therefore focuses on the impact of the MIDP on the competitiveness of component manufacturers, given the scenario in which they operate and the history and development of this sector of the automotive industry.

1.4. Scope of the research

The scope of the research has been aligned to the main focus areas of the MIDP. This means that the study will focus on the development of the component manufacturing industry in relation to the OEMs based on the key measurement of exports. The study will further seek to gain an in depth understanding of the competitive forces and attempts at competitiveness under the MIDP "rules of the game" by using a comparative case study of two local component manufacturers that export products. In order to further align the study with the key focal point of the MIDP all information considered as well as the component manufacturers chosen will be focussed on the passenger vehicle segment of the market.

Given the scope of the study, the study will also focus on the competitiveness of component manufacturers through an analysis of their reaction to a changing local and global market, to changes in the industrial policy that governs the

industry a der to become manufacturing entities as was required by the MIDP.

1.5. Limitations and delimitations of the study

1.5.1. Delimitations

Given the nature of this study, it will be assumed that all component manufacturers that operate within South Africa have been affected by the MIDP. It will also be assumed that the change from the preceding industrial policy to the current MIDP has been the cause of dramatic changes in this industry. As such 1995, the year in which the MIDP was enacted, will become the base year for this study. The study will further only consider changes in the component sector and the MIDP's influence thereof, in the period between 1995 and 2007, the last year for which there if full export data available.

1.5.2. Limitations

Several limitations exist in the study. These include previously stated limitations, notably the focus on the passenger vehicle market. Other limitations include the fact that the study will only focus on the impact of the MIDP on component manufacturers and not on the direct impact of the MIDP on OEMs.

The study ...urers, meaning those component manufacturers that have direct or near-direct relations with OEMs. Lastly, the study focused on component manufacturers that are members of the National Association of Automotive Component and Allied Manufacturers (Naacam) in the Gauteng, North West and Mpumalanga-regions of South Africa, as those are within a reasonable distance from the researcher.

1.6. Layout of the study

The study will start with a brief but thorough analysis of the literature available on this subject as well as information on competitiveness and industrial policy in general. A short chapter clearly outlining the hypotheses that guide this study will follow this chapter. Chapter four, subsequent to the stated hypotheses, will document the research process, information gathering methods, sources of information, unit of analysis and respondents. The two chapters following chapter four will include the aggregated data linked to the hypotheses and the interpretation of the data. The study will lastly be concluded and summarised in a final chapter that will include recommendations on future studies in this field.

2. Liter

2.1. Introduction

The South African automotive industry is a significant sector of the South African economy and a major contributor to the country's output of manufactured products as well as the resultant foreign currency that is earned from the exported portion of these products (Roberts, 2004; Damoense and Simon, 2004). Given the sector's importance within the larger manufacturing sector it is often referred to as the "industry of industries" (Barnes and Morris, 2008 p. 32) and many proponents of its importance refer to its role as a significant creator of skilled jobs, its role as an investor in the country and as a destination of long term foreign direct investment (Flatters, 2002; Damoense and Simon, 2004).

It becomes clear from the onset that the South African automotive industry in 2008 is significantly different from the one that was present in the country when the current targeted industrial policy for this industry, called the Motor Industry Development Programme (MIDP), was introduced. The MIDP was introduced in 1995 as the seventh iteration of an industrial programme for the local automotive industry (Damoense and Simon, 2004). Although it was influenced by the lessons from the industry-focussed policies it succeeded, the MIDP was the first plan that aimed directly at making the local industry internationally competitive and locally more efficient (Black, 2003; Barnes and Morris, 2008).

Several s e industry has experienced significant growth in export volumes of both components and fully built up vehicles (Damoense and Simon, 2004; Flatters, 2002). At the same time the industry has evolved from an inwardly focussed manufacturing industry, with small production runs of a great variety of products, to a leaner industry where a limited number of automotive products were produced in high quantities (Barnes and Morris, 2008).

Despite the apparent successes of the MIDP in changing the goals and structure of the local automotive industry, it has come under significant criticism from certain sectors, most notably the automotive component-manufacturing sector (Flatters, 2002; Black, 2002) and opponents of targeted industrial policies (Flatters, 2002).

The following chapter is dedicated to a concise but thorough analysis of the dominant literature on the South African automotive industry, the component manufacturing industry specifically, the MIDP as a targeted industrial policy and as a successor to a range of industrial policies in this sector, and the so-called original equipment manufacturers or OEMs. The review will also briefly study the global automotive industry and competitiveness.

2.2. The global automotive industry

The automotive industry can truly be described as a global industry. Evidence to that fact can be found in production and sales data from the global industry

body. Th s (OICA), who is made up of 43 automotive organisations across the world (OICA, 2008), represents this industry. Members of OICA, who include all major automotive manufacturers, manufactured 73,152,699 vehicles (including commercial vehicles but excluding motorcycles) in 2007. This number represents an increase of 5.7% over 2006, when 69,227,975 vehicles were produced (OICA, 2008).

Manufacturing output is not the only matrix by which one can argue that the automotive industry is truly global in nature. According to Black and Bhanisi (2007) the international market for exported automotive products has grown by an average annual rate of 8% since the 1980s. In 2005 the global trade in automotive products reached a combined value of $914 billion, representing 9% of total global merchandised trade and 12.5% of all trade in manufactures (Black and Bhanisi, 2007).

Barnes and Morris (2008) divide the global automotive industry into three broad sectors. The first and possibly the most visible grouping is original equipment manufacturers (OEMs), the companies that manufacture the vehicles and related products that are purchased and used by the final customer. The second segment is grouped under the term automotive component manufacturers, the companies that produce automotive parts and accessories to be used in the manufacturing of vehicles and sale through established manufacturing channels. The third broad segment is the independent

aftermark cts, automotive parts and accessories, through independent retailers and repair shops.

If one were to study the roots of this growth in trade value and volume it becomes clear that the automotive industry has been transformed by global trade and investment liberalisation, especially in the 1990s (Humphrey, 2003). Trade of automotive products, and the investment that often preceded it, shifted to developing countries, such as South Africa, as these countries started dismantling protective instruments such as investment controls, tariff protection (on both imports and exports) and a multitude of quantitative restrictions.

Humphrey (2003) also points to the fact that many OEMs and component manufacturers started to focus on developing countries as growth and growth opportunities in developed markets slowed or even turned negative. Developing countries, states Worral, Donnelly and Morris (2004), offered less sophisticated markets and low vehicle ownership to population ratios, which promised high growth possibilities. These markets included South Africa, Central Europe, Latin America and parts of the Far East. These markets offered the most growth from 1990 onwards (Humphrey and Memedovic, 2003).

Developing countries such as South Africa after 1994, when the local market opened up (Damoense and Simon, 2004), not only offered less sophisticated markets but often a less sophisticated manufacturing and supplier base as well (Barnes and Morris, 2008). This reality served both as a hindrance and an opportunity to OEMs and international component manufacturers, as it offered

promising market (Cooper and Leverick, 1998), but also offered little support through the presence of a capable and modern component manufacturing base (Barnes and Morris, 2008).

The requirements for a capable and modern component manufacturing and supply base is emphasised by the way in which the automotive manufacturing industry developed during the last few decades. Cooper and Leverick (1998) point to the fact that the pace of development and the level of complexity in the global automotive industry has expanded almost exponentially during the last few decades. This growth in complexity has placed severe pressure on OEMs and hence changed their relationship with component manufacturers (Cooper and Leverick, 1998). OEMs now require far greater design and development support from component manufacturers (Cooper and Leverick, 1998; Barnes and Morris, 2008) and will often require so-called global sourcing or follower sourcing capabilities, where the supplier or manufacturer must offer manufacturing capabilities at each global location that the vehicle which uses the specific component is built (Barnes and Morris, 2008). These arrangements has also lead to the creation of so-called tier 0.5-suppliers, where the responsibility for supplying larger sub-assembled components is moved to component manufacturers, who must then source the underlying components and ensure the manufacturing quality (Humphrey, 2003).

The practice of follower sourcing and the move towards sub-assemblies and more empowered component manufacturers brings the move to developing

countries , often lack the developed supplier and manufacturing base. It will become clear in later sections how many governments aim to address this problem through the use of targeted industrial polices.

2.3. The South African automotive industry

The local automotive industry was formed in the 1920s when Ford and General Motors both entered the market as manufacturers (Hartzenberg and Marudzikwa, 2002). The first four decades after 1920 saw rapid expansion, with the exception of the Great Depression and Second World War, and many new manufacturers entered the market. By 1960 a total of 87 000 vehicles were produced annually by 8 manufacturers in South Africa, making it the largest vehicle manufacturer amongst developing countries (Hartzenberg and Marudzikwa, 2002).

The significant growth of the South African automotive sector, its relative importance within the country's manufacturing sector and the political developments that effectively cut the country's access to major economies led the South African government to introduce the first of a series of targeted industrial policies in 1961 (Barnes and Kaplinsky, 2000; Black and Bhanisi, 2007). These policies were aimed at substituting vehicle and component imports by artificially stimulating the local vehicle market and similarly protecting the market from imported products – as was done in several economic sectors (Altman and Mayer, 2003).

The industrial policies that focused on the automotive industry initially measured local content, a target that was set by law, based on weight (refer to Table 1) (Damoense and Simon, 2004). The first five policies, continuing until 1989, aimed purely at protecting the local market from imported vehicles and components and in doing so substituted imported products (Altman and Mayer, 2003). The government changed its approach in 1989, when phase VI and subsequently the MIDP was introduced (Damoense and Simon, 2004). These policies aimed to rectify any imbalances created by an inwardly looking industry and the policies that created it (Black, 2001). The first attempt at rectifying the situation still protected the local industry artificially, whilst the subsequent MIDP supported export development and the gradual lowering of tariff protection (Damoense and Simon, 2004).

TABLE 1 : DEVELOPMENT OF AUTOMOTIVE INDUSTRY POLICIES

Policy phase	Year of inception	Local content measured by:
I	1961	Weight
II	1970	Weight
III	1976	Weight
IV	1981	Weight
V	1987	Weight
VI	1989	Value
VI (MIDP)	1995	No local content requirement
MIDP phase II	1999-2012	No local content requirement

Sources: Damoense and Simon (2004); Altman and Mayer (2003)

There are currently seven vehicle manufacturers, distributed across three provinces and manufacturing 21 model-ranges of passenger and light commercial vehicles (Naamsa, 2007). During the first five phases of

protection of different model ranges, with virtually no products produced in volumes in excess of 20,000 units annually (Naamsa, 2007; Damoense and Simon, 2004). During the era of inward focus and protectionism local vehicle sales, including commercial vehicles, reached a peak of 453,541 units in 1981. For the two decades preceding and the two decades following this record year the industry stagnated at a plateau of fewer than 400,000 units (Naamsa, 2007).

The vehicle market has grown significantly after the inception of the MIDP but more specifically after 2004, the first year that the 1981 production-peak could be surpassed. The industry reached a peak of 714,315 units in 2006, before slowing to 617,500 in 2007 (Naamsa, 2007). During this period vehicle exports, a significant goal of the MIDP, grew from 15,764 units in 1995 to 179,859 units in 2006 (Naamsa, 2007). The exported number of vehicles are expected to surpass 200 000 in 2008 (Naamsa, 2007).

The MIDP as export-stimulating industrial policy is one of the major drivers behind the shift towards vehicle and component exports (Kaplan, 2004). Manufacturers of both components and completely built-up vehicles were given incentives, mainly in the form of export tariffs that could be used as an offset of import tariffs on both imported vehicles and components (Kaplan, 2004; Black and Bhanisi, 2007). This process, as will become clear in the section on industrial policy and the MIDP, involved using both a “carrot” in the form of export incentives and a “stick”, in the gradual but progressive lowering of import tariffs, that protected the industry for so long (Black, 2002, p. 4). The various

policy toc he component and OEM-industries will be discussed in the analysis of the history and development of industrial policy in South Africa, which will illustrate the move from import protection to export promotion.

The discussion on changes in the local production levels and export volumes will further illustrate that the South African automotive industry is highly reliant and responsive to industrial policies. It will also become clear that the industry developed to its current state, whilst continuously being under the influence or protection of an industrial policy (Flatters, 2002).

2.4. Original Equipment Manufacturers (OEMs)

The development of the automotive manufacturing industry and specifically the OEM-sector is a key to the underlying development and evolution of the automotive component industry. The seven OEMs that currently manufacture passenger and light commercial vehicles in South Africa were all present in the preceding era of high tariff protection, artificial market stimulation and weight-based local content requirements. Of these seven (refer to Table 2), only Volkswagen and BMW remained wholly owned throughout the previous political dispensation, with other manufacturers pursuing a range of options, including completely disinvesting (such as General Motors and Ford) and retaining a stake (such as Mercedes-Benz) (Barnes and Morris, 2004).

TABLE 2 : OEMs PRESENTLY MANUFACTURING IN SOUTH AFRICA

Manufacturer	City, province	Brands	Vehicle ranges manufactured locally (2008)	Ownership
BMW	Rosslyn, Gauteng	BMW, Mini	BMW 3-series	Wholly owned by multinational parent company
Ford	Silverton, Gauteng	Ford, Mazda, Volvo	Ford Focus, Mazda3, Ford Ranger, Mazda Drifter	Wholly owned by multinational parent company
General Motors	Port Elizabeth, Eastern Cape	Opel, Hummer, Isuzu, Saab, Cadillac, Chevrolet	Hummer H3, Opel Corsa Utility, Isuzu KB	Wholly owned by multinational parent company
Mercedes-Benz (Daimler)	East London, Eastern Cape	Mercedes-Benz, Smart, Maybach, Mitsubishi	Mercedes-Benz C-class	Wholly owned by multinational parent company
Nissan	Rosslyn, Gauteng	Nissan	Nissan Tiida, Nissan NP200, Nissan NP300	Wholly owned by multinational parent company
Toyota	Durban, KwaZulu-Natal	Toyota, Lexus	Toyota Corolla, Toyota Hilux, Toyota Fortuner	Wholly owned by multinational parent company
Volkswagen	Uitenhage, Eastern Cape	Volkswagen, Audi, Seat, Bentley, Lamborghini	VW Polo, VW Golf, VW Jetta, VW Citi	Wholly owned by multinational parent company

Source: Naamsa (2007); Venter (2008a); Lamprecht (2006); AIDC (2008).

During the period between the first use of industrial policies in 1961 and the inception of the MIDP in 1995 the South African-based OEMs mostly manufactured products that were outdated when compared to the international

developm arnes, 2000b; Damoense and Simon, 2004) and a wide range of products were manufactured in uneconomically small volumes (Barnes and Kaplinsky, 2000). The market, being protected by high import tariffs, were unsophisticated and investment levels remained low and behind that of other protected markets such as Brazil and Argentina (Damoense and Simon, 2004).

The described state of the market prior to the promulgation of the MIDP in 1995 (Barnes and Morris, 2004) had a direct influence on OEMs' relationship with the component industry and the underlying development of the component manufacturing industry (Hartzenberg and Marudzikwa, 2002). The general emphasis on local content measured by weight and not complexity or value, the fact that OEMs' sourcing relationship with component manufacturers was legally required and thus artificially sustained and the uneconomically small volume of each range of vehicle manufactured in South Africa led to the existence of a broad, but underdeveloped and less productive component manufacturing industry (Black and Bhanisi, 2007; Lorentzen and Barnes, 2004).

The relationship between OEMs and their international parent companies also changed significantly with the introduction of the MIDP on 1 September 1995 (Barnes and Morris, 2004). In the following decade all the international owners of the brands manufactured locally returned to the country, the range of products produced by local manufacturers were rationalised and production volumes increased (Barnes and Morris, 2004). Local manufacturers also used the provisions of the MIDP – such as import tariff reduction and import credits

earned c ship with their international parent companies to source components and sub-assemblies from modern and cost competitive component manufacturers in other parts of the world (Lorentzen, 2005; Black, 2000b). This move to international sourcing placed increasing pressure on component manufacturers.

One should note that the changes in requirements and sourcing of components was not only influenced by local manufacturers' reaction to the MIDP, but was also influenced by their new multinational ownership (Barnes and Morris, 2004). Based on this relationship, OEMs were required to comply with international standards for the design of components, the method of production, the quality of those components and the use of those components in the final manufacturing process (Black and Bhanisi, 2007). As such OEMs started enforcing strict control of the production cycle and of the global standardisation of components (Barnes, Kaplinsky and Morris, 2003). Black and Bhanisi (2007) further emphasise the fact that many OEMs jumped from producing older and more basic products to producing new and modern vehicles with more modern technology, thereby making a significant leap in product evolution, without the normal slow evolution that involved the market requirements and the necessary changes amongst component manufacturers.

The rapid and dramatic change in the way in which OEMs approached component suppliers led to a so-called "de-linking" of the traditional relationship between OEMs and component manufacturers (Barnes and Morris, 2008, p. 805). In this new market the traditional method of willing buyer and willing seller

no longe e multinational controlling company. It is important to note that the power shifted to OEMs, because they controlled the access to modern technology (Barnes and Morris, 2008), the designs of the now internationally standardised components and often their finished vehicles served as the conduit for the export of locally made components (Barnes and Morris, 2004).

The dramatic change in South African OEMs component requirements led to a change in their sourcing patterns. Barnes and Morris (2004) state that OEMs often continued sourcing from local component manufacturers for older products that were still assembled after the inception of the MIDP. Newer products, were the stated requirements for internationally standardised components became a reality, was the key to a gradual move away from local component manufacturers (Barnes and Morris, 2004). Another related change was evident in the way OEMs no longer placed any value in local component manufacturers' abilities to design components for local vehicles or even adapt international designs to suit local requirements or tastes (Barnes and Morris, 2004).

It is important to note that South African OEMs have not achieved an absolute level of competitiveness against similar manufacturers in other countries (Kaplinsky, 2004). South African OEMs are, despite significant growth in production and productivity, very small in comparison with global competitors, accounting for only 0.7% of global vehicle production in 2002 (Lorentzen, 2005). Despite its relative global unimportance the local industry is considered highly

important ıcturing sector (Damoense and Simon, 2004).

The following section will consider the development of South African component manufacturers and their reaction to this change in behaviour and requirements of modern South African OEMs.

2.5. South African component manufacturers

The South African automotive component-manufacturing sector was formed soon after the first vehicle manufacturers entered the market in the 1920s, but focussed mainly on the manufacturing of products that were not cost effective to transport to South Africa, such as glass and rubber (Hartzenberg and Marudzikwa, 2002). The industry has since evolved and expanded and there are currently 350 component manufacturers in South Africa (Naacam, 2008).

Black (2003) identifies four distinct segments in the component-manufacturing segment. This industry can be divided into four so-called tiers. The first tier includes all component manufacturers that produce components for supply directly to vehicle manufacturers. The second tier supply sub-components for use in the first tier manufacturer's manufacturing process and the third tier supplies components or treated materials to the second tier manufacturers. An example of the different tiers would be a tier 3 supplier producing plastic pellets, which is melted by a tier 2 supplier and moulded into sheets. These sheets are then supplied to a tier 1 supplier who cuts or moulds these sheets into plastic

dashboar final assembly process. A fourth tier is often referred to as the aftermarket fitment suppliers, and will include any vehicle related products that are not directly linked to or used by the vehicle manufacturers (Black, 2003). An example of a company in this segment would be an alloy wheel manufacturer that designs and makes its own wheels and sells them to customers for after-market fitment to their vehicles.

Al four tiers of component manufacturers are present in South Africa and have been represented by different companies through the different phases of industrial protection in the automotive industry (Black, 2003). As became evident in the preceding analysis of the automotive manufacturing industry, the automotive manufacturing industry in general were inwardly focussed and largely inefficient during the first five phases of industrial policy and tariff protection in South Africa (Barnes and Kaplinsky, 2000). Inefficiencies in this market sprouted from the artificially stimulated and protected market and the legal requirement on OEMs to source a certain level of products from South African component manufacturers (Barnes, 2000b; Barnes and Kaplinsky, 2000).

One should note that component manufacturers were subject to the same industrial policies as OEMs and as such they were not motivated, through policy or market demand, to develop their technological base, production techniques or products further than that which was required by the local OEMs (Barnes *et al.*, 2003). One should also keep in mind that the first five phases of industrial

policy re ıich motivated component manufacturers to focus on the development and manufacture of heavy and often less complicated components (Black, 2000b). Where component manufacturers did develop a natural advantage was in the ability to adapt products to local market requirements and the ability to produce products in smaller production runs that would be considered less cost effective for a international component manufacturer to manufacture (Black, 2001).

The inwardly focussed and protected local market created a component manufacturing industry that was unfit for the post-1995 changing needs of the seven OEMs, that was now incorporated into the international supply chain (Barnes, 2000b). As became evident in the preceding section, many of these OEMs changed their product line and subsequently their production techniques very rapidly, in answer to the need to quickly step in line with the multinational owner's global product portfolio (Barnes and Kaplinsky, 2000). Barnes and Kaplinsky (2003) emphasises this point by stating that many of these firms jumped past one or even two generations of model ranges in order to align themselves with the multinational parent's production line-up. This, states the authors, clearly brought with it a jump in technology, both of the components used and the production techniques employed in manufacturing the vehicle (Barnes and Kaplinsky, 2000).

Many of the subsequent changes in OEMs requirements of component manufacturers have been illustrated in the section on OEMs, but several more have a direct relation to component manufacturers. On an external level

compone ips with OEMs had to align their product ranges and manufacturing techniques with those of similar international component suppliers (Barnes, 1999). These component manufacturers found themselves under severe pressure in order to meet the global standard for a given product's design and quality specifications (Barnes, 1999) and in the contractual obligations that penalised poor quality or delivery unreliability and that required an annual reduction in unit price over the life cycle of the product (so-called cost-down contracts) (Barnes and Kaplinky, 2000). On an internal level local component manufacturers found less value in offering local design or adaptation skills, as component designs were internationally created and standardised (Barnes, 2000b). One should keep in mind, and this will be illustrated in the section on the MIDP, that the local OEMs were no longer under any legal obligation to purchase locally manufactured components.

The pressures on local component manufacturers discussed above led to a dramatic change in the way component manufacturers interacted with OEMs. As was explained earlier OEMs often move some of the responsibility or cost of designing components or manufacturing multi-component sub-assemblies onto tier 1-component manufacturers (Barnes *et al*., 2003). The ownership or control over the intellectual property rights to that component is then shared between the OEM and component manufacturer and as such the manufacturer of the component is closely controlled (Barnes *et al*., 2003; Barnes, 2000a). If one views this development with the international practice of global or follower sourcing, where the responsibility is on the component manufacturer to supply

the produ ent, it changes the way in which locally owned component manufacturers seeking access to these lucrative contracts operate. Many of the local component manufacturers seeking to gain access to these contracts are required to sell an equity stake to the owner of the global contract or intellectual property rights, or they are forced to form a joint venture company in which the given product could be produced (Barnes *et al.*, 2003). Component manufacturers, regardless of the ownership status, did have to foster their relationships with local OEMs in order to gain access to new component designs and often to global markets for their products.

The move toward global integration by South African OEMs, the abolishment of local content requirements under the MIDP (to be discussed in detail in the section on industrial policy) and the rapid modernisation of the products and production techniques of OEMs have rapidly changed the way in which OEMs view local component manufacturers (Barnes, 1999). Research by Barnes (1999; 2000b) point to the fact that South African OEMs value criteria such as delivery reliability, price, quality and conformance to standards far more than innovation capabilities and geographic location, which Black (2002) and Barnes (2000b) point out is the traditional stronghold of local component manufacturers. This emphasised the pressure placed on component manufacturers to conform to international standards, given that they compete directly with international component manufacturers.

A study c facturers does imply that this sector has changed dramatically in reaction to the changing requirements and market for their products. Barnes and Kaplinsky (2000) point to the fact that many component manufacturers aligned themselves with OEMs in order to gain access to international supply contracts. This move shows that component manufacturers viewed exports as a method of counteracting the change in industrial policy protection and local market requirements (Black, 2003).

OEMs views of local component manufacturers often remain negative and some research point to the fact that the percentage of local content in locally manufactured vehicles is dwindling (Black and Bhanisi, 2007). Tied to this view is the fact that component manufacturers are faced a global market where the speed of development is ever increasing (Barnes and Kaplinsky, 2000) and where local manufacturers are often disadvantaged by higher labour costs or lower productivity (Barnes, 1999). A review of the current state of industrial policy, to be followed by a description of the current Motor Industry Development Programme (MIDP) will further contextualise the current business environment in which component manufacturers have to operate.

2.6. Industrial policy

Industrial policy can broadly be defined as policy interventions by a country or regions government that is aimed at emphasising those economic factors that

influence nefits both the interests of private parties and the public good (Altman and Mayer, 2003).

The creation of industrial policies is often driven by a belief that a modern economy remains driven by a strong industrial sector (Altman and Mayer, 2003). In direct relation to this view is the generally held belief that a national government should support and foster this sector through targeted policies that either protects or stimulates companies in this sector (Altman and Mayer, 2003).

When considering those arguments in favour of industrial policy, one can discern between two distinct approaches to such policy formation. On the one hand there are those that believe that industrial policy should at best be general supply-side policies that focus on the long term development and support of the industrial sector (Pack and Saggi, 2006; De Mello, 1997). The arguments in favour of such an approach hold that such policies are less interventionist and allow for general economic principles, such as basic supply, demand and price signals, to hold despite the influence of market-changing policy (Pack and Saggi, 2006).

On the other side of the table are those that believe that the government is efficient enough to take responsibility for the protection, development or stimulation of specific sectors. Proponents of this approach talk of sector-specific or targeted industrial policies (Pack and Saggi, 2006; Rodrik, 2004). Buss (1999), a firm opponent of targeted industrial policies, explains that

proponen in the sectors that they target and that they often aim to further stimulate a sector beyond the level at which it would naturally grow. Buss (1999) further argues that these policies assume that a sector can be fostered until it grows into a cluster of interrelated businesses that could later gain critical mass and grow on its own. Targeted industrial policies, states Black (2002), can also seek to negate natural disadvantages, such as South Africa's relatively small local market or its distance from major export markets such as Europe and the United States.

There are of course many arguments against both industrial policies in general and targeted industrial policies more specifically. Buss (1999) argues that targeted policies, more so than broad industrial stimulation policies, mute or distort market signals. Such policies also assume that the issuing government has the necessary skills, capacity and understanding of a targeted policy to effectively manage it (in the same way that normal markets free from intervention would) (Buss, 1999). Given the distortions and the understanding that a government does not have a full understanding of all economic sectors in a country, Buss (1999) argues that resources such as jobs and skills, physical resources and capital are often directed into sectors that destroy value or that will hardly be able to be sustained without continued support. Buss (1999) is further supported by Rodrik (2004) who also argues that competing policies from the same government, such as import parity pricing policies and market stimulating policies in the steel and automotive sectors respectively, prove that industrial policies have many inherent flaws.

It is these ... South African automotive industry. Barnes *et al.* (2003) acknowledges that the history of policies that artificially supported this market led to high levels of inefficiency and that these inefficiencies will continuously rely on government support in order to be sustained. These authors are supported by Flatters (2002) who warns against the practice of rent seeking, where an industry merely exists to benefit from the government support and not because it is an economically promising sector in which to do business.

Other arguments against targeted industrial policy include the inefficiencies that it creates in any given market and the cost to the final consumer, who has to carry the inefficiencies that often exist in the absence of normal price signals (Barnes *et al*., 2003).

Proponents of industrial policies often argue in favour of the net benefits of such policies (Barnes *et al*., 2003) and state that these policies are often the only way of changing sectors to adapt, at an acceptable pace, to the global changes that occur within a given sector. This is especially true for the MIDP, which is aimed at creating a globally competitive sector after years of protection and subsequent inefficiencies (Barnes *et al*., 2003; Black, 2002).

Other arguments in favour of targeted industrial policies state that such policies create a stable environment in which a company can plan its future and proponents often point to the successful implementation of such policies in certain Asian countries (Barnes *et al*., 2003). The MIDP is an example of such

a policy, ives and tariff reductions (Barnes *et al.,* 2003).

2.7. The Motor Industry Development Programme (MIDP)

The Motor Industry Development Programme (MIDP) is the current industrial plan for the South African automotive industry (Black, 2002). The plan was created in 1994 after a consultation process between the South African government, labour representatives, the automotive industry and civil society (Damoense and Simon, 2004). This process was organised and collated by the so-called Motor Industry Task Group (MITG) which started its investigation in 1992 (Damoense and Simon, 2004; Black, 2002). The recommendations of the MITG, combined with the goals of the preceding industrial plan for this sector, led to the creation of the MIDP, which was implemented on 1 September 1995 (Damoense and Simon, 2004; Black, 2002; Barnes and Morris, 2008). In its current form the MIDP is set to be the governing industrial policy for this sector until it is replaced at the end of 2012 (Barnes and Morris, 2008; Venter, 2008b).

Given the nature of the MIDP and the fact that it is focussed on one single sector, it can be described as a targeted, supply-side focussed industrial policy targeted at the local automotive sector (Altman and Mayer, 2003). As such, the policy was created to nurture and develop this sector, but more specifically it was developed as a way of ushering the local automotive industry into the global arena, which is where South Africa found itself after its first democratic elections in 1994 (Barnes and Kaplinsky, 2000).

As became evident in the discussion on the intertwined development of the automotive industry and targeted industrial policy in South Africa it is important to note that the MIDP is not the first industrial policy for this sector. The MIDP was preceded by six different phases of official industrial policy, which started in 1961 (Damoense and Simon, 2004) and will be succeeded by the new Automotive Production and Development Programme (APDP) in 2013 (Venter, 2008b). The fact that the MIDP is part of a long line of progressive industrial programmes should be noted, as its goals and incentives were directly influenced by the preceding plan (Phase 6) and the underlying economic climate in South Africa and amongst modern countries (Black and Mitchell, 2002). This lineage will be discussed further in the section on the development of and reasoning behind the creation of the MIDP.

2.7.1. The creation and goals of the MIDP

The MIDP is the seventh phase of industrial policy focussed on the automotive sector (Black and Mitchell, 2002; also refer to Table 1). Two differing aspects influence this programme's creation and the underlying reasoning for it. The first is the goals of the preceding phase (Phase 6) and the second is the changes in South Africa's position within the global arena, with it entering global governing bodies such as the World Trade Organisation (WTO). Each of these influences will be discussed in detail.

The first icy, provides a clear signal of the South African government's views on the development and support of the country's automotive industry (Black, 2003). In stark contrast to phases 1 to 5, phase 6 recognised that there were several tools that the government could use to substitute imports (Black and Bhanisi, 2007), protect the market (Barnes and Kaplinsky, 2000) and manage the sectors usage of foreign currency (Black and Bhanisi, 2007). This acknowledgement of the different tools available to the government relates to the change the government's goals for this industry. As such phase 6 changed its measurement of local content volumes to value and not weight (Black and Bhanisi, 2007), whilst locally manufactured vehicles' required local content as a percentage of total value was lowered to 50% (Black, 2002). The change in measurement was accompanied by changes to the incentive structure that slowly focussed the industry's attention on the value of exporting products (Black, 2003). Given the inward focussed structure of the OEM-industry at that time, it was no surprise when component manufacturers were the first to explore the possibilities of exporting products (Black, 2003). The MIDP, as phase 7, built on these goals.

The second important influence on the approach of the MIDP was the changes in South Africa's political reality. The MIDP was planned and discussed from 1992 onwards, during a time when the country entered democracy and sought to enter the world economy and global bodies such as the World Trade Organisation (Black, 2003). Given this change, the government also wished to move the automotive industry towards global integration and competitiveness

(Black, 2(industry could do immediately. The MIDP was therefore created as a staggered method of integrating the industry into the global arena (Black, 2003), whilst the past three and a half decades of import substitution was reversed and changed to export promotion (Black and Bhanisi, 2007; Black, 2003).

The reasoning behind the creation of the MIDP was also clearly confirmed in the MIDP's stated goals. Damoense and Simon (2004) list the primary goal of the MIDP as "developing a globally integrated and competitive local motor vehicle and component industry" (Damoense and Simon, 2004, p. 254). Other goals noted by the author are: stabilising long term employment in the industry, improving the affordability and quality of the vehicles produced in the country, promoting exports and in so doing improve the industry's balance of payments and contributing to the country's economic activity (Damoense and Simon, 2004). The authors, supported by Black (2002), Black and Bhanisi (2007) and Flatters (2002), point to the fact that exports is an effective method of testing an industry's quality and level of competitiveness against the products of similar industries in other countries in the world.

Tied to the stated goals of the MIDP was the belief that the policy of export promotion, through the use of various incentives and rebates, would lead to the rationalisation of the product ranges manufactured locally (Black, 2002). It was further believed that this rationalisation, through the basic laws of scale and economics, would enable the industry to focus on the profitable manufacturing of one or a small number of products that could then be both exported and sold

locally (D) further states that the MIDP illustrated the government's belief that this cycle of rationalisation and increasing volume amongst OEMs would also benefit component manufacturers who, through a pull-factor, could then also rationalise the number of locally manufactured products and start building them in higher volumes (Black, 2002; Black and Mitchell, 2002).

One should keep in mind that the automotive component industry was also restrained from moving outside of the country's borders during the first five phases of industrial policy. This, tied to the proliferation of vehicles being build in small numbers, prevented the component industry from itself gaining efficiency and global competitiveness by focussing on the high volume manufacturing and export of a limited number of components (Black, 2002; Hartzenberg and Marudzikwa, 2002). Barnes, Kaplinsky and Morris (2003) state that high volume production and economies of scale is often more important to component manufacturers, who produce lower value products and hence need much higher volumes in order to support tooling costs.

Given the MIDP's underlying belief of its effect on the component industry all local content requirements were scrapped (Damoense and Simon, 2004; Kaggwa, Pouris and Steyn, 2007). The effects of this immediate decision is key to this study, as the component industry was governed by the same range of industrial policies as the OEMs in all the industrial policy phases prior to 1995's inception of the MIDP and hence it suffered from many of the same

uncompe DP set out to change).

2.7.2. The workings of the MIDP

An understanding of the goals of the MIDP clearly supports the different incentives and supportive measures that have been included in the MIDP. The MIDP offers a range of rather blunt incentives and was structured to be less complex than preceding industrial policies (Barnes *et al*., 2003). The most important of these is the programme of import duty rebate certificates (IRCCs) that are directly aligned with the MIDP's goal of promoting exports (Damoense and Simon, 2004). IRCCs were designed as part of a broader scheme of Import/Export complementation (IEC) and offered manufacturers the full value of the locally contributed portion of exports back in the form of IRCCs (Damoense and Simon, 2004). The IRCCs could then be used to import other products (CBUs or components) and offset the cost of the import duties against the value of the IRCCs (Damoense and Simon, 2004).

It is important to note how the IRCC-benefit is calculated for exported goods. Lamprecht (2006) states that the IRCCs is calculated as a percentage of the free on board (FOB) price of the good, net of imported content, royalties payable and further transport costs. This means that the local content included in the price of the component or vehicle exported will be included in the value of the IRCC-benefit. The IRCC-benefit gradually declines in line with the lowering

of import ıat both OEMs and component manufacturers become more competitive over time.

In order to improve OEMs' competitiveness, the value of the IRCCs in relation to the value of the exported product gradually declined, to a level of 89% by 2005 and a final level of 70% of exported value in 2007 (Barnes and Morris, 2008). This level was then maintained after that period (Damoense and Simon, 2004). Apart from the programme of IRCCs, the MIDP scrapped any local content requirements, but did offer extra incentives to CBU-exports based on the value of their local content (Black, 2002; Damoense and Simon, 2004). This incentive was broadly negated by the fact that OEMs could import components to the value of 27% of the final product's value as a duty-free allowance (DFA) (Barnes and Morris, 2008). It is very important to note that the duty free allowance has not been extended to component manufacturers (Naamsa, 2007).

Other incentives included in the MIDP and related to the overall goals of this programme are a small vehicle incentive (SVI) that were intended to encourage manufacturers to build affordable vehicles for the local market, and a productive asset allowance (PAA), that encouraged the productive use of an OEM or component manufacturer's assets (Barnes and Morris, 2008). The SVI was removed in 2007, whilst the PAA was first introduced in 2000 (Damoense and Simon, 2004). The PAA is a cornerstone of the new Automotive Production and Development Programme (APDP), which is set to move away from export promotion and which will replace the MIDP in 2013 (Venter, 2008b).

Following from the feedback that the government and industry received from the MITG, the parties also agreed to allow the trading and exchange of IRCCs on an exchange, called the Export Credit Exchange (ECE) (Damoense and Simon, 2004; Barnes and Morris, 2008). The exchange of credits have become an important aspect to the MIDP, as component manufacturers often offer their credits directly to OEMs or on the ECE in exchange for access to large supply contracts (Black, 2002).

On the other side of the coin the MIDP provided a fixed schedule for the lowering of import duties (Black, 2002). This schedule (see Table 3) was drawn up as a way of forcing OEMs and component manufacturers to become competitive, by gradually exposing them to competition from other parts of the world (Black, 2002). The schedule was set to continue up to a final level, which would be reached in 2002, the planned final year of the MIDP (Black, 2002). This schedule was amended in 2000, when a mid-term review recommended an extension to 2007 (Black, 2003), and again in 2006, when the plan was extended until 2012 (Barnes and Morris, 2008). It is important to note that the MIDP-schedule of tariff reduction was more aggressive that the schedule required by the WTO, of which South Africa had become a member (Kaggwa *et al.,* 2007).

Table 3 follows on the next page

TABLE 3: TARIFF PROTECTION FOR OEMs

Effective date	Light vehicle segment		Medium and heavy vehicle segment	
	CBUs	Original components	CBUs	Original components
January 1, 1995	65%	49%	40%	50%
January 1, 1996	61%	46%	37.5%	45%
January 1, 1997	57.5%	43%	35%	40%
January 1, 1998	54%	40%	30%	35%
January 1, 1999	50.5%	37.5%	25%	30%
*January 1, 2000	47%	35%	20%	25%
January 1, 2001	43.5%	32.5%	Unchanged	Unchanged
January 1, 2002	40%	30%	-	-
January 1, 2003	38%	29%	-	-
January 1, 2004	36%	28%	-	-
January 1, 2005	34%	27%	-	-
January 1, 2006	32%	26%	-	-
* January 1, 2007	30%	25%	-	-
January 1, 2008	29%	24%	-	-
January 1, 2009	28%	23%	-	-
January 1, 2009	27%	22%	-	-
January 1, 2010	26%	21%	-	-
January 1, 2011	25%	20%	-	-

Sources: Damoense and Simon (2004); Naamsa (2007), Lamprecht (2006)
* Indicates years in which the MIDP was extended.

Proponents of the MIDP often refer to the growth in export volumes as the largest body of evidence of the success of the MIDP (Black, 2002). This measurement has indeed shown significant growth, with the combined exports of components and CBUs grew from R2 245 million in 1994, the year prior to the implementation of the MIDP, to R55 103 million in 2006 (Naamsa, 2007). This growth can be translated into a compound annual growth rate of 26% for the first 11 years of the MIDP (Naamsa, 2007).

Black (2002) also points to the fact that the number of vehicle ranges built in South Africa dropped significantly, whilst the number of units per vehicle range built increased. This is a direct result of OEMs decision to focus on the manufacturing of a smaller range, but in higher volumes and then importing other products using the IEC and IRCCs (Black, 2002; Kaggwa *et al.,* 2007). Naamsa (2007) indicate that the number of model platforms being built in South Africa has been rationalised from 42 in 1995 to 21 in 2006.

Other indicators also point to the success of the MIDP. Naamsa (2007) indicated that the annual capital investment in South Africa's automotive industry was R841 million in 1995, compared to R6.2 billion in 2006. In the same vein the value of exported automotive products (vehicles and components) grew from R4.2 billion in 1994 to R55.1 billion in 2006 (Naamsa, 2007).

The MIDP has had a positive effect on the level of employment in the industry. Naamsa (2007) and Kaggwa *et al.* (2007) point to the fact that this measurement has remained stable, although there was a downward adjustment of 1.7% in the industry's employment levels in the first five years of the MIDP, as the industry adjusted to the changing environment.

One can also identify secondary effects of the MIDP. Key amongst these is the change in ownership, as was alluded to in the discussion on the local automotive industry. Barnes and Morris (2008) state that all local vehicle manufacturers have been bought by their respective international parent companies, with the exception of a small portion of private and institutional holdings by local companies and individuals in Toyota South Africa. This final local shareholding was sold to the Toyota Motor Corporation in June 2008, completing the change to full foreign ownership by all the South African manufacturers (Cokayne, 2008a). Black and Mitchell (2002), Black (2002) and Barnes (2000b) indicate that a similar pattern is evident in the component manufacturing industry, where many local component manufacturers sold their company or a portion thereof, to foreign multinational component manufacturers.

2.7.4. Concerns relating to the MIDP

The key concern relating to the MIDP has a direct relation to the MIDP's key goal, which is the aim of growing export volumes. Black and Mitchell (2002) argues that the automotive sector has seen significant growth in exports, a

statemen owth is linked directly to the incentives that are offered in the form of IRCCs. This, states Black and Mitchell (2002), creates concerns over the sustainability of this industry's export growth.

Black and Mitchell (2002) raise a further concern, namely that the MIDP distorts the true market price of vehicles in the local marketplace. This is done, says the authors, through the use of import help and tariff protection that artificially leads to higher prices for local vehicles than would be the case in a purely competitive markets. This statement is contrasted by research from Barnes *et al.* (2003), which prove a small and marginal price benefit for South African vehicle buyers in comparison to vehicle buyers in Europe.

A further concern relates to the difference between cutting import tariffs and using incentives. The first, states Black and Mitchell (2002) moves the South African industry towards international prices and ultimately reduces the possible rents that the South African OEMs earn from the government support. In sharp contrast to this is the use of incentives, which moves the market away from direct competition and back towards protectionism (Black and Mitchell, 2002; Cokayne, 2008b). This is especially of concern given the fact that IRCCs were only gradually reduced until 2007, after which it remains stable until 2012 (Black and Mitchell, 2002).

The range of concerns relating to the MIDP's impact on component manufacturers is significant. Key amongst the concerns again relates to the

MIDP's f( )) highlight the fact that OEMs are in no way obliged to source any components from South Africa. One could argue that component manufacturers are protected by high import tariffs that might offset any cost disadvantage that they might have given their development in a small, unproductive and protected market. This is however cancelled by the DFA-clause, which allows OEMs to import 27% of the value of their vehicle without paying duties (Barnes and Morris, 2008). Given this allowance, and the gradual lowering of import duties, Barnes and Kaplinsky (2000) argues that the effective rate of protection (ERP) is close to 0% for component manufacturers, whilst Flatters (2002) support this calculation and argues that this reality forces South African component manufactures to become globally competitive at a far more rapid pace than is afforded OEMs.

The second concern regarding the impact of the MIDP on component manufacturers relate to the assumption of the chain of events that would follow the implementation of the MIDP. Black and Mitchell (2002) explain that the initial assumption of the MIDP was that a sudden change in local content requirements and ERP would create a pull-force that would force component manufacturers to rationalise product lines, increase volumes and export large quantities, in the same way as OEMs have done, albeit in a more managed and protected manner. This, states the authors, ignore the fact that OEMs have foreign owners that offer a direct link to export contracts, as opposed to component manufacturers that have solely focussed on the local market and are still under local ownership. Black and Mitchell (2002) states that this is the possible reason why the bulk of export growth, for new products, can be traced

back to a ers and not the traditional grouping of locally owned and operated component manufacturers.

Tied to the change in composition amongst component manufacturers and the products that they manufacture and export is a concern relating to the use of IRCCs amongst component manufacturers. Black (2002) and Barnes *et al.* (2003) say that component manufacturers often offer their IRCCs to OEMs as an order qualifying step and that those IRCCs can then be used to import other components that could directly compete against the component manufacturers product.

Lastly the impact of global competition on the local component industry is exacerbated by the global changes in OEM and component manufacturer relations, with the OEM requiring far more control over component manufacturer's production, quality and pricing (Barnes *et al.,* 2003). This is of concern to local component manufacturers that might not have the links with the global OEMs of component manufacturers in other areas and as such they are disadvantaged when bidding for future contracts (Barnes *et al.,* 2003).

2.8. Competitiveness

The concept of competitiveness can be defined in a multitude of ways, depending on the unit of analysis, the situation in which that unit finds itself and in some cases also the measurements that the given institution or individual values as important (Feurer and Chaharbaglu, 1994). This fluid view of the

concept leads to an inappropriate view of what competitiveness is, especially when one moves between measuring competitiveness amongst corporate entities to measuring sector-level competitiveness. The variance in unit of analysis influences the definition, but Krugman (1994) proposes that a very basic and broad definition of competitiveness is to describe it as the ability of the unit of analysis to sell its products profitably. Feurer and Chaharbaglu (1994) adds several components to this definition, most importantly that of the sustainability of the entities' endeavours. The definition of competitiveness, as applicable to both the firm level and sector level is of importance to this study.

Krugman (1986), in an article on the interplay between industrial policy and competitiveness on a sector- and country-level, argues against the simplistic analysis of sector-level competitiveness. The author does this through the analysis of a common measurement, namely trade balance. According to Krugman (1986) the analysis of a sector's trade balance relative to other similar sectors in other countries is simplistic, as it assumes that trade is a competitive action and that one region's gain is necessarily to the detriment of another. He proposes that export performance, as a measurement of competitiveness, should be supplemented by another measurement, such as the measuring of a growth or decline in productivity (Krugman, 1994). Krugman (1986 and 1994) concludes by emphasising that the measurements of competitiveness is varying, and should consider the environment of possible influencing factors, such as government policies that might promote factors such as export growth, yet does not benefit a sector's competitiveness.

The study of competitiveness on a sectoral level is of value in this analysis of the impact of the MIDP as a targeted, sector-focussed industrial policy, on the competitiveness of the South African component industry, as a sub-set of the automotive sector. Black and Bhanisi (2007) argue that one can measure competitiveness amongst component manufacturers by measuring investment and export performance as the two main criteria. These measurements link directly to the MIDP's stated goals of growing the sector through promoting exports and, indirectly, by attracting foreign direct investment (FDI) into the country (Black and Mitchell, 2002; Black and Bhanisi, 2007).

The view by Black and Bhanisi (2007) relating to the value of FDI inflows is confirmed by Narula and Wakelin (1998) and De Mello (1997). Narula and Wakelin (1998) argue that FDI is in many ways a measure of the advancement of the sector relative to other similar sectors in other countries. In much the same way do exports act as an indication of a country's share of a specific market, again relative to similar sectors in other countries (Narula and Wakelin, 1998). Cockburn, Siggel, Coulibaly and Vézina (1999) expands on the comparative difference between sectors, corporations or countries, by emphasising the fact that there is a difference between comparative advantage, which measures on unit's performance relative to another, and competitiveness, which measures a unit's ability to sell its goods profitably.

Competitiveness on a firm level have many and varying definitions. Feurer and Chaharbaglu (1994) define a firm's competitiveness, in addition to the general

definition rings of a firm relative to that of its competitors. In their definition, the authors also include the sustainability of the firm, the value that it offers relative to the cost in the eyes of the consumer, and the sustainability of the firm's ventures (Feurer and Chaharbaglu, 1994).

Black and Bhanisi (2007) relate the firm- and sector-level competitiveness measures directly to component manufacturers by emphasising, on a sector-level, the growth in investment and export levels. In a similar article by Black and Mitchell (2002) the authors hold that export and investment levels have increased, but that this is in many ways directly related to the introduction of the MIDP as a policy set to help the industry increase its competitiveness. The statements by Black and Mitchell (2002) creates an interesting scenario, as it places into context an industrial policy that simultaneously seeks to increase a sector's competitiveness, for the benefit of export and investment levels, yet it directly influences those levels artificially, thereby creating its own success.

On a firm level in the component industry Barnes and Morris (1999) and Granerud (2003) state that a component firm's level of competitiveness is simultaneously influenced by the sudden opening of the market to foreign competitors and by the changes in the global market for components, where speed of development, quality and the continuous lowering of costs force these firms to become more efficient, productive and subsequently more competitive. The MIDP also plays an important role on this level, yet for different reasons. On the component level this industrial policy has effectively removed protection

levels ar become more competitive, rather than incentivise them to do so, as is the case with OEMs.

2.9. Conclusion

The analysis of the South African automotive market from prior to the inception of the MIDP shows that it has been influenced by changes in the international market, especially with regards to changing technology and sourcing patterns, and by simultaneous changes in the local market, with the country entering the global marketplace and liberalising the industry. The analysis also clearly indicated that the South African automotive industry have been influenced, and became reliant, on some form of industrial policy since 1961. The industrial policies employed in this segment of the market have changed with the changing requirements of the market, and this included the changes in incentives and in end goals. It is also these industrial policies that, given their inwardly focussed nature, became responsible for the inefficient state of the industry when compared to its global competitors, when the MIDP was introduced in 1995.

The presence of a set of industrial policies are the key factor in this study, as it is set to correct inefficiencies and uncompetitive behaviour of the industry in a closed economy, yet it also becomes the main driver and reason for the growth in the outcomes that it has set. This of course blurs the lines between incentivised performance and true changes in competitiveness.

The stud EMs and their multinational parent companies and between OEMs and component manufacturers. The last relationship has come under severe pressure under the MIDP, as local content requirements were removed, duty-free imports were allowed and supported through import credits and import tariffs were lowered. This three pronged change in the operating environment of component manufacturers have forced these companies to forge alliances with large multinational component manufacturers, who control modern technology and large supply contract, and it forced them to export well in advance of similar moves by OEMs.

3. Rese

3.1. Introduction

Based on the preceding literature review one can induce certain propositions on the state of competitiveness in the component industry and the influence that the MIDP as a targeted industrial policy has had on this industry.

It is important to note that the propositions seek to describe the relationship between component manufacturers and their market, both local and international, whilst seeking to understand the impact of the MIDP on this sub-sector of the automotive industry. It is believed that the MIDP has had a similar export-promoting effect on the component industry, but that the effects might have been less intentional or direct, given the differing requirements for this sub-sector and the fact that the industry entered the global marketplace and OEMs were integrated into their global parent companies. It is also believed that component manufacturers were forced to become more competitive due to the changes in their regulated relationship with OEMs and the effective rate of tariff protection that they enjoy.

Lastly it is believed, and this was illuminated by the literature review, that the global nature of the automotive industry and the role of local OEMs in the global networks of the parent companies have strengthened their role as export promoting entities for component manufacturers in South Africa. These findings will be tested by conducting a comparative case study between two South

African c cal production.

The testing of these findings will be guided by the following three propositions.

3.2. Propositions

1. The MIDP is successful in motivating component manufacturers to export.

2. Component manufacturers that have grown their export volumes are also more competitive than before.

3. OEMs play a key role in component manufacturers' export growth.

4. Rese

4.1. Introduction

The study of the impact of the MIDP on the competitiveness of component manufacturers in South Africa has been structured as a comparative case study of two component manufacturers that operate under the MIDP and that has operated in this sector prior to the inception of the MIDP in 1995. The focus of this study is in line with the propositions stated in the preceding chapter. The chapter will include information on the unit of analysis, data collection and analysis method and the limitations that exist when using this method of data collection and analysis.

4.2. Research objectives

The goals of this study, understanding the nature of competitiveness amongst component manufacturers in South Africa, are strongly aligned with the case study analysis method. A case study allows for the use of multiple sources of data and for multiple methods of triangulating and extracting meaning from the data (Yin, 2003; Rowley, 2002). Moreover, a case study ensures that the context within which the unit of analysis exist, which is in itself a valuable source of information, is communicated (Stake, 1995; Yin, 2003). Lastly, states Yin (2003) and Rowley (2002), a case analysis is in direct contrast to an experiment

as the re: and reaction to the environment, yet never influences that environment.

Rowley (2002) offers four different forms of case studies, based on the data collection method and number of units in the sample. Given her definition this comparative case study can be defined as a holistic study (with only one unit of analysis) with a sample size of more than one, which would identify it as a Type three case research method. Type three case research methods allow for comparative research, states Rowley (2002), and are ideal for testing or building on theory.

It is believed that the study of a certain market segment's competitiveness under a targeted industrial policy is well suited to case study research. This conclusion follows from the stated values of case study research in understanding the context within which a specific observed unit exists as well as allowing the researcher to access multiple sources of information in testing stated propositions.

The case study approach is supported by the goals underlying this study. An analysis of the competitiveness of component manufacturers necessarily include the analysis export data, which is quantitative in nature, whilst an understanding of the context in which they operate requires more qualitative information. Both are deemed important as the study seeks to understand the way in which the MIDP has influenced the competitiveness of the sector as a whole, but also companies as the key unit of analysis. Case study research,

states Y le sources of information and will enable a broad understanding of the sector beyond the impact on the specific unit of analysis.

4.3. Methodological approach

4.3.1. Case study preparation

The first step in preparing for the case study analysis was the broad review of the available literature on the motoring industry, the component manufacturing industry, industrial policy in general and the MIDP specifically. A literature review of this nature is important in the final triangulation process, which tests the validity of the findings and is included in chapter six of this study. The literature review was concluded by a review of other case study analyses that relate to the South African component-manufacturing industry. One such case study was found, namely a narrative description and analysis of a plastic component as it moves through the production pipeline by J. Barnes and M. Morris of the University of KwaZulu-Natal (Barnes and Morris, 1999). Although this study provided valuable guidance in the collection and presentation of data, it focused on understanding the production pipeline as a proxy for competiveness and it used a completely different unit of analysis. As such the study do not compare directly to this study.

The literature review, as presented in chapter two, was followed by the creation of several propositions, as is presented in chapter three. After stating the

study's a ve companies were selected and contacted in order to participate in this study. More on this process is contained in the section on the sampling methodology.

4.3.2. Unit of analysis

The choice of unit of analysis was informed by the propositions posted in chapter three and were identified as South African component manufacturers that supply manufactured products directly to local OEMs and that export products. The unit of analysis seek to understand the impact that the MIDP has had on the competitiveness of component manufacturers in South Africa.

4.3.3. Sample

Pettigrew (1973) in Eisenhardt (1989) proposes that cases at the more extreme ends of a given spectrum be chosen. It is believed that selecting cases that exhibit a more extreme variation of the studied phenomenon would enable theory formation from a smaller number of cases than would be necessary when cases toward the median of a given spectrum is studied.

In this study it was decided that two companies would be chosen that does not necessarily exhibit more extreme reactions to the MIDP or as manufacturers within the component-manufacturing industry, but that does exist at the extreme end of the spectrum of exporters. As such two companies were chosen that manufacture catalytic converters and leather seat covers, which is two of the

best perf e MIDP (Pitot, 2008).

The sample was chosen from the membership list of the National Association of Automotive Component and Allied Manufacturers (Naacam). Naacam-members were grouped by tier and subsequently by region. The final list of component manufacturers in the Gauteng, North West and Mpumalanga-provinces were then selected and subsequently ranked by key export product. Preference was given to component manufacturers in the most popular export segments, namely catalytic converters, leather upholstery and tyres. Companies in each section were approached and a final selection was made based on availability, range of information available, the willingness of the participants to share information with the researcher and importantly the fact that both companies existed prior to the inception of the MIDP in 1995 and as such would be able to provide comparative information on the operating environment and the changes to their levels of competitiveness. Both companies that were chosen are domiciled in the Gauteng province.

4.3.4. Sources of information

Yin (2003), supported by Eisenhardt (1989), Gillham (2000), Rowley (2002) and Darke *et al.* (1998), indicate that case study analysis allows for the use of a multitude of data sources. This, argues Yin (2003), allows for the triangulation of information in support or against a given proposition, and is a very good way of understanding the context within which a company operates or a given

observati ı also ensures construct validity, as aligned information from multiple sources point to a strong case construct (Yin, 2003).

In the study of the two South African component manufacturers several sources of information were used. The varying sources of information in both cases are tabulated below:

TABLE 4: VARYING SOURCES OF INFORMATION

Component manufacturer 1: Catalytic converter manufacturer	
- Interviews	Export manager Sales and marketing manager
- Presentations	Several internal presentations on the MIDP, rebate structures and corporate policy
- Annual reports	2007
- Observation	Plant visit.
Component manufacturer 2: Leather component manufacturer	
- Interviews	Chief executive officer Chief financial officer
- Observation	Plant visit and ad hoc questioning of employees in the manufacturing and shipping division
- Promotional material	Study of all services relating to the MIDP as offered to clients

Yin (2003) and Eisenhardt (1989) state that data collection and analysis should be supported by a wide and thorough literature review. In this instance the thorough literature review in chapter two served as the basis required for the creation of the interview schedule and the analysis of the data collected.

Several data collection methods were considered in this study. The use of multiple sources of both quantitative and qualitative data is proposed by Yin (2003), Eisenhardt (1989), Rowley (2002) and others as it allows for more robust findings through the triangulation of data and for richer context surrounding the research problem, which is key to a case study. Eisenhardt (1989) and Mason (2002) further support the use of multiple sources of information as they often inform each other and act as a guide for data collection and within-case analysis and it allows for the use of a single piece of data, as is often the case with qualitative data analysis, to inform more than one proposition.

4.3.6. Data analysis methods

The data analysis process was divided into two sections, namely within-case analysis and cross-case comparison. This division of analysis is recommended by Eisenhardt (1989), who states that the sheer volume of information gathered from the multitude of sources makes it an imperative to analyse the information during collection and between the studies of different sources. Eisenhardt (1989) is supported by Yin (2003) who calls for constant information analysis and for the building of an explanation about the case as it progressed, in order to better analyse it.

The metl :r view on the positivist nature of data collection – finding facts in support or against a stated proposition (Zikmund, 2003) – and the fact that she believes the case study propositions to be somewhat fluid in nature. Given this view, within-case analysis is a valuable test of the strength of the propositions and the strength of the link between it and the data that is gathered. It also allows for the adjustment of the propositions, if it does not invalidate the preparation and initial goals of the study (Eisenhardt, 1989). Lastly, Eisenhardt (1989) states that it is allowable in a case study analysis for the researcher to draw upon his or her own expert knowledge in the field, whether in questioning sources or guiding the data collection process. She is supported by Woodside and Wilson (2003) in making this statement.

It should be noted that each level of data analysis, whether in one case, between cases or theoretically of all cases, was done in three steps, as recommended by Yin (2003). As proposed by Yin (2003) the collected data was reduced, through a process of selection, simplification (where applicable) and abstraction. The data was then displayed in a manner that allowed for analysis and understanding. Lastly conclusion drawing and verification was done through analysis of the displayed information.

4.3.7. Within-case analysis

The first step taken in the within-case analysis process was keeping a case file or logbook. All interviews were recorded in this file and key themes or

construct also served as a point of reference, with quantitative and other data sources referenced in this logbook to the themes identified in interviews. It has been noted that Darke, Shanks and Broadbent (1998) identified interviews as the foundation to any case study, whilst Yin (2003) acknowledged this fact, yet reminded the researcher to be mindful of over-reliance on this source of data. Stake's (1995) view on the use of questions guided by a broad framework, rather than by a codifiable set of questions and answers, was used in these instances.

The second step of within-case analysis was the grouping of data by source and the subsequent comparison of themes and constructs from each source with all other sources. The comparison of data was done by tabulating the information and then comparing that information. This step was considered key in ensuring internal validity, which Yin (2003) proposes as the method of ensuring that causal relationships proposed in the study are indeed causal and not spurious.

4.3.8. Cross-case analysis

In analysing multiple case studies, Yin (2003) and Eisenhardt (1989) warns that one should keep the key questions of "what" (reasons) and "why" (context) in mind when analysing across case studies and looking for contrasting or supporting information.

In the an idy, the cross-case comparison was guided by a method of so-called pattern matching, in which the themes from one study were compared to that of the other in a search for patterns. This method was informed by Yin (2003) and was tested by a constant levelling of possible alternative explanations for the data collected. This method was once again made easier through the tabulation of data, specifically the method proposed by Darke *et al.* (1998), where the information is ranked in a way similar to constructing a narrative.

4.3.9. Theory development

Theory development, says Eisenhardt (1989) remains the ultimate goal of case study analysis and as such it represents the final phase of case analysis, following on within-case analysis and cross-case analysis. Eisenhardt (1989) however warns against creating theory that is overly cumbersome. This would be a sign of insufficient data cleanup and analysis, as is covered in the section on data collection. In order to counter this, Yin's (2003) five levels of questioning were used in order to analyse the data. This entails questioning interviewees, questioning the data from a specific case, questioning the patterns that emerge from the data and between the cases, questioning the findings of the entire study and lastly questioning the validity of the study, its scope and the findings from it.

Theory development, whilst being the ultimate goal of case study analysis, is also a final method of ensuring validity. Within this study, the goal was creating

theories for theoretical replication. Theoretical replication, states Yin (2003), Darke *et al.* (1998) and Eisenhardt (1989) is proof that the case design, data collection and analysis were aligned and supportive of each other.

4.4. Limitations

Several limitations were identified in the data collection and analysis process. As was stated previously, the study only sampled component manufacturers from Gauteng and the provinces surrounding it. Although the sampled companies represent two of the largest manufacturers in two of the largest component-manufacturing segments, it remains blind to the possible variations that may exist in regions such as KwaZulu-Natal or the Eastern Cape that have substantial clusters of component manufacturers. Tied to this limitation is the fact that despite agreeing to provide access to the researcher, both participating companies expressed a wish to remain anonymous, apart from identifying the region and market segment in which they operate.

Further restrictions exist in the final selection of the sample population that was identified in the study is the fact that only companies that are members of Naacam were sampled. Although Naacam represents virtually all major members of this industry, it remains possible that certain companies that represent a significant portion of the market could have been excluded from the population and hence from possibly being included in the comparative case study.

Other possible limitations exist in the possibility that both companies studied withheld information based on the researcher's occupation as a journalist. This has however been negated by agreeing on the anonymity of the companies involved, if not of the information supplied.

4.5. Conclusion

A review of the application of case studies in business research shows that it is a research method that allows for the use of multiple sources of data, for constant review of the collected data and of the stated propositions as data collection guide. Case studies also allow for a good understanding of the context within which the specific companies exist, which is of great value when studying the effects of an industrial policy that influences the operating methods of companies within a specific sector. Lastly, comparative case study research allowed for the better understanding of possible differences between the sample group as well as for better theory formulation through the comparison of different cases.

5. Findi

5.1. Introduction

The following chapter represents an agglomeration of the information collected from the various data sources and guided by the structured case study methodology that was put forward in chapter four. The information contained in this chapter has been grouped by proposition, with each proposition containing information on both companies that were studied in turn. Each proposition has been introduced by a short introductory paragraph. The final analysis has been done and presented in chapter six and includes a separate cross-case analysis-section, as was discussed in chapter four.

It is important to note that the information contained under each proposition include information gathered from interviews, observations and internal and public documents. More information on the different sources of each statement is included in the tabulated within-case analysis in chapter six. The documents, some of which are not for public consumption, include internal documentation on the companies' understanding of and method of dealing with the MIDP and public documents that explain the workings of the MIDP for training or marketing purposes. All documentation has been included in the case study file that was built in step with the case study process and that will be stored for the period required.

The interview with component manufacturers forms the basis of the data collection process, as is supported by authors such as Darke *et al.* (1998) who holds that interviews form the basis of any case study analysis method. Information gathering from interviews were guided by a structured interview guide (Appendix A), whilst data was extracted in a positivist manner, where information pertaining to and in support of or contradicting the stated hypothesis was collected. The interviews, combined with observations noted in the case file, have also been instrumental in providing contextual information that may support the extraction of meaning from the various sources of data.

5.2. Sample description

The sample of this study consists of two South African component manufacturers that operate under the regulatory regime of the motor industry development programme (MIDP) and that export a significant portion of their products. The sample selection process has been described in chapter four.

5.2.1. Company 1: Catalytic converter manufacturer

Company 1 is a broad engineering company, which focuses on the manufacture, export and retail of automotive components. The company is part of a much larger international group that has 47 manufacturing plants in 12 countries. The South African division has 7 plants in South Africa of which one manufactures catalytic converters for the OEM market. These catalytic

converter ised in the local manufacturing process and exported as part of locally manufactured vehicles. The global company offers in excess of 900 different catalytic converters of which some are proprietary to the South African division, which designed it for locally built vehicles.

The South African division that focuses on the manufacturing of catalytic converters is based in Gauteng and employs 47 workers. In comparison to the company's other manufacturing plants, which focus on products such as aftermarket performance equipment, jacks and related equipment, roll- and bull bars and precision steel products, this staff compliment is relatively small.

Company 1 is currently profitable and exports a major portion of its catalytic converters to companies in Europe. The company also delivers products to its head office in Europe, where it is stored and delivered to clients that deal directly with Company 1's head office.

5.2.2. Company 2: Leather component manufacturer

Company 2 is a manufacturer of automotive leather seat covers. The company employs in excess of 700 people at its single plant in Gauteng and exports 95% of its manufactured product to several countries and companies in Europe. The company receives pre-dyed and pre-cut leather sections from suppliers chosen by the OEMs that have placed the order for the final product. The company stitches the leather parts together and fits them to guiding rods and fasteners,

which are ve leather trim is then grouped and shipped as leather covering sets to the OEMs based in Europe. All leather products are shipped by airfreight in order to ensure higher production flexibility, including less time between order and delivery, and also better leather quality – leather transported by sea freight tends to spoil due to the changes in moisture level over a prolonged period.

The company started operations in 1990 and started exporting in 1994, one year prior to the inception of the MIDP. It has an annual turnover in excess of R500 million and a daily turnover of between R1 million and R2 million. The company is also a fully black empowered business, with black equity shareholding of 25.1%. The company has a stated plant capacity of between 900 and 1 000 car sets per day and the plant is operated on a 40-hour week schedule.

5.3. Process description

The process of data collection has been described in chapter four and in the introduction to this chapter. It is however important to note that the data analysis process, which is enclosed in chapter six, was done in conjunction with the data structuring and presentation process contained in this chapter. The process was initiated by the creation of two case study summary documents, which include key phrases and themes from each case process. These documents have been included in the case study file and contain information from all sources noted in chapter four and in the introduction to this chapter.

Following the creation of the case study summary document, the key themes were identified and tabulated. This process, which is documented in chapter 6 under the section of the within-case analysis, was repeated three times, whist applying a process of data reduction in order to concentrate the key themes. During each repetition, the key themes were identified, reduced into constructs and tabulated. The process led to the reduction in constructs, through this process of grouping and reduction, from 22 per case to 18 and finally 17 key constructs. A similar process of comparison, grouping and reduction, as described by Yin (2003), was repeated for the second step of analysis, namely the cross-case analysis process. This process led to the further reduction of constructs and the ranking of these themes in a rank ordered table, which have been used selectively under each proposition in chapter six and have been included in full as Appendix B.

A separate and concurrent process was followed to tabulate and document information on the export performance of both the catalytic and automotive leather sectors, individually and in comparison with the automotive component sector as a whole. This analysis drew from several sources of data, as will be stated, and was done for the specific proposition that relate to this data.

The final step of data presentation and analysis was the process of triangulation. The validity of the findings from the comparative case study was tested through triangulation by comparing different sources of information in the within-case analysis process as described above. This was then compared to

the findin two and finally tested through two expert interviews. The product of this process of triangulation is the final section before the conclusion in chapter six.

5.4. Data presentation

5.4.1. Proposition 1: The MIDP is successful in motivating component manufacturers to export.

The MIDP is first and foremost an export promoting policy. Literature collected in chapter two points to the fact that the MIDP is more beneficial to OEMs, when one considers the policy tools available, the lack of prescriptive local content requirements and the number of direct benefits available to the OEMs. This was further supported by feedback from the companies in the study. This proposition therefore seeks to test whether the goal of export promotion also holds for component manufacturers, given the fact that they are in some ways disadvantaged in comparison to OEMs.

5.4.1.1. Company 1: Catalytic converter manufacturer

The company currently successfully exports catalytic converters to several countries, most notably in Europe. The company believes that the MIDP does promote exports and that its export programme has been a result of the MIDP's goals and incentives. Tied to this is the fact that the company believes that it fully understands all aspects of the regulation as it pertains to the export

promoting documentation and training material on the subject. The company's thorough understanding of the MIDP includes the way in which incentives are structured and awarded and the way in which they have to register for the incentives and document their export process.

There is big money in exporting components under the MIDP.

The company further believes that it has been able to grow and expand its export network thanks to the structure of the MIDP. The company holds the belief that the MIDP is inherently export promoting in nature, although some of its regulations is not in favour of component manufacturers directly. The regulations that are believed to be export promoting, but not directly to the benefit of the component manufacturers, relate to the absence of regulated local content requirements in the MIDP. This means that OEMs will not be penalised in any way if they do not use locally made components, although they will miss out on some credit benefits under the IRCC-scheme.

The reference to the lack of local content requirements under the MIDP can be included in a list of three ways in which the company believes that the MIDP promotes component exports. The ways are:

- Directly: The company earns IRCCs when they export catalytic converters to fulfil orders from its head office. In these instances the company is the direct and primary exporter and they earn import rebates (IRCCs) on the value of the local content included in the catalytic converters. It is very important to note that these IRCCs can be sold or

tra /hich they can offset the duties with IRCCs;

- Indirectly: The company believes that the high value of catalytic converters (that contains platinum) acts as an incentive to OEMs to source their product for export directly (in serving a large international order for its parent company) or indirectly (as part of the export of a fully built up vehicle). The OEMs earn the IRCCs and any contract between the component manufacturer and a local OEM is done from the understanding that the IRCCs will be ceded to the OEM for his exclusive use. In further explanation it should be noted that the way in which IRCC-calculations are structured implies that higher local content values would ensure more IRCCs to offset import duties (as was discussed in chapter two);
- Indirectly: The company firmly believes that the lack of local content requirements in the MIDP has forced them to seek alternative markets. This statement is especially pertinent for the export of other components manufactured by the company, but also apply to the catalytic converter business. It should be noted that OEMs benefit from a so-called duty-free allowance (DFA) that allows OEMs to import 27% of the value of the vehicle without paying duties.

The company does believe that the MIDP is not sufficient in promoting exports, as it does not regulate all aspects of its business. This statement, upon interrogation, relates almost exclusively to the fact that the company is forced to pay international steel prices to local suppliers and that this has a very

detriment that exporting component manufacturers should be subsidised or see the steel prices they pay being regulated – as a way of more thoroughly promoting exports and in doing so ensure that the MIDP is more effective.

All information and direct feedback from the interviews further points to the fact that the company believes that the MIDP has a very important role to play in the way in which it "levels the playing field". The company believes that the direct and indirect ways in which the MIDP promotes exports (as was discussed earlier) helps it to negate the disadvantages of operating far from its major markets. This point will be discussed further under the second proposition.

5.4.1.2. Company 2: Leather component manufacturer

This company has been in operation in its current export-focussed form from 1994, which means that it has operated under the MIDP structure for the largest part of its existence – a fact that is evident in the way in which the company is structured. This operational model is reflective of the rules and requirements of the MIDP, where every single aspect of the business is streamlined to the use of the MIDP.

The company believes that it is the MIDP's direct intention to promote exports. The company also has a very clear understanding of the policy tools employed in the MIDP and how they must operate and export in order to obtain IRCCs. The company has developed to a point where 95% of its total production

volume is liant on export markets for its success. It is also important to note that the company has documented very strong growth in export volumes and contract values under the MIDP.

The company believes that the MIDP, although being the most important driver of export growth, is not the only reason for component exports. They point to the fact, as will be discussed under proposition 3, that purchasing decisions for both local and international component contracts has moved to the international head office at the time when OEMs were being bought by their respective parent companies. The company has therefore been forced to operate on an international scale (read: export) in order to "be on the radar" of international parent companies.

We realised that we must never lose sight of the international picture.

Given the fact that the company exports 95% of its production, and the final 5% is destined for local production, the company feels a direct impact of the MIDP on its profitability. The company does however feel that the MIDP promotes exports indirectly, through the following methods:

- Indirectly: "The MIDP ensures that there is interest in the company." Leather upholstery is considered a high value item, which means that the OEM exporting the product as part of their local content will be able to gain more IRCCs. This means that leather upholstery, by the company's own admission, is a favourite local content item for OEMs wishing to export. Note that all the company's leather products are exported via a

loc t. This will be discussed further under proposition three.

A good example of the way in which the MIDP indirectly benefits them and enables them to export more is evident in the example given. The company will bid for new international business, but through the OEM, which will negotiate on their behalf with their parent company. The leather producer then sells the product to the OEM in South Africa, in order to ensure that it is registered as local content, and the product is then exported to the international destination. This calculated benefit allows the component manufacturer to export at a competitive rate thanks to the benefits gained through the IRCCs.

They must not think of us as 10 000 km away. They must think of us as one of the companies down the road.

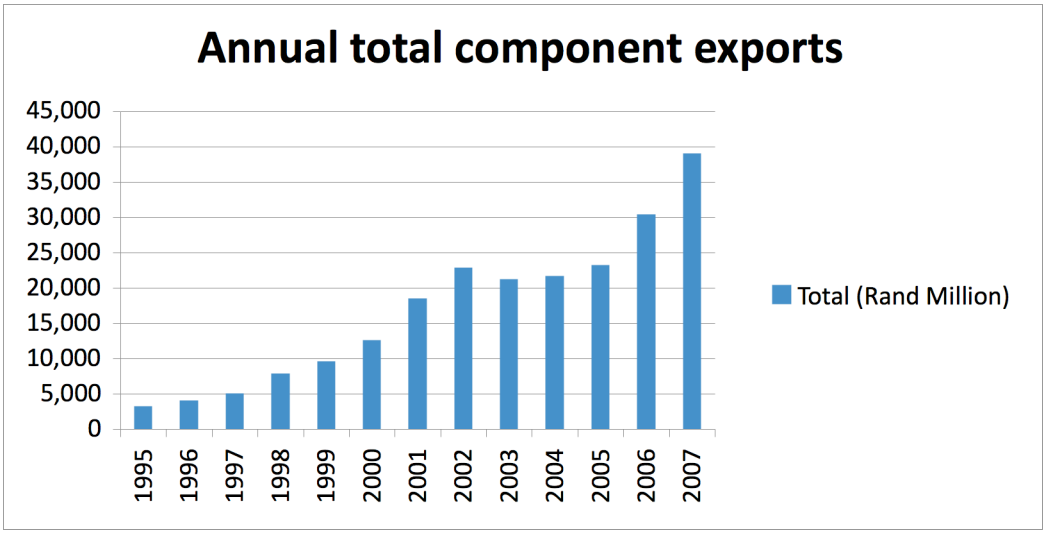
The company makes a very strong point for the way in which the MIDP "levels the playing field". They believe that, given the international nature of new contracts, they have to compete on a global level for new business. They do however feel that they are being disadvantaged by the country's distance from the major international markets and by other costs and disadvantages that are not directly related to their level of efficiency or competitiveness. This also includes the fluctuating currency and the small local market. Given this situation, the company believes that the benefits gained through the MIDP, which would be indirectly in their case, help them to negate these disadvantages and subsequently enable them to export more products. This has also been a very strong driver for export growth.

It costs u ; to Europe. A similar component manufacturer on that continent need only pay R30.

The MIDP levels the playing field and allows us to compete on normal criteria.

Further support in favour of this proposition, for both companies studied, is found in the national export data for all components exported from South Africa. The graphs are included below and detailed aggregated export data is included under Appendix C.

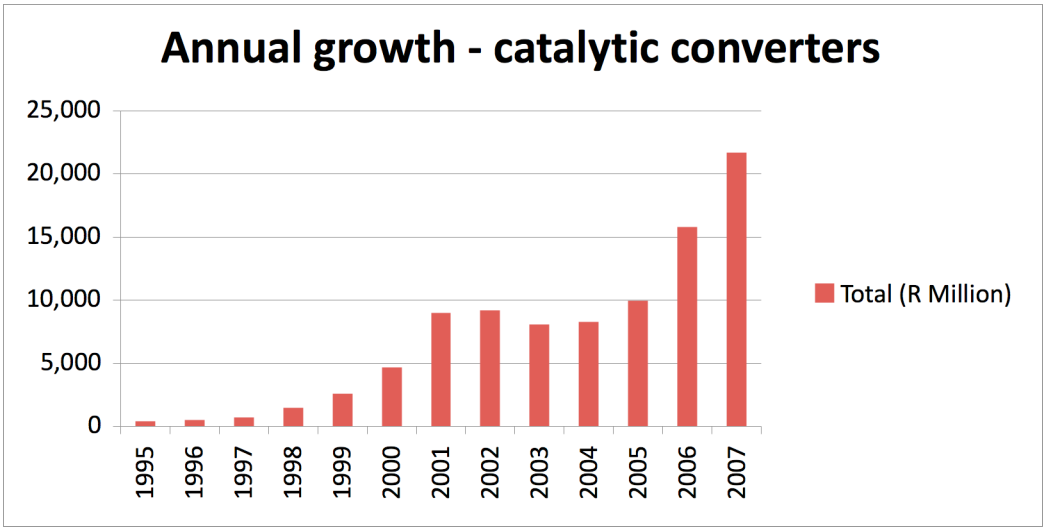
FIGURE 1: GROWTH IN TOTAL COMPONENT EXPORTS



Sources: AIEC (2007); AIEC (2008).

This figure is supported by detailed export figures included in Appendix C. The graph measures the annual turnover of all automotive component exports from the inception in 1995, although it must be noted that the MIDP only came into effect on 1 September 1995.

FIGURE :RTES



Sources: AIEC (2007); AIEC (2008).

From figure four one can deduct that catalytic converters only became a pertinent export product after 1999, which is in line with the global mass market acceptance of this technology. The data included in Appendix C clearly illustrates that the export of stitched leather products and catalytic converters constitute the highest value exports of any components by a significant margin. This is even more applicable for the export of catalytic converters after 1999.

Figure 3 follows on the next page

FIGURE D LEATHER PRODUCTS

Sources: AIEC (2007); AIEC (2008).

Stitched leather covers were the best performing component export under the first part of the MIDP. The component, as is the case with catalytic converters, is deemed to be a high value export product that will ensure higher IRCC-values if it is included as local content. The export of leather covers has dropped from their peak in 2002, but is still the second best performing component export under the MIDP.

5.4.2. Proposition 2: Component manufacturers that have grown their export volumes are also more competitive than before.

Under this proposition it was important to understand whether or not the companies being studied was developing as competitive entities and not merely passively gaining benefits by exporting under the regulations of the MIDP.

5.4.2.1. Company 1: Catalytic converter manufacturer

It is very important to note how this company perceives its competitiveness. It believes that there is a link between export growth and competitiveness, but that its competitiveness is not directly linked to the tools and processes documented in the MIDP. The company believes that it is being measured on the same criteria as other catalytic converters from other parts of the world and that the measurements that count does include price, which is influenced by the MIDP, and importantly also delivery flexibility, delivery reliability and quality. On these criteria, barring price, the company is forced to be as efficient and hence as competitive as other companies bidding for the same contract and they believe that the MIDP has no direct bearing on these measurements.

In direct relation to the company's view on the non-MIDP-related measurements that they are measured is the fact that the company cedes all IRCC-benefits to local OEMs in instances where they deal with local OEMs. This means that gaining IRCC benefits under the MIDP is no longer an order winning benefit, but is now rather an order qualifying criteria. Given this reality, the company has to be competitive on all the normal criteria, which was mentioned earlier. One should mention that local OEMs would offer some form of support to component manufacturers in local contracts, although this will be discussed under the third proposition.

The com world, which is not linked to local manufacturers, and these contracts are often done through the company's German head office. In these instances the company has to compete directly with other catalytic converter manufacturers from the same company that is based in other parts of the world. In these bidding processes the company feels that the client has no affinity to any bidder and as such they have to be on par with all the other bidders, or better if they wish to gain a contract.

There is no love lost between us and other affiliates within the company and most definitely between the OEMs and us.

Based on the company's description of competitiveness and the way in which they compare themselves against other component manufacturers, it is important to note that the company does perceive themselves to be far more competitive that in the era prior to the MIDP. It is in this area of their business where the company feels that there is a need for innovation. The company frequently innovates in the way in which it operates (mainly in manufacturing), in order to become more efficient and thus enable them to compete better.

It is very important to note that the company believes that it is much more competitive than before, but that it would not be able to compete with international manufacturers of catalytic converters if they did not have the benefit of the MIDP. This statement relates to the way in which the MIDP "levels the playing field", but also to the way in which it allows for local OEM-interest in

their pro n and will be discussed further under proposition three.

5.4.2.2. Company 2: Leather component manufacturer

The company feels that they are far more competitive than before. This statement is underscored by the fact that they have intentionally pre-empted the introduction of so-called cost-down contracts by dropping the prices of their stitched leather parts by an average of 3% per year for the last 10 years. This means that the company is charging 30% less for a leather set when compared to a decade ago, yet by their own admission they are now more profitable than before. This indicates that the company has become far more efficient in manufacturing and that it exhibits competitive traits, by aggressively lowering prices in order to grow its market share. Given the fact that the company exports 95% of its products, a growth in market share would necessarily indicate a growth in export volumes.

Instead of reacting to changes in the competitive pressure, we decided to take the fight to them [other leather component manufacturers] and initiate price cuts. We started the price war.

Despite the growth in efficiency and competitiveness, the company does not believe that they would be able to compete directly with international stitched leather producers if they did not have the benefit of the MIDP. This is due in part to reasons mentioned earlier, namely the country (and company's) distance from international markets and the relative small size of the local market.

The company does mention another way in which the MIDP has increased its competitiveness. The company points to the fact that three international leather component manufacturers have created divisions in South Africa upon request of different OEMs. The OEMs have requested this in order to benefit from the export credits that these leather components can earn. The new entrants to the market have off course increased the levels of competition, which has forced the company to become more competitive as all the competitors now operate under the benefit of the MIDP. This is seen as an indirect way in which the MIDP has influenced the company's level of competitiveness and a way in which the MIDP has forced the company to become more innovative in bettering their production rates, quality and efficiencies.

One example of the way in which the company has innovated in order to become more efficient and competitive relates to the use of work teams. The company has divided the greatest part of the workforce into work teams, each with a personalised stall, name, targets and awards. The teams become self-regulating units where the different members of the teams (cognisant of the loss of possible recognition and reward) will rework products or reprimand colleagues if their quality levels drop.

Another way in which the company is forced to be more competitive relates to the way in which OEMs perceive and deal with the export credits (IRCCs) earned by the component manufacturer. The leather producer explains that

these ber ' qualifying and not negotiable. The pricing offered by the leather component manufacturer can therefore not include this benefit in its price calculations, which also places pressure on them to offer a price for components that are similar to that of other stitched leather producers in other parts of the world.

5.4.3. Proposition 3: OEMs play a key role in component manufacturers' export growth.

The importance of OEMs and particularly local OEMs in enabling component manufacturers to export and simultaneously grow local production was evident in both the literature and from the onset in the discussions with both companies. This relationship and the importance thereof in promoting exports, is not directly addressed in or regulated by the MIDP, especially since this policy does not include any local content requirements. The following proposition is set to test the importance of this statement, given the normal export promoting policies included in the MIDP.

5.4.3.1. Company 1: Catalytic converter manufacturer

One of the points that this manufacturer makes very clearly is that OEMs are the gatekeepers to export contracts. The company explains that OEMs have now become integrated into their global supply chain, which means that purchasing decisions are made internationally, often for both local and international contracts. Given this situation local OEMs act as a gatekeeper to

these inte known by and contracted to local OEMS. As such, the component manufacturer considers their relationship with local OEMs as very important.

Tied to the observation of the role that local OEMs play when bidding for international contracts is the fact that these local OEMs often become the conduit for large export orders. This, explains the company, can be done in two ways. The first is where the company uses the catalytic converters in the local manufacturing process. The components are then exported as part of a fully built-up vehicle. The second way is exporting directly through an OEM-negotiated export contract.

A so-called OEM-negotiated export contract is explained in the following way. The OEM, being part of the global network of that manufacturer, receives information on a large international order for a given component. He realises that this contract can be fulfilled by one of the local component manufacturers and, if that should happen, he can claim the import rebate certificates (IRCCs) for use in the import of other vehicles or components. The OEM, with full knowledge of the component manufacturer, bids for the contract and adjusts the price offered by using its purchasing bulk or some of its IRCCs to negate the logistical costs. The component manufacturer gains a large export contract in this way and the OEM gains IRCCs.

The catalytic converter manufacturer does feel that this benefit, of OEM interest in their product and OEM support when negotiating for large contracts, are more

applicabl ı which IRCCs are calculated, with higher value components translating into higher value rebates. As such the catalytic converter manufacturer believes that the MIDP benefits it and a small number of other component manufacturers far more than it does other component manufacturing categories.

It almost feels as though the MIDP was created for the catalytic converter industry.

In further support of the importance of OEM-relationships is the fact that the majority of the catalytic converter manufacturer's profit originates from local OEMs. The company believes that this reality is partly due to the fact that the MIDP offers more incentives and benefits to OEMs.

The MIDP definitely benefits the OEMs more than it does us.

One can find more evidence of the strong emphasis on the relationship between the component manufacturers and the OEMs in the way the catalytic converter manufacturer actively educates OEMs on the benefits and possibilities that exist under the MIDP. This includes education on the benefits that they can gain, the way in which they can use credits and help with identifying possible products that has not been registered yet for IRCC-rebates, yet would qualify for it. This, states the catalytic converter manufacturer, is done as a way of marketing their products even though it might mean that they have to sacrifice the possible IRCCs that they might have gained from any export contract in which a local OEM is involved.

It become of the possible pitfalls of being so heavily reliant on local OEMs and hence it has started expanding to areas beyond those regulated by the MIDP. The company has most recently started negotiating contracts for its performance products with resellers in Africa as the first step in an effort of building a revenue stream that is not directly linked to South African OEMs or the regulations of the MIDP.

It should be noted that the company, as part of a larger international conglomerate, does fulfil certain contracts with its head office. Its head office negotiated these contracts and it subsequently does not rely on local OEM contacts or negotiations. In these contracts the catalytic converter manufacturer does have to compete on the measurements discussed under the first proposition and they earn IRCCs directly, which they can then sell or trade on the market created for these credits.

5.4.3.2. Company 2: Leather component manufacturer

The most important element of its relationship with OEMs for this component manufacturer is the interest that the MIDP awakens with OEMs and secondly the access that the MIDP benefits gives component manufacturers. As an explanation this component manufacturer states that all export contracts are done through local OEMs and hence invoiced locally. In doing so the local OEM can claim the IRCC-benefit and in some cases use a portion of that benefit, or at least his distribution network and purchasing size, to help with the transport or logistical costs of transporting the leather parts to the international clients. It

is interes ed by airfreight because it allows for a greater deal of flexibility and ensures the quality of the leather components. As such the transport costs of moving leather components is very high and this places further emphasis on the benefit that the component manufacturer can gain from the OEM.

It is a very different sales pitch when you stand alone to when you stand there with a local OEM by your side. The MIDP has awakened interest in our product from OEMs.

The importance of using an OEMs network, his logistical support, his bargaining power and his connections to access possible international contracts are further emphasised in the way in which this component manufacturer perceives the OEM to be a conduit of his product. This explanation is different from that of the catalytic component manufacturer because the leather producer exports virtually all of its products and supplies almost nothing for locally manufactured products that are then exported. The leather producer therefore views the OEMs role as conduit as being directly involved in moving the product to international clients. In support of this slightly different view (to that of the catalytic converter manufacturer) the company explains that it has recently opened an office in Germany to service its international customer base.

The leather producer further explains that its relationship with its clients are highly regulated and tightly controlled. This includes regulations regarding the suppliers of the treated leather, the way in which the leather is stitched and fastened to the guiding hooks and supporting rods that they are provided with

and even ıvers for all the seats and other leather covered parts in a car) are transported. The OEM also dictates the amount of flexibility that the leather producer must have, which in some cases are as much as 40%. That means the company must be able to vary its production runs by as much as 40% before delivery. Given these strong regulations, the company feels that its relationship with the OEMs as clients is vital.

Another important aspect is that the leather producer, in similar fashion to the catalytic component manufacturer, sacrifices all MIDP credit benefits to the OEM with which they have the contract. This is especially relevant for the two sectors being studied, as they are considered high value components and therefore offer higher levels of IRCCs. OEMs will therefore look to supporting the export endeavours of leather producers, as they stand to benefit from it. As such the relationship between the leather producer and the OEM again becomes very important.

In conclusion, the leather producer states that it has also started expanding its business to areas outside of those regulated by the MIDP. The company has, amongst other things, started a logistics management business, which it has grown from its own internal logistics division. This new company focuses on logistic support for companies in the automotive division, but the goal is to expand the business to support all kinds of importing and exporting businesses.

The aggregated information from the various sources studied as part of this comparative case study seem to support then various propositions, which was in turn deducted from the information collected in chapter two. The following chapter will use detailed content analysis to concentrate the themes put forward in this chapter and structure them in support of or contradiction to the propositions put forward in this study.

6. Discussion of results

6.1. Introduction

It would be wholly tempting and easily justifiable to measure an export promoting policy such as the MIDP merely by looking at the growth in exports of the industry to which it applies. Using this measure, the MIDP has been successful with vehicle exports growing in excess of 2 900% between 1995 and 2007 (Naamsa, 2007; Lamrecht, 2006) and component exports showing a similarly significant jump in exports from R3.3 billion in 1995 to R30.5 billion in 2006, a growth of 824% in the same period (AIDC, 2007; AIDC, 2008).

This study has however shown that the drivers behind export growth and the measurements of success of export promotion in the component industry is more complex than can be fully controlled by the policy tools encapsulated in the MIDP. Given the importance of the relationship between component manufacturers and OEMs, which is partially driven by the requirements of the MIDP and partially by the changes in the global automotive sphere, it would be advisable to refrain from promoting the value and success of the MIDP merely on the measure of export growth by both the OEM and component manufacturing industry.

In the following chapter the data collected and presented in chapter five have been concentrated intro key themes. The process has been structured to firstly consider the themes on a case-by-case basis (within-case analysis) as is

 to consider the value that each company placed on the specific theme. It is important to note that this ranking does not consider the prevalence of the themes in relation to the other case. The ranking of themes in relation to each other is done in the section following the within-case analysis. This section contains the grouping of similarly ranked themes in a rank ordered table, with the most prevalent themes ranked through an analysis of their appearance in both the cases individually (including the interviews and internal and external documentation) and also the prevalence of these themes in the literature that has been reviewed in chapter two.

It should be noted that the analysis of the findings under each proposition, as is put forward in chapter four and five, will only be done after the presentation of the themes from the within-case and cross-case analysis.

6.2. Within-case analysis

The following ranking represents the results of a thrice-repeated process of data concentration and reduction. During each step the data was interrogated and compared in order to concentrate the key themes. The case study summary documents acted as a guide in this data reduction process as did the findings from the literature review. Themes from the literature review will be introduced under the cross-case analysis.

6.2

The table representing the data appears on the following page.

TABLE 5: WITHIN-CASE ANALYSIS (COMPANY 1)

Observation	From: Interview (i) and section in interview framework, documentation (d) or observation (o)	Themes	Ranking
1) The MIDP allows the company to compete on a global stage. The respondents however believe the MIDP does not mitigate the need for general competitive requirements, such as flexibility, quality and delivery reliability. The company has to compete both internally (between other affiliates of the same company) and externally for new catalytic converter contracts.	i (MIDP), d (internal presentations)	The MIDP creates an environment in which local component manufacturers can compete. The component manufacturer must still fulfil normal order winning criteria, regardless of the MIDP benefits.	High High

2) The re are fully a requirements and possible benefits of the MIDP, both for them and for OEMs. This includes the MIDP's goals, its aims and the policy tools to be used to reach the stated goals. The company actually educates their OEM-clients on the benefits that they can gain through component exports under the MIDP.	OEM relationship), d (internal presentations, external presentations)	understood.	High
3) Respondents believe, given the overwhelming portion of business done with local OEMs, that their relationship with local OEMs is critical to their success.	i (OEM relationship)	Relationships with local OEMs considered paramount.	Very high
4) Respondents believe that the importance of their relationship with local OEMs is supported by the MIDP, which ensures local OEM-interest in locally produced components. The MIDP-training offered by the component manufacturer in question (number two) is used as a sales technique in order to rouse the interest of OEMs in their products.	i (MIDP, OEM relationships)	MIDP allows for local OEM-interest in locally manufactured components.	High

5) Local C… export co…duits for locally produced components. This happens both through the use of local components in exported vehicles, and through international delivery contracts that have been negotiated on behalf of component manufacturers by OEMs that are keen to earn the IRCCs from that export contract.	…relationships)	…nduits.	Very high
6) In contract negotiations with OEMs the credit benefit from exporting products is always handed to the OEMs. This is seen as an order qualifier. The company in question only earns the export credits themselves when they export catalytic converters directly to their parent company.	i (Exports, MIDP, OEM relationships)	Direct MIDP benefits are ceded to local OEMs in contract negotiations. Component manufacturers earn IRCCs when exporting directly.	High Mediu m
7) The company believes that the credits earned through direct exports negate the disadvantages of high transport costs. The MIDP benefit, which takes the form of IRCC-credits and can be traded, becomes the company's profit margin on a direct export contract.	i (Competitiven ess), d (internal documents)	The MIDP creates an environment in which local component manufacturers can compete.	Very high

8) Sourci... and more frequently moved to multinational head office and not made locally. This is happening regardless of whether the product is destined for local or international production.	...relationship)	...made internationally.	High
8) Local OEMs will often act as gatekeepers to international contracts. Whilst the purchasing decision is made internationally, the local OEM will control the bidding process locally and possibly use his size and the IRCCs from the contract to offer a better price on behalf of the component manufacturer.	i (OEM relationship, Exports)	OEMs the gatekeepers to new contracts, both locally and internationally.	Very high
9) The company believes that, given its cost base, relative size compared to many other similar companies, and its distance from international markets it would not be able to compete without the benefits of the MIDP or a similar industrial policy.	i (Competitiveness)	A targeted industrial policy, such as the MIDP, is seen as compulsory for business success.	Very high

10) It is b… the respondents of the company) that the structure of the MIDP – where local content plays a role in the calculation of the rebates – works in favour of high value components such as catalytic converters and leather.	…Exports)	…value components.	High
11) The respondents believe that the company is much more competitive in the era under the MIDP than before. This is partially because it has to compete against other affiliates in the same company for new international contracts.	i (Competitiveness)	Component manufacturers are more competitive than before.	High
12) In the absence of legally binding local content requirements, the company feels that their local base can be threatened. OEMs are given incentives to source locally, but they are under no obligation to act on it.	i (MIDP), d (external documents, internal documents)	No direct local content requirements are a threat to local component manufacturers.	Medium
13) It is believed that the MIDP is written in such a way that it favours OEMs and not component manufacturers.	i (OEM relationship), d (external documents)	The balance of the benefits offered by the MIDP resides with OEMs.	Medium

14) The r… believe th… industrial policy is not as effective as it could be, because there is no regulation controlling their input costs. Instances such as import parity pricing on steel is threatening their competitiveness.	…(Competitiven… ess)	…policy …pects of this sector and is therefore not as effective.	Mediu m
15) The company has in recent years started expanding beyond its traditional markets. It has started manufacturing and marketing products not directly linked to the MIDP, such as performance and aftermarket products, and have expanded into Africa, as a market which is aligned more to South Africa thank to Europe.	i (Competitiven ess), d (internal documents)	The company is expanding its business to spheres beyond that which is supported by the MIDP.	Low
16) The respondents believe that the MIDP does not directly influence job creation, as its most profitable MIDP-driven catalytic converter division employs far less people that other divisions and plants.	i (MIDP)	The MIDP does not benefit job creation directly.	Low

6.2.2. Company 2: Leather component manufacturer

The information for this within-case analysis appears on the following page.

TABLE 6

Observation	From: Interview (i) and section in interview framework, documents (d) or observation (o)	Theme / Construct	Ranking
1) All contracts that are signed between an OEM and the company is invoiced locally, as that allows the OEM's local affiliate to claim the MIDP benefits.	i (OEM relationship)	Direct benefits are ceded to local OEMs in contract negotiations.	Very high
2) All the company's clients have local affiliates, but only 5% of the finished product is used in production in South Africa. The local affiliates usually tender for new contracts with, or on behalf of, the leather producer. This allows the leather producer unprecedented access to foreign decision makers and large international contracts.	i (OEM relationship, Export)	OEMs the gatekeepers to new contracts, both locally and internationally.	Very high

3) The m… purchasi… decisions for the leather products supplied by this company are made internationally. The company has recently opened an office in Germany in answer to this phenomenon.	…relationships)	…made internationally.	High
4) The MIDP has ensured a higher level of interest in the company and its products. This is partially due to the export credits that they can earn from the export of leather components.	i (OEM relationships, MIDP), d (company presentation)	MIDP allows for local OEM interest in locally manufactured components.	Very high
5) The company does not export any of its products directly. As such the local OEMs are key in establishing the export programmes. The OEMs will often in the bidding process consider the transport cost and will subsidise this through the credits that it earns from the export of that product.	i (OEM relationships)	OEMs act as export conduits.	Very high

6) OEMs [illegible] sector control every aspect of the production process, including where products are sourced from, the basic method of manufacturing and the delivery method. Given this reality and the importance of local OEMs as export conduits and gatekeepers of new contracts, the relationship between component manufacturer and OEM is considered to be highly important.	[illegible] relationships)	[illegible]en the component manufacturer and OEM is considered to be paramount.	Very high
7) The benefit gained from the MIDP, which is passed on from the OEMs (see five), subsidise the costs that flows from the company's perceived disadvantages. These perceived disadvantages include the long distance to the company's key markets in Europe and its relative small size in comparison to major European competitors.	i (Competitiveness / MIDP)	The MIDP creates an environment in which local component manufacturers can compete.	High

8) When measuring their operational competitiveness, the company believes that it is on par with international companies. The company can offer up to 40% flexibility from the contracted product, it can deliver a set of leather covers within 24 hours in Germany and it has dropped its selling price by 30% in 10 years, in answer to perceived competition in the South African market.	), d (company presentations)	ers an before.	High
9) OEMs will not choose the company's products purely because they can gain from the export credits. The credits are taken as a given and the leather provider must still compete on price, delivery reliability and quality.	i (Exports)	The component manufacturer must still fulfil normal order winning criteria, regardless of the MIDP benefits.	High

10) The c… believes t…, despite the higher levels of competitiveness, it would not be able to compete should there be no industrial support programme for the industry. This is partially due to the company's distance from major markets and the fact that transport costs are ten times higher than that of an European supplier (respondent claims)	…Competitiveness)	…icy, … as the MIDP, is seen as compulsory for business success.	Very high
11) The respondents believe that the MIDP "works" for leather products because it is of such high value relative to its weight and size. This makes it ideal to earn IRCCs on the value of the exported product, as it offers a substantial gain in terms of local content.	i (Exports, MIDP)	The MIDP favours high value components.	Medium

12) The c… has recently expanded its business to logistics and transport. This was done in answer to an internal need, but similar logistics management services are now offered to other companies.	(Competitiveness), o (factory tour)	…ling its business to spheres beyond that which is supported by the MIDP.	Medium

6.3. Cross-case analysis

In the following section the themes from both within-case analyses will be compared and analysed. The tabulated findings in this section have been split into separate lines that are then discussed as the second step in the triangulation process. The third step, data validation through an expert interview, follows this section. It should be noted that the eight most pertinent themes in the cross-case analysis have been discussed in detail. A full cross-case analysis, which includes all 17 themes identified in this process, has been attached as Appendix B.

The themes appear as they have been ranked, starting with the most important theme.

TABLE 7

Rank	Theme	Company 1: Catalytic converter manufacturer	Company 2: Leather component manufacturer	Supporting literature
1.	The relationship with local OEMs is considered paramount.	Very high	Very high	Cooper & Leverick, 1998; Barnes and Morris, 2008; Barnes and Kaplinsky, 2000; Barnes and Morris, 2004

The most pertinent theme in both case studies related to the high level of importance assigned to the component manufacturer's relationship with local OEMs. This theme is borne out next two most important findings, which will be presented together, and relates to the way in which the OEMs promise both access to large contracts for both local manufacturing and export and secondly the way in which they often act as a direct conduit for the locally manufactured components.

The foundation for the finding of this theme is the way in which the global automotive industry has developed. Cooper and Leverick (1998) and Barnes and Morris (2008) both emphasise the pertinent position of global OEMs as the key driver of new technologies and the use thereof in vehicles. This global development should be read in comparison with the fact that the South African supplier base was, and in many ways remain, unsophisticated and underdeveloped due to the requirements and regulations of the major portion of targeted industrial policies after 1961 (Barnes and Morris, 2008). These two juxtaposed facts emphasise the importance of local OEMs in supporting the

developm ıg contracts or acting on their behalf and offering access to modern components and modern manufacturing techniques. This point will be further clarified under theme two and three.

In closing the fact that both component manufacturers included in this study place the most important emphasis on this point is supported by similar statements by Barnes and Kaplinsky (2000) and Barnes and Morris (2004).

2.	OEMs are the gatekeepers to new contracts, both locally and internationally.	Very high	Very high	Barnes and Morris, 2004; Barnes and Morris, 2008; Barnes, 2000b, Barnes and Kaplinsky, 2000
3.	OEMs act as export conduits.	Very high	Very high	

Both companies included in this case study stated that the locally based OEMs play a very important role in gaining access to international markets. Both companies understood that the MIDP offered some benefit to them should they export directly, but in both cases the companies felt that gaining access to international markets on their own accord whilst being based in South Africa was a very difficult task. The companies did expand on the fact that local OEMs offered a benefit both by exporting the components as part of their fully built up vehicles and by negotiating on their behalf and giving them (the component manufacturers) access to their international base and possibly the local expertise that they have on exporting.

These th ure included in chapter two. Barnes and Morris (2008) explain that the local OEMs are now integrated into the global networks of their respective brands. The authors also expand on the prevalence of follower sourcing, where the purchasing decisions for components are made internationally and then enforced by the respective OEMs on a local basis (this finding is also reflected under theme nine). This again emphasise the important role of local OEMs as gatekeepers to international and local contracts.

The same authors discuss the relevance of local OEMs in an earlier paper (Barnes and Morris, 2004), where they empirically support the statement that local OEMs are indeed the gatekeepers to both local and international supplier contracts and that they act as conduits for the export of locally manufactured contracts. The authors further note that the OEMs, being part of their relevant international networks, play an important role in ensuring local component quality and in introducing international quality standards (of both the product and the manufacturing process), which further emphasise their role as gatekeepers (Barnes and Morris, 2004).

It should also be noted that the MIDP, both in its original and revised forms, place no legal obligation on OEMs to use locally manufactured components (Barnes, 2000b; Barnes and Kaplinsky, 2000). This appears to be a larger concern for the catalytic converter manufacturer studied, but it does remain a pertinent concern of local OEMs and as such it further strengthens the OEMs'

role as b of component exports.

4.	A targeted industrial policy, such as the MIDP, is seen as compulsory for business success.	Very high	Very high	Damoense and Simon, 2004; Black, 2001; Barnes, 2001b

Both companies included in this study believed that although they are far more competitive and efficient when compared to the period prior to the inception of the MIDP they both would not be able to compete on a global level without the support of the MIDP.

Damoense and Simon (2004) point to the fact that the MIDP is in many ways necessitated by the inefficiencies created by previous phases of industrial policy, most pertinently the first five phases. These policies forced the industry to be inward looking and hence globally inefficient. Black (2001) supports this statement and states that it is relevant for the manufacturing processes, the complexity and quality of the products and the nature of relationships between component manufacturers and OEMs, which was regulated and legally enforced.

In further support of this view are the findings by Barnes (2001b) that local component manufacturers have some natural strengths, such as small batch production and certain technical expertise that flow from South Africa's geographic position. These advantages are not enough to sustain the sector and hence companies to compete on a global scale, where criteria such as

price, de ɛs, 2000b). All these pressures necessitate some form of industrial policy support, albeit only to negate the historic disadvantages. This will be illuminated further under the following point.

5.	The MIDP creates an environment in which local component manufacturers can compete.	Very high	Very high	Barnes, 1999; Barnes, 2000b

Both companies in this study spoke of the way in which the MIDP "levels the playing field", with component manufacturers being able to offset the cost of being so far from international markets and having such a small local market. In this instance cost is usually negated indirectly, through the purchase and export programmes of local OEMs, where these OEMs will use some of the IRCC-benefit from the local components to offset the transport costs, allowing local component manufacturers to offer a price similar to a component manufacturer from another country.

The fact that the MIDP "levels the playing field" does mean that normal order winning criteria becomes important, such as quality, delivery reliability and risk mitigation (as part of delivery reliability). This view is supported by Barnes (1999; 2000b).

6.	The MIDP allows for local OEM interest in locally manufactured components.	High	Very high	Lamprecht, 2006; Barnes, Kaplinsky and Morris,2003; Black and Bhanisi, 2007

It is interesting to note that both the catalytic converter manufacturer and the automotive leather producer felt that their respective sectors benefited more from the MIDP than did other component manufacturing sectors. This was partly due to the way the IRCC-benefit was calculated, with higher value local components offering more benefit than low value local components (Lamprecht, 2006).

Barnes *et al.* (2003) indirectly support this point by explaining the international phenomenon of follower sourcing, where one component manufacturer is given the global contract for a specific component and is then required to deliver that product at all the client's international manufacturing sites. The benefits to be gained from using local components will often ensure that the global sourcing requirements are enforced locally not by importing products, but rather by sourcing it from a local component manufacturer or establishing a Greenfield-plant in the country.

As a caution one should however take note of the findings in a study by Black and Bhanisi (2007) that indicate that the level of local content in locally manufactured products are indeed dwindling and are in many cases not at the same level as during the era prior to the inception of the MIDP in 1995.

7.	Direct MIDP benefits are ceded to local OEMs in contract negotiations.	High	Very high	Lamprecht, 2006

manufacturers included in this study and is in some way seen as a way of ensuring local OEM-interest in their companies and products. This situation is however also enforced by OEMs, who require the IRCCs from all local supply contracts. Lamprecht (2006) provides evidence to this fact.

8.	The component manufacturer must still fulfil normal order winning criteria, regardless of the MIDP benefits.	High	High	Barnes, 2000b

Both component-manufacturing companies in this study stated that the MIDP in itself is not sufficient to ensure new contracts. They went as far as to state that, given the fact that OEMs require the IRCC-benefit to be ceded to them, the MIDP has no direct bearing on them winning an order. This means that the companies must still be competitive and efficient enough to ensure them winning an order. This, as was illustrated well in the automotive leather producer-case, includes offering cost-down contacts, being flexible and even engaging in price wars with other producers. Barnes (2000b) is one of the authors that support this finding.

9.	Sourcing decisions are made internationally.	High	High	Barnes, Kaplinsky and Morris, 2003

This point, as supported by Barnes *et al.* (2003) is pertinent when one considers the key points that relate to the importance of the OEM as gatekeeper to contracts. The fact that decisions are made internationally has in many ways

also supp ıny purchasing decision (along with the practice of global follower sourcing) ensured that many of the contracts awarded also has an exporting component.

10.	Component manufacturers are more competitive than before.	High	High	Black and Mitchell, 2002; Kaggwa, Pouris and Steyn, 2007

Both component manufacturers included in this study believed that they are more competitive than before. This is borne out in the evidence noted under themes five, seven and eight. The authors Black and Mitchell (2002) and Kaggwa *et al.* (2007) state that by many measurements this is indeed true although it should be read in combination with theme four, which states that the MIDP is necessary for continued business success.

11.	The MIDP favours high value components.	High	Medium	Lamprecht, 2006

This statement was not made directly but directly links to theme six, which relates to the fact that the MIDP ensures the interest of OEMs in the local component manufacturers. Lamprecht's (2006) description of the way in which the IRCC's are calculated (with reference to chapter two and theme six) is pertinent to this point as it clearly indicates the way in which the IRCC's include the value of local components in its calculation and hence higher value local components will benefit more than lower valued local components.

12.	The MIDP's official goals are well understood.	High	High	Lorentzen, 2005

This statement, although only ranked number 12, directly support the most key themes. The fact that the component manufacturing industry understands what is required of them under the MIDP, how they can benefit from it (directly in the case of the catalytic converter manufacturer and indirectly for both), and how they must align their business processes inform the understanding that the MIDP is important and that it has directly influenced this industry. Lorentzen (2005), through his thorough description of the way in which the MIDP is used in the component manufacturing industry, validates this statement.

The findings as presented are expanded further under Appendix B, where lower ranked, individually ranked and non-ranked items are also listed. The key findings will now be grouped and represented under the four propositions.

6.4. Propositions

6.4.1. Proposition 1: The MIDP is successful in motivating component manufacturers to export.

The information listed in chapter five, which shows the success of the export programme and the growth in especially high value component exports, provide the first level of evidence to support this proposition. The data supports the proposition by showing a growth of 170% in the export of leather upholstery from South Africa and an even more impressive growth of 5 474% in the growth of catalytic converter exports from South Africa.

Several other key findings support this statement. If has been shown that the MIDP directly motivates exports by offering IRCCs to any exporter in this industry. This means that component manufacturers that export directly do earn IRCCs, which they can trade or use for the import of certain products. This point was clearly evidenced in the case of the catalytic converter manufacturer.

The MIDP offers a second level of motivation for the export of components in several ways. The first of these is the fact that the MIDP ensures local OEM interest in the products of local component manufacturers. This view seems more relevant for the two sectors studied, where the components are of high value and the IRCC-benefit is therefore greater. It can therefore be stated that the MIDP does benefit local component usage if the value thereof is high enough to ensure a greater number of IRCC's earned.

Tied to the above-mentioned finding is the fact that local OEMs have become the gatekeepers to large contracts, thanks to their inclusion into their international networks. This, tied with the fact that the MIDP does motivate them to consider local components, have ensured that the MIDP has motivated component exports, where those exports are part of built up vehicles or where they are exported through the channels controlled by the OEMs.

A last point in support of this proposition is the statement by the catalytic converter manufacturer that the lack of legally binding local content requirements has forced them to find export markets to fuel their growth. One

should al e value of their imports duty-free (a privilege not available to component manufacturers), which compounds the catalytic converter manufacturer's fear.

In light of these findings one can state that the MIDP is indeed successful in motivating component manufacturers to export, albeit in some ways indirectly through the operating environment which it has created.

6.4.2. Proposition 2: Component manufacturers that have grown their export volumes are also more competitive than before.

The key finding in support of this proposition is that the MIDP allows for OEM interest in locally manufactured products and the MIDP levels the playing field, allowing local components to compete on equal footing with international component manufacturers that offer the same products. One should also note that the IRCC-benefit that is gained through the export of locally manufactured components, where a local OEM is the client or conduit, is naturally ceded to the local OEM, which means that this benefit is not an order winning advantage for component manufacturers.

In light of these findings one can state that any contract won by a local component manufacturer was won on normal order winning criteria, such as price, delivery reliability, product quality and the mitigation of risk. Of these criteria one the findings show that price could be influenced by the MIDP, where the OEM is willing to reinvest some of the IRCC-benefit into the price that the

compone ectly related to the competitiveness of the component manufacturer and should therefore point to a higher level of competitiveness under the MIDP than before.

This point should be made whilst considering the fact that the MIDP influences the market in which the component manufacturers operate. This applies equally to them and to the OEMs as their principle clients. This finding also states that the component manufacturers believe that they remain disadvantaged by being far from major markets and having a small local market and that they therefore need the MIDP for the reasons included under proposition one. As such one can state that the component manufacturers are indeed more competitive than before, but that this competitiveness remains fragile and dependant on the MIDP to mitigate non-company specific disadvantages, such as the component manufacturers' distance from major export markets.

6.4.3. Proposition 3: OEMs play a key role in component manufacturers' export growth.

Evidence in support of this statement can be found under both preceding propositions and is very prevalent in the literature included in chapter two. The important point to note under this proposition is not that the OEMs play a key role, as this is very evident, but why their role is so important. The first clear reason is the fact that local OEMs have been integrated into the global networks of their respective parent companies and as such they now become the gateway to large export contracts for locally manufactured components.

The secc gned to benefit from the MIDP though their own exports and they can offer their locally built products as a conduit for locally built components. These OEMs, through their exports, can often also use their networks, size and IRCC-stockpile, to negotiate for global contracts on behalf of the component manufacturers. The MIDP-benefits, where deemed attractive by OEMs, will ensure that OEMs gain interest in locally built component and use them.

It is believed that one can accept this proposition in light of the way in which the market has developed and how component manufacturers and OEMs interact in an environment that is regulated by the MIDP.

6.5. Expert interview

The following section includes two interviews conducted with executives in the motoring industry as the third and final step in the data triangulation process. This step, which is proposed by many authors, including Yin (1994; 2003), Eisenhardt (1989) and Darke *et al.* (1998), serves as a test of validity and a guard against bias in the findings, given the involved nature of the researcher in the data collection and data generation process. The interviewees were selected for their expert knowledge of the automotive industry in general and for their alignment to local OEMs as opposed to the component manufacturing industry. Given this difference in alignment, the interviews served as both a test of the validity of the findings and an alternative view on the role of the MIDP and the relationship between the component manufacturers and the local OEMs.

Interviews were guided by the tabulated cross-case analysis that is included in this chapter and in attached in full as Appendix B.

6.5.1. Norman Lamprecht, Executive director of Naamsa

Norman Lamprecht confirms the view that the lack of local content requirements included in the MIDP has placed a burden on the local component manufacturers to simultaneously foster the relationship between them and the OEMs and seek alternative markets for their products. Lamprecht does however concur with the view held by both component manufacturers that the structure of the MIDP-benefits (notably the IRCC-credit calculation as is put forward in chapter 2) entices local OEMs to use local content and hence believes that the lack of a minimum local content requirement in the MIDP has not been too detrimental to component manufacturers.

In following from the discussion on the IRCC-benefits, Lamprecht believes that the MIDP does favour high value components, but adds that this view is also influenced by South Africa's distance from major foreign markets. Components such as leather upholstery and catalytic converters offer a high enough benefit to support their high transport costs, but they are both also easier to transport. In the case of leather upholstery the company can transport it very speedily by airfreight, whilst in the case of catalytic converters their size and value makes them cost effective to move by ship.

In comme ıe MIDP and of component manufacturers' export promotion, Lamprecht strongly supports the finding that local OEMs are the key to component exports and future growth. Lamprecht points to the fact that local OEMs are now integrated into their respective international networks and they do have access to component contracts that stretch beyond their local requirements. In these contracts, and in light of the IRCC-benefits that they may gain from locally manufactured components, these OEMs often negotiate on behalf of component manufacturers and will use their network and "logistical muscle" to enable large export contracts on behalf of local component manufacturers. This, states Lamprecht, is especially evident in the catalytic converter and leather upholstery sectors. He also states that OEMs require the IRCCs in all contracts that they negotiate or in which they act as conduit.

In further support of the relationship between OEMs and component manufacturers Lamprecht states that around 85% of all IRCCs are claimed by OEMs, which emphasise the fact that OEMs are the conduits for locally manufactured components and do require that IRCCs be ceded to them.

On the key finding that component manufacturers are more competitive, but still reliant on the MIDP, Lamprecht emphatically agrees. According to him no company in this sector would be able to survive without the MIDP, especially given the way in which the benefits of the MIDP negates the very high logistical costs associated with exporting products from South Africa to major markets such as the United States and more importantly Europe. Lamprecht does

however OEMs (which excludes some tyre-exporters and aftermarket component manufacturers) have become far more competitive than before. This is due in part to the heavy investment by OEMs in lifting their suppliers to the international levels required for new products but also to the nature of exported products, where both the OEMs and component manufacturers are have to compete directly with similar products from other manufacturers.

In continuation of the discussion on competitiveness, Lamprecht states that the measurements of quality, reliability of supply and cost competitiveness are paramount in competing globally. Of the three, Lamprecht believes that quality and reliability are both order qualifying measurements and that price competitiveness is the major order winner. On this measurement he argues that any local component manufacturer who wins a contract on this measurement is also more competitive than before the inception of the MIDP.

In conclusion Lamprecht states that the focus on export promotion has forced the full value chain to become more competitive. This is driven largely by the efforts of OEMs, who allow access to global supply contracts, supply the designs and requirements for new generation components, offer support in the form of training and development of the component manufacturers and often act as conduits of the components.

6.6. C[illegible]

It becomes clear from the analysis conducted in this chapter that all three propositions hold true through all three steps of triangulation. The study has shown that the MIDP has played an unquestionable role in the promotion of exports for both OEMs and component manufacturers, even though the influence felt by component manufacturers are in many ways an indirect result of the regulations put forward by the MIDP.

The second proposition has shown that once component manufacturers started exporting, they found themselves in an environment where they were required to compete directly with other manufacturers of similar products. In this arena the MIDP does not count as an order winner, although it can have an indirect effect on the price competitiveness of the manufactured components in some instances.

The third finding as central to the preceding two, as it shows that South African OEMs, all of which are integrated in their global supply chains, play a very important role in allowing the MIDP to take effect for component manufacturers. OEMs are truly the gatekeepers to new international contracts and they are clearly the conduits of exported components, sometimes through the export of fully built-up vehicles that contain local components and sometimes through the direct use of their export network and purchasing bulk.

In summa moting exports and making component manufacturers more competitive, but this is done through local OEMs, who are also directly influenced by this policy. The final triangulation can be presented as follows:

TABLE 8: FINAL VALIDITY TEST

Proposition	Literature review	Company 1: Catalytic converter manufacturer	Company 2: Leather component manufacturer	Expert interview
The MIDP is successful in motivating component manufacturers to export.	True	True	True	True
Component manufacturers that have grown their export volumes are also more competitive than before.	True	True	True	True
OEMs play a key role in component manufacturers' export growth.	True	True	True	True

7. Conclusion

7.1. Research overview

Competitiveness is undoubtedly a very important topic for any industry that is both considered a key industry in a country and that is required to change from an inwardly focussed industry to one that competes on the global stage. The South African automotive industry is such a key industry in South Africa and it has been required to integrate into the global automotive industry from 1995 onwards. The Motor Industry Development Programme (MIDP) was introduced in 1995 as the government's targeted industrial programme for this industry. Its goal was the integration of the automotive industry into the global sphere, its aims was focussed on enticing the automotive industry to export and in doing so expose them to global competition and its policy tools ranged from export promoting incentives, such as the import duty credit rebate certificates (IRCCs), to competitiveness promoting actions, such as the gradual lowering of import tariffs for competing products.

The export promoting nature of the MIDP highlights the views held by the South African government on the nature and desirability of an exporting automotive industry. It appears as though the government believed that by both forcing and enticing the industry to export this industry would be exposed to the highly competitive global industry, which would off course force them to be competitive, a worthy goal for a country and industry that was gradually taking

its rightfu and economic isolation.

The mere presence of a targeted industrial policy such as the MIDP would off course attract criticism from many of the authors included in chapter two that are opposed to the use of an industrial policy for reasons such as the fact that this policy can in no means control every aspect of a dynamic industry in which many visible and unseen linkages exist and where many related industries have developed in ways that reflect the policies preceding, in this instance, the MIDP. It is within this milieu that this study has focussed on the competitiveness of the automotive component industry. The industry, as was shown, developed in lockstep with the OEM-industry and it entered 1995 in the same uncompetitive and inwardly focussed state as the OEMs. Yet the new MIDP did not provide the same measure of effective protection or incentives as it did for the OEMs.

This study therefore aimed at understanding whether the automotive component industry firstly exported to the same measure as the OEMs and whether or not the MIDP was responsible for this. The study secondly focussed on understanding the competitive measures present in this industry, and whether or not these have improved after the inception of the MIDP and with the growth of automotive component exports. Lastly, the study developed to include research on the relationship between the component manufacturing industry and OEMs, as it became evident during the data collection phase that this relationship was paramount to both preceding measures of export and competitiveness growth.

7.2. Findings

The data collection process included three propositions that were formulated to focus the aims of this study, as mentioned above, into testable statements. The proposition set forth to understand whether, and how, the automotive component industry has developed its exporting capacity under the MIDP. This proposition read: The MIDP is successful in motivating component manufacturers to export.

The study has shown that this proposition holds true. The information gathered in the data collection, case study and expert interview-steps proved that the MIDP has influenced the component manufacturers directly, but more importantly in an indirect way. The indirect way has proven equally powerful to the direct way, and included the way in which the MIDP influenced OEMs view of component manufacturers, especially those manufacturing high value components, and the way in which the MIDP offered no minimum local content provision, which forced component manufacturers to seek alternative markets and also foster the relationship with local OEMs. This relationship had, prior to the introduction of the MIDP, been largely legally protected by preceding policies' local content requirements.

The second proposition aimed at understanding the main premise of this study, namely the changes to component manufacturers' level of competitiveness. It read: Component manufacturers that have grown their export volumes are also

more cor rough all three steps of triangulation, but it became evident that one could not state that component manufacturers were more competitive than before without adding that this was reliant on the MIDP. It became clear under this proposition that the MIDP aimed at promoting exports, but that it also negated the high logistical costs and other barriers to competitiveness that component manufacturers believes they held no control over. In this case one could therefore argue that component manufacturers have undoubtedly become more competitive, but only in a market where non-company related risks were mitigated by an industrial policy.

The third proposition stated: OEMs play a key role in component manufacturers' export growth. This proposition has also proven to be true and in many instances the central position of OEMs as both export conduits for locally manufactured components and gatekeepers to large export contracts were instrumental in the validity of the preceding two propositions. It became clear that OEMs acted as the channels through which component manufacturers could export and therefore increase their competitiveness, which greatly aided further understanding of the way in which component manufacturers fostered the relationships they had with OEMs. These OEMs, as gatekeepers to large export contracts, are key to the validity of the preceding two propositions. It became clear that OEMs acted as the channels through which component manufacturers could export and therefore increase their competitiveness, which greatly aided further understanding of the way in which component manufacturers managed the relationships they had with OEMs.

7.3. Recommendations to stakeholders

A study of all the facets of the automotive industry in South Africa shows that both the OEM and component manufacturing sectors are strongly aligned to the MIDP. This realisation becomes very pertinent in light of the introduction of the Automotive Production and Development Programme (APDP), which is set to replace the MIDP after 2012. The APDP, in strong contrast to the MIDP, moves away from export promotion to the promotion of production efficiency, regardless of the destination of the manufactured product. This has been done to align the APDP with the requirements of the World Trade Organisation (WTO) (Venter, 2008a).

Given the knowledge of the successor plan and the fact that the MIDP still has another five years in which it will be the guiding industrial policy, it is recommended that the direct, and equally powerful indirect, effects of the MIDP be studied, as a precursor to what can be expected to happen in the industry once the APDP is introduced. It would also be prudent to consider a staggered approach to the introduction of the APDP, as it has become clear that virtually all facets of the automotive industry has aligned itself to the MIDP and its goal of exporting locally produced products.

The study has also shown that the automotive industry is truly global in nature and that South Africa's industry, and most notably all the local OEMs and a sizeable portion of the first tier component manufacturers, is now part of this

global n[illegible]e international linkages that exist in this industry and the way in which the APDP could influence them, especially in light of the MIDP's effect of mitigating the high transport costs that exist for any exports from South Africa. Put another way, all stakeholders should ensure that any future industrial policy does not jeopardise the way in which South Africa fits into the global network of this, truly global, automotive industry.

On a national level it has become clear that the automotive industry is in need of a strong foundation in the form of an efficient component manufacturing industry. This fact has become evident throughout the study and should be considered in light of the central role that local OEMs play in this industry. Given this, OEMs should take care in developing the local component manufacturing base, whilst being mindful of the fact that this sector of the industry is not privileged to all incentives offered to OEMs. The goal of continuously developing a competitive local supply base should be seen as a long-term investment in light of the locally focussed APDP and perhaps even in light of South Africa's position in Africa, which remains largely untapped.

In keeping with South Africa's strengths in relation to itself and to Africa, one should consider the ways in which any industrial policy could protect and strengthen the natural advantages that exist in the South African automotive industry. It was shown in this study that both leather components and catalytic converters have grown substantially under the MIDP, but it should be considered that both these sub-sectors of the component manufacturing

industry se of leather components the quality of South African leather and the availability of skilled sowing machine operators enabled the industry to grow to a point where manufacturers such as BMW have relied very heavily on South Africa for their leather products (Lamprecht, 2006). In similar vein the catalytic converter industry have developed into an independent and substantial sub-sector, given South Africa's abundance of platinum group metals (PGM) that are a key raw material in the manufacture of catalytic converters.

Lastly one should keep in mind that South Africa is far from the largest and most developed automotive markets, for both components and vehicles, and as such the need remains for a form of industrial policy protection or stimulation to mitigate what the component manufacturers in this study has referred to as non-company related risks. These include the above-mentioned distance from international markets and the relative small size of South Africa's market in relation to the rest of the world.

7.4. Recommendations for future study

This study has shown that the MIDP has developed to assume a dual role as both a stimulator of the country's export goals and a way of mitigating some of the disadvantages of manufacturing and exporting from the Southern tip of Africa. This development appears to relate partially to the way in which the industry is traditionally structured and partially to the way in which it has developed to take full benefit of the MIDP. Given these intended and

unintende[illegible] of linkages in the industry and the interplay between it and any industrial policy. This study would be well suited to the South African context, given the fact that the automotive industry has developed under some form of industrial policy for the greatest part of its existence.

On a more granular level the room exists for a more detailed and quantifiable study of the actual export of components, changes in the market share of South African built components and the profitability of local component manufacturers. If one takes the chapter two definition of competitiveness to be the profitable growth in market share, then data proving or disproving this fact would offer substantial proof of the statements made in this study and it would also allow for an unbiased evaluation of the success of the MIDP in developing this section of the industry.

A third possible area for future studies is very pertinent for the current social climate in South Africa and it relates to job creation. The point of job creation was mentioned several times in the writing of the catalytic converter case, where it was mentioned that the division that manufacturers catalytic converters is also one of the divisions that employ the least number of people. It appears as though the MIDP does express the need for stable and growing employment in this industry, but that goal does not materialise directly in its export-stimulating policy tools. Given this situation, the need exists to study possible policy tools available to regulators that would benefit or stimulate job creation, whilst still serving the goal of increasing a sector's competitiveness.

Lastly, it would be valuable to investigate the possible methods of self-promotion available to component manufacturers. The study has clearly shown that local component manufacturers rely heavily on the local OEMs for contracts and for help in exporting products and that both companies included in this study was busy investigating future business opportunities that would decrease their reliance on OEMs and the MIDP-incentives. A study of such possible avenues would be timely in this regard.

7.5. Conclusion

In conclusion this study has shown that component manufacturers have indeed become more competitive. This was done through exports and the subsequent exposure to global competition and global standards, as was envisaged by the MIDP. Yet the study has also shown that the MIDP has affected component manufacturers indirectly, through the linkages that exist with OEMs and through apparently unintended changes in policy. It is believed that the findings of this study will contribute to the body of knowledge on this subject and add to the information available to regulators with which they can judge the success of the MIDP as a targeted industrial policy plan.

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Appendix A – Interview schedule

Note that this schedule has been created based on the literature review, but that it acts as a guideline for data collection, as described by Rowley (2002) and others.

MIDP - Aware of its requirements? - Are you making use of it? - Has it been beneficial? - Do you believe it is a necessity in order to produce in South Africa? - To what level is local technology and design still a factor?	**Exports** - When did you start to export? - What level of production is exported? - To what extent do you benefit from the requirements of the MIDP to export? - Do you gain from the MIDP export credits? - Would you be able to export if there was no MIDP? - How do you compare with similar companies in other countries?
Competitiveness - Do you believe that you are competitive in your field? - How does your exported products compare with similar products from other regions? - Do you believe that you have been supported by the MIDP in exporting? - Is there any other reason for growing exports, other than the	**OEM Relationship** - How has this relationship changed since the inception of the MIDP? - Was the change beneficial? - Are you benefitted in contract negotiations given the presence of the MIDP? - How has global sourcing influenced your business? - How has follower sourcing

cre siness?	
- Do you use your own export credits? - How does your product compare against imported products? - Do you believe you can price your product competitively without the benefits of the MIDP? - Would you be able to compete if you were not protected by import duties?	

Appendix B – Cross-case analysis in full

Nr	Themes	Ranking: Catalytic converter manufacturer	Ranking: Leather component manufacturer	Supporting literature
1.	The relationship with local OEMs is considered paramount.	Very high	Very high	Cooper and Leverick, 1998; Barnes and Morris, 2008; Barnes and Kaplinsky. 2000; Barnes and Morris, 2004
2.	OEMs are the gatekeepers to new contracts, both locally and internationally.	Very high	Very high	Barnes and Morris, 2004; Barnes and Morris, 2008; Barnes, 2000b; Barnes and Kaplinsky, 2000
3.	OEMs act as export conduits.	Very high	Very high	
4.	A targeted industrial policy, such as the MIDP, is seen as compulsory for business success.	Very high	Very high	Damoense and Simon, 2004; Black, 2001; Barnes, 2001b
5.	The MIDP creates an environment in which local component manufacturers can compete.	Very high	Very high	Barnes, 1999; Barnes, 2000b
6.	The MIDP allows for local OEM interest in locally manufactured components.	High	Very high	Lamprecht, 2006; Barnes, Kaplinsky and Morris, 2003; Black and Bhanisi, 2007
7.	Direct MIDP benefits are ceded to local OEMs in contract negotiations.	High	Very high	Lamprecht, 2006

8.	The manufacturer must still fulfil normal order winning criteria, regardless of the MIDP benefits.			Barnes, 2000b
9.	Sourcing decisions are made internationally.	High	High	Barnes, Kaplinsky and Morris, 2003
10.	Component manufacturers are more competitive than before.	High	High	Black and Mitchell, 2002; Kaggwa, Pouris and Steyn, 2007
11.	The MIDP favours high value components.	High	Medium	Lamprecht, 2006
12.	The MIDP's official goals are well understood.	High	High	Lorentzen, 2005
13.	No direct local content requirements are a threat to local component manufacturers.	Medium	Not ranked	Damoense and Simon, 2004; Kaggwa, Pouris and Steyn, 2007
14.	The balance of benefits offered by the MIDP resides with OEMs.	Medium	Not ranked	Damoense and Simon, 2004
15.	The MIDP as industrial policy does not regulate all aspects of this sector and is therefore not as effective.	Medium	Not ranked	-
16.	The company is expanding its business to spheres beyond that which is supported by the MIDP.	Low	Medium	-
17.	The MIDP does not benefit job creation directly.	Low	Not ranked	Contradicting information in Barnes, 2001

Appendix C – Aggregated component export figures

Year	1995	1996	1997	1998	1999	2000
	Value in Rand Millions					
Catalytic converters	389	485	698	1,485	2,592	4,683
Stitched leather seat parts	1,019	1,227	1,364	1,729	1,840	1,915
Tyres	213	288	330	463	589	682
Engines	9	86	192	233	53	76
Engine parts	102	124	203	328	289	409
Silencers/exhaust pipes	76	168	241	488	593	377
Road wheels and parts	157	225	321	431	471	551
Car radios	7	4	28	47	73	89
Axles	3	3	7	26	34	63
Radiators	66	98	93	93	88	72
Transmission shafts/cranks	55	64	42	34	41	127
Automotive glass	43	70	105	111	146	171
Automotive tooling	153	281	322	236	253	362
Filters	11	39	52	69	85	118
Wiring harnesses	42	95	135	206	284	319
Gauges/instrument/parts	19	28	29	21	50	56
Ignition/starting equipment	13	37	29	38	76	128
Brake parts	25	35	48	88	88	95
Body parts/panels	30	39	36	30	76	84
Gear boxes	1	2	3	5	17	21
Batteries	52	61	88	79	68	100
Clutches/shaft couplings	17	21	33	47	49	59
Alarm systems	10	13	24	79	55	65
Steering wheel/column/box		2	1	3	9	21
Lighting/signalling/wiping	8	10	9	8	15	22
Seat belts	-	-	1	3	16	45
Gaskets	4	6	8	7	9	16
Springs	15	18	22	36	37	47
Jacks	13	20	24	13	23	24
Air conditioners	5	3	6	8	6	8
Seats	5	2	3	37	44	49
Shock absorbers	27	46	49	62	74	81
Other components	727	452	567	1,346	1,519	1,700
TOTAL	3,316	4,052	5,113	7,889	9,662	12,635

Year	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2006	2007
	Value in Rand Millions						
Catalytic converters	8,989	9,204	8,104	8,289	9,935	15,810	21,683
Stitched leather seat parts	2,391	3,184	2,899	3,113	2,693	2,549	2,760
Tyres	781	1,379	1,278	1,285	1,183	1,220	1,705
Engines	88	623	564	701	781	1,216	1,196
Engine parts	520	771	843	894	1,000	984	1,092
Silencers/exhaust pipes	282	340	327	407	493	880	1,080
Road wheels and parts	725	955	809	753	738	681	772
Car radios	115	171	332	257	268	377	589
Axles	81	129	119	140	201	375	556
Radiators	70	199	191	162	220	365	520
Transmission shafts/cranks	149	236	263	332	553	351	368
Automotive glass	241	328	307	311	359	321	295
Automotive tooling	441	363	529	383	332	272	275
Filters	114	184	142	164	174	218	273
Wiring harnesses	391	457	427	359	258	208	248
Gauges/instrument/parts	77	119	128	142	161	184	204
Ignition/starting equipment	195	231	270	230	185	174	198
Brake parts	118	215	198	146	120	120	164
Body parts/panels	107	140	168	116	78	115	152
Gear boxes	21	38	29	34	82	113	150
Batteries	116	150	106	114	75	83	138
Clutches/shaft couplings	92	110	84	97	73	81	127
Alarm systems	75	86	65	55	55	81	115
Steering wheel/column/box	26	63	64	59	71	32	97
Lighting/signalling/wiping	25	54	43	38	54	63	86
Seat belts	71	63	57	49	61	60	70
Gaskets	19	38	37	43	36	45	62
Springs	44	38	26	23	28	38	60
Jacks	26	35	24	23	10	18	44
Air conditioners	20	14	21	12	14	11	21
Seats	2	6	6	3	3	7	12
Shock absorbers	75	21	6	5	5	1	8
Other components	2,062	2,938	2,808	2,982	3,017	3,413	3,986
TOTAL	18,549	22,882	21,274	21,721	23,316	30,466	39,106

Sources: AIDC (2007); AIDC (2008); Naamsa (2007)