

**Analysis of the Motor Industry Development  
Programme (MIDP) as a promotional tool for  
the South African automotive industry in the  
global automotive environment**

**by**

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## Summary

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The Motor Industry Development Programme (MIDP) was implemented on 1 September 1995 in the context of the country's political and economic liberalisation and the major structural shift in government policy and the trade regime. In an intensely competitive global environment, the strategies of a few dominant motor vehicle manufacturers, mainly operating from the Triad regions of North America, Europe and Japan, impact significantly on the developments of the global automotive industry.

Over the past decade the small, highly protected and inwardly focused South African automotive industry has become fully integrated in the global strategies of foreign parent companies. As South Africa's leading manufacturing sector, the automotive sector is contributing significantly to the country's economy in terms of exports, investment, employment and the gross domestic product.

The objective of the study was to establish and measure the relevance and value of the MIDP as a promotional tool in the global automotive environment by capturing the responses and perceptions of direct automotive industry exporters and stakeholders for

- the South African automotive industry in general, and
- the companies forming part of the empirical survey.

To satisfy the objectives of the study, the research methodology incorporated an extensive primary and secondary research phase (qualitative and quantitative). A structured empirical survey was used to collect the primary data. The survey data were captured and processed by the Bureau for Market Research (BMR), Unisa.

The main findings of the study are that:

- The promotional relevance and value of the MIDP as a promotional tool is embedded in the programme's ability to trigger interest in the South African automotive industry, to generate business and to attract investments.
- The MIDP is successful in contributing to the automotive sector's international competitiveness and is therefore a very important promotional tool for convincing foreign parent companies to consider South Africa as an investment destination.
- The South African automotive industry would not be able to cope with global competition without the MIDP.
- Different factors impact on the business operations of the South African automotive industry in general and the specific company in particular and the factors are viewed differently by the selected groups based on their demographic details.

The process of trade liberalisation is forcing many South African companies to encounter both intensified competition and new forms of competition. The South African government's target of a 6 percent economic growth rate by 2010 will largely depend on the ongoing successes achieved in priority sectors such as the domestic automotive sector.

Key terms: Motor Industry Development Programme (MIDP); promotional tool; South African automotive sector; manufacturing sector; automotive policy; export growth; strong rand; multinational companies; global competitiveness; strategic marketing management

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## Table of contents

---

<b>Chapter 1: Introduction and purpose of the study</b>	<b>1</b>
1.1 Introduction .....	1
1.2 Overview of the global and South African automotive industry .....	2
1.3 Problem statement.....	3
1.4 Objectives of the study.....	5
1.5 Scope of research.....	6
1.6 Importance of the research .....	8
1.7 Research design and methodology .....	9
1.8 Outline of the study.....	11
<b>Chapter 2: Overview of the global automotive industry</b>	<b>13</b>
2.1 Introduction .....	13
2.2 Early developments in the global automotive industry .....	13
2.3 Key characteristics of the global automotive industry.....	14
2.4 Mapping the global automotive industry structure .....	15
2.4.1 The supply side.....	15
2.4.2 Segments of the automotive industry supply side .....	16
2.4.3 Global automotive vehicle production.....	17
2.4.4 Global motor vehicle manufacturers (OEMs) .....	19
2.4.5 Global component suppliers .....	21
2.5 The demand side .....	22
2.5.1 Global vehicle sales.....	22
2.5.2 Future vehicle demand .....	24
2.6 Summary.....	24
2.7 Major automotive global trends and developments .....	25
2.7.1 Mergers and acquisitions (M&A) .....	25
2.7.2 Global overcapacity .....	28
2.7.3 Outsourcing and sourcing strategies .....	29
2.7.4 New technology and innovation.....	37
2.7.5 Automotive environmental trends .....	38
2.7.6 Summary of major automotive global trends and developments .....	40
2.8 Global automotive industry performance indicators .....	40
2.9 Global automotive financial performance and profitability .....	41
2.9.1 OEMs profitability.....	41
2.9.2 Component sector profitability .....	43
2.10 Automotive employment .....	45
2.10.1 OEM employment .....	46
2.10.2 Component sector employment.....	47
2.11 Automotive industry investment intensity.....	47
2.12 Summary.....	49
2.13 Summary of Chapter 2.....	50
<b>Chapter 3: The evolution of South African automotive industry policy</b>	<b>52</b>
3.1 Introduction .....	52
3.2 Overview of early developments in the South African automotive industry.....	52
3.3 Impact derived from South Africa's automotive policy exposition .....	56
3.3.1 Automotive industry development in South Africa up to 1961.....	57
3.3.2 Phase 1 to Phase 5 of the local content programmes.....	57

3.3.3	Phase 6 of the local content programme.....	60
3.4	Motor Industry Development Programme (MIDP) .....	61
3.4.1	Rationale behind the implementation of the MIDP .....	61
3.4.2	Aim of the MIDP.....	64
3.4.3	MIDP objectives.....	64
3.4.4	Operations of the MIDP .....	65
3.4.5	MIDP Reviews 1999 and 2002 .....	67
3.4.6	Technical parameters of the MIDP .....	71
3.5	Summary of Chapter 3.....	74

## **Chapter 4: The performance of the South African automotive industry under the MIDP** **76**

4.1	Introduction .....	76
4.2	South African automotive industry vision under the MIDP .....	76
4.3	Key players in the domestic automotive industry .....	77
4.4	Key characteristics of the domestic automotive industry.....	78
4.5	Performance indicators of the domestic automotive industry under the MIDP.....	80
4.5.1	South African automotive sector growth.....	80
4.5.2	South African automotive industry export performance .....	87
4.5.3	Trade balance of the South African automotive industry.....	95
4.5.4	Financial performance of the South African automotive industry .....	98
4.5.5	Investment intensity of the South African automotive industry.....	100
4.5.6	Automotive employment levels in South Africa .....	105
4.5.7	Vehicle affordability in South Africa .....	108
4.5.8	Comments on the technical capabilities of the MIDP .....	111
4.6	Summary.....	113
4.7	External factors impacting on the South African automotive industry .....	114
4.7.1	Global developments .....	115
4.7.2	World Trade Organisation (WTO).....	116
4.7.3	Trade arrangements .....	117
4.7.4	Logistical costs .....	118
4.7.5	Raw material prices .....	119
4.7.6	Currency movements.....	119
4.7.7	Broad Based Black Economic Empowerment (BBBEE) and HIV/Aids .....	121
4.7.8	Summary .....	121
4.8	Summary of Chapter 4.....	122

## **Chapter 5: Theoretical principles of marketing strategies and competitiveness** **124**

5.1	Introduction .....	124
5.2	Globalisation and the competitive advantage of nations .....	124
5.2.1	Globalisation .....	124
5.2.2	Absolute, comparative and competitive advantage.....	125
5.2.3	Competitive advantage of nations .....	126
5.2.4	Arguments against Porter's theory of the "Competitive Advantage of Nations" .....	128
5.3	Marketing strategies.....	130
5.3.1	Introduction .....	130
5.3.2	The marketing scope .....	131
5.3.3	The marketing process .....	133
5.3.4	Marketing management.....	134
5.3.5	Summary .....	136
5.4	Strategic marketing management.....	136
5.4.1	Introduction .....	136
5.4.2	External analysis.....	137
5.4.3	Competitor analysis .....	143
5.4.4	Market analysis.....	146

5.4.5	Customer analysis .....	152
5.4.6	Summary .....	157
5.5	Internal analysis .....	157
5.5.1	Financial performance appraisal .....	158
5.5.2	Non-financial performance appraisal .....	159
5.5.3	Determinants of strategic options .....	159
5.5.4	Summary .....	160
5.6	Strategy identification and selection .....	161
5.6.1	Product-market investment strategies .....	161
5.6.2	Functional area strategies .....	162
5.6.3	Bases of a sustainable competitive advantage .....	163
5.6.4	Summary .....	163
5.7	Global marketing strategies .....	163
5.7.1	Reasons for expanding globally .....	163
5.7.2	Expanding by means of foreign direct investment.....	165
5.7.3	The MIDP's promotional role for the South African automotive industry.....	167
5.7.4	Global promotional strategies.....	169
5.7.5	Summary .....	171
5.7.6	Summary of Chapter 5.....	171

## **Chapter 6: Research design and methodology 173**

6.1	Introduction .....	173
6.2	The marketing research process .....	173
6.2.1	Research design .....	175
6.2.2	Design the exploratory and/or conclusive phases of the research.....	176
6.3	Data collection design.....	177
6.3.1	Secondary data.....	178
6.3.2	Primary data .....	179
6.4	Developing a sampling plan.....	179
6.4.1	Target population.....	180
6.4.2	Sampling frame.....	182
6.4.3	Sampling technique .....	183
6.4.4	Sampling size .....	184
6.4.5	Execute the sampling process.....	186
6.5	Construct and pre-test the questionnaire.....	186
6.5.1	Question sequence.....	187
6.5.2	Question format .....	188
6.5.3	Questionnaire instructions .....	192
6.5.4	Physical characteristics of the questionnaire .....	192
6.5.5	Pre-testing of survey.....	193
6.6	Reliability and validity of the research for this study.....	193
6.6.1	General error types.....	194
6.6.2	Central editing.....	195
6.6.3	Coding .....	195
6.6.4	Tabulation .....	195
6.6.5	Validation .....	195
6.7	Data analysis .....	197
6.8	Summary of Chapter 6.....	199

## **Chapter 7 Analysis of survey findings 200**

7.1	Introduction .....	200
7.2	Part 1 of the questionnaire.....	201
7.3	Summary.....	207
7.4	Part 2 of the questionnaire.....	208
7.5	Summary.....	221
7.6	Part 3 of the questionnaire.....	222
7.7	Summary.....	234

7.8	Part 4 of the questionnaire.....	235
7.9	Summary.....	283
7.10	Part 5 of the questionnaire.....	285
7.11	Summary.....	290
7.12	Summary of Chapter 7.....	291
<b>Chapter 8 Conclusions and recommendations</b>		<b>292</b>
8.1	Introduction .....	292
8.2	Objectives of the study.....	293
8.3	Conclusions to Part 1 of the questionnaire .....	294
8.4	Conclusions to Part 2 of the questionnaire .....	297
8.5	Conclusions to Part 3 of the questionnaire .....	301
8.6	Conclusions to part 4 of the questionnaire .....	305
8.7	Conclusions to Part 5 of the questionnaire .....	310
8.8	Recommendations in respect of Parts 1 to 5.....	313
8.9	Potential areas of further research .....	319
8.10	Summary of Chapter 8.....	321
<b>List of references</b>		<b>323</b>



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## List of Tables

---

Table 2.1:	World vehicle production by region ('000 of units) .....	18
Table 2.2:	World motor vehicle production by manufacturer, 2004 .....	19
Table 2.3:	Top twenty component suppliers by revenue, 2003 .....	21
Table 2.4:	Direct automotive industry employment by country, 2003 .....	45
Table 2.5:	Investments in euro billion by country in research, development and production, 2003...	48
Table 3.1:	Summary of automotive policy development in South Africa .....	53
Table 3.2:	Technical parameters of the MIDP (1995 to 2012) .....	71
Table 3.3:	Import Rebate Credit Certificates (IRCC) on completely knocked-down (CKD) kits imports (1995 to 2012) .....	72
Table 3.4:	Import Rebate Credit Certificates (IRCCs) on completely built-up unit (CBU) imports (1995 to 2012) .....	73
Table 4.1:	New vehicle sales in South Africa (units) (1960 to 2005).....	81
Table 4.2:	Production of vehicles from 1995 to 2005 – South Africa (units) .....	84
Table 4.3:	Vehicle manufacturing capacity utilisation (%) .....	85
Table 4.4:	Completely built-up vehicle imports from 1995 – 2005 (units) .....	86
Table 4.5:	Top destinations of South African vehicle exports by value from 1995 to 2004 (passenger cars and light commercial vehicles).....	90
Table 4.6:	Major automotive component exports from South Africa, 1995 to 2004 (R billion – FOB values) .....	92
Table 4.7:	Top destinations of South African automotive component exports, 1995 to 2004 .....	94
Table 4.8:	Trade balance for the automotive industry, 1995 to 2004 .....	96
Table 4.9:	OEM industry profitability in nominal terms .....	98
Table 4.10:	Investment expenditure by the OEMs in South Africa, 1995 to 2004 (rand million).....	103
Table 4.11:	South African automotive industry employment, 1995 to 2004 (number of employees) .....	105
Table 4.12:	Currency indices for the rand versus major trading partners (foreign currency: rand - annual averages) .....	120
Table 5.1:	Standardisation versus adaptation .....	155
Table 5.2:	Product-market growth directions .....	161
Table 5.3:	Why firms go international .....	164
Table 6.1:	Differences between business and consumer markets .....	174
Table 6.2:	Format of questions in the questionnaire .....	191
Table 7.1:	Breakdown of respondents of the study .....	202
Table 7.2:	Companies registered under the MIDP .....	203
Table 7.3:	Direct, indirect or no benefits under the MIDP .....	204
Table 7.4:	South African automotive industry's capability to cope with global competition without the MIDP .....	204
Table 7.5:	Companies' participation in automotive events abroad .....	206
Table 7.6:	The value of the MIDP in promoting the South African automotive industry in general .....	210
Table 7.7:	The value of the MIDP in promoting the specific company in particular in the global automotive environment since it was implemented in 1995 .....	214
Table 7.8:	Views on the role of the MIDP with its extension until 2012 .....	218
Table 7.9:	Views on the dependence on support for the South African automotive industry in general post 2012 when the MIDP is due to expire .....	220
Table 7.10:	Importance of different factors impacting on the South African automotive industry's business operations in general (mean rating value) .....	224
Table 7.11:	Correlations of the different factors impacting on the business operations of the South African automotive industry in general .....	226
Table 7.12:	Importance of the difference factors impacting on the business operations of the specific company in particular .....	231

Table 7.13: Correlations of the different factors impacting on the business operations of the specific company in particular .....	232
Table 7.14: Respondents' employee grouping: percentage foreign owned – cross tabulation.....	236
Table 7.15: Importance of the different factors impacting on the business operations of the South African automotive industry in general based on ownership and employment (mean value rating).....	238
Table 7.16: Correlations between the different factors impacting on the business operations of the South African automotive industry in general based on ownership and employment levels.....	241
Table 7.17: Importance of different factors impacting on the business operations of the specific company in particular based on ownership and employment levels (mean value rating).....	243
Table 7.18: Correlations between the different factors impacting on the business operations of the specific company in particular based on ownership and employment levels (mean value rating).....	246
Table 7.19: Importance of the different factors impacting on the business operations of the South African automotive industry in general based on sales segments (mean value rating) ..	250
Table 7.20: Correlations between the different factors impacting on the business operations of the South African automotive industry in general based on sales segments.....	254
Table 7.21: Importance of the different factors impacting on the business operations of the specific company in particular based on sales segments (mean value rating) .....	256
Table 7.22: Correlations between the different factors impacting on the business operations of the specific company in particular based on sales segments .....	260
Table 7.23: Turnover of company per annum – cross tabulation .....	262
Table 7.24: Importance of the different factors impacting on the business operations of the South African automotive industry in general based on turnover (mean value rating) .....	263
Table 7.25: Correlations between the importance of the different factors impacting on the business operations of the South African automotive industry in general based on turnover.....	266
Table 7.26: Importance of the different factors impacting on the business operations of the specific company in particular based on turnover (mean value rating) .....	268
Table 7.27: Correlations between the importance of the different factors impacting on the business operations of the specific company in particular based on turnover .....	271
Table 7.28: Exports (direct and/or indirect) as a percentage of turnover – cross tabulation.....	273
Table 7.29: Importance of the different factors impacting on the business operations of the South African automotive industry in general based on exports as a percentage of turnover (Mean value rating).....	274
Table 7.30: Correlation between the importance of the different factors impacting on the business operations of the South African automotive industry in general based on exports as a percentage of turnover .....	277
Table 7.31: Importance of the different factors impacting on the business operations of the specific company in particular based on exports as a percentage of turnover (Mean value rating).....	279
Table 7.32: Correlations between the importance of the different factors impacting on the business operations of the specific company in particular based on exports as a percentage of turnover.....	281

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## List of Figures and Appendices

---

Figure 2.1: Segments of the automotive industry supply side .....	16
Figure 2.2: Automotive employment trends, top 15 automotive producing countries 1999-2002 ('000 of jobs) .....	46
Figure 4.1: New vehicle sales and GDP growth rate .....	82
Figure 4.2: South African automotive exports from 1995 to 2004 (rand billion) .....	87
Figure 4.3: Rate of increase in vehicle prices compared to CPI and PPI for 1995 to 2004 .....	110
Figure 5.1: Automotive Diamond Model .....	126
Figure 7.1: The most important value of the MIDP in promoting the South African automotive industry in general in the global automotive environment (Index= 100).....	212
Figure 7.2: The most important value of the MIDP in promoting the company in particular in the global automotive environment since 1995 when the MIDP was implemented (Index = 100).....	215
Appendix A: Empirical survey .....	338
Appendix B: Covering letter .....	348
Appendix C: List of respondents to the empirical survey .....	350
Appendix D: Detailed qualitative responses to Question 10 of the empirical survey.....	353
Appendix E: Detailed qualitative responses to Question 12 of the empirical survey .....	360
Appendix F: Detailed qualitative responses to Question 19 of the empirical survey .....	364
Appendix G: Detailed qualitative responses to Question 20 of the empirical survey .....	372

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## Abbreviations

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AGOA	African Growth and Opportunity Act
AIDC	Automotive Industry Development Centre
CBU	Completely built-up unit (vehicle)
CKD	Completely knocked down
CPI	Consumer price index
DFA	Duty free allowance
DTI	The Department of Trade and Industry South Africa
EU	European Union
FDI	Foreign direct investment
FOB	Free on board
GATT	General Agreement on Tariffs and Trade
GDP	Gross domestic product
ITAC	International Trade Administration Commission
IRCC	Import Rebate Credit Certificate
LCV	Light commercial vehicle
LV	Light vehicle (passenger and light commercial vehicle)
MCV/HCV	Medium and heavy commercial vehicle
MERCOSUR	Mercado Común del Sur (Common Market of South America)
MIDC	Motor Industry Development Council
MIDP	Motor Industry Development Programme
NAACAM	National Association of Automotive Component and Allied Manufacturers
NAAMSA	National Association of Automobile Manufacturers of South Africa
NAFTA	North American Free Trade Area
OEM	Original equipment manufacturer (motor vehicle manufacturer)
PAA	Productive asset allowance
PPI	Production price index
R&D	Research and development
R	South African rand
SA	South Africa
SADC	Southern Africa Development Community
SATMC	South African Tyre Manufacturers' Conference
SME	Small and medium enterprise
SIT	Strategic investment team
TISA	Trade and Investment South Africa (a division of the DTI)
UNIDO	United Nations Industrial Development Organisation
USA	United States of America
WTO	World Trade Organisation

## **CHAPTER 1: INTRODUCTION AND PURPOSE OF THE STUDY**

### **1.1 INTRODUCTION**

One of the most notable macroeconomic developments over the past decade has been the revitalisation of international trade in South Africa's domestic economy. The country's accession to the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in February 1994 has also had a significant impact on the economy (Twine, 2004:16). The Motor Industry Development Programme (MIDP) was implemented in the context of rapid trade liberalisation and a major structural shift in government policy and the trade regime. Government eliminated its major demand side support for industry, such as tariff and import control protective measures, and shifted towards a variety of supply side measures. These measures were aimed at assisting the manufacturing sector to become more internationally competitive by helping firms to cope with imports and allowing them to export. The MIDP was initiated in recognition of the problems besetting the domestic automotive industry in the new context. These problems were related to the high cost structure and low volume production that resulted from various local content programmes that had protected the automotive industry for over three decades. The MIDP was a sector-specific part of government's new industrial policy to rapidly increase the international competitiveness of the domestic automotive industry and facilitate increased exports of vehicles and components. The programme was established to entrench the outward orientation of the industry, thereby restructuring it to achieve global competitiveness, whilst at the same time maintaining its employment and output contribution to the South African economy. The objectives of the MIDP were deemed non-mutually exclusive as it was argued that they could be achieved through a phased integration of the South African automotive industry into the global automotive environment (Barnes & Morris, 1999:3).

Since the implementation of the MIDP in 1995 the South African automotive sector has grown in stature to become the leading manufacturing sector in the country's economy. Total automotive exports (completely built-up vehicles and components)

have grown from limited exports before 1995 to achieve record-breaking levels for several consecutive years, growing at a compounded annual rate of 28,2 percent in rand terms from 1995 to 2004 (NAAMSA, 2005:12). Total automotive exports as a percentage of total South African exports has increased nearly fourfold from 4 percent in 1995 to 14,9 percent in 2003 (DTI, 2004:4). The export growth has been accommodated by significant investments in best practice assets and state-of-the-art equipment, skills upgrading, productivity gains and the upgrading of the whole automotive value chain. In addition, the constructive way in which all the industry role-players have accepted the global challenges and committed themselves to co-operate in growing the South African automotive sector's output in terms of international competitiveness and contribution to the country's economy is a significant achievement. The next section provides a brief overview of the South African automotive industry in the global context.

## **1.2 OVERVIEW OF THE GLOBAL AND SOUTH AFRICAN AUTOMOTIVE INDUSTRY**

The global automotive industry is a troubled sector at present, beset by structural overcapacity, a global price war and a general inability to return its cost of capital. Despite disappointing results, compared to other industries, the global automotive sector continues to maintain a tenuous balance in the face of an expanding list of structural and cyclical challenges (PWC, 2005:5).

The increased integration of the South African automotive industry into the global arena provides not only opportunities but challenges as well. Transformation in the global automotive industry is being strongly led by changes at the motor vehicle manufacturer or original equipment manufacturer (OEM) level, which consequently have a significant impact on the component supplier industry.

Global vehicle sales have been relatively stable at around 60 million units over the course of the last few years and automotive analysts expect only limited growth to 70 million units globally by 2010. In 2004 global vehicle sales were strongly dominated by the Triad countries of North America, Western Europe and Japan, representing

nearly 70 percent of global units sold, despite the rapid surge in sales by the Asian region, most notably China. The stagnant sales level is problematic and is driving the restructuring of competitiveness dynamics within the global automotive supply chain. The reason why this limited growth is so problematic is that substantial production overcapacity of between 25 percent and 35 percent exists in the global automotive industry, which means that production capacity exceeds market demand for the products capable of being manufactured. The intensity of the competitiveness challenge is unlikely to dissipate and the global automotive industry is confronted with some major challenges going forward (Robbins, 2004).

As was the case with many other developing countries, the South African automotive industry developed under high levels of protection (Black, 2001:3). The policies that have driven the South African automotive sector are central to understanding the sector's history and its recent accomplishments (Flatters, 2002:2). One thing that distinguishes the motor industry from other industrial sectors is the importance of government policies in steering its development. The MIDP's role as a structural adjustment programme in turning the South African automotive industry, which was inward focused for decades, into an export-orientated automotive industry since 1995 when the programme was implemented, will be analysed in Chapter 3.

### **1.3 PROBLEM STATEMENT**

It is the understanding of the automotive industry role-players in South Africa that the MIDP has contributed to the positive developments experienced in the domestic automotive industry. The central research problem involves establishing and measuring the relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment since 1995, taking into account the impact of both external and internal factors. In addition, the research problem will focus on the future potential relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. The uncertainty that the extensions of the MIDP from 2002 to 2007 and again from 2008 to 2012 and the simultaneous phasing down of the MIDP benefits

during these periods will bring, taking into account a new era in which trading conditions could change radically, need to be taken into account. Challenges such as the phasing down of MIDP benefits could mean increased exports and/or increased local content to generate the same benefits as currently enjoyed under the programme. This would require that the South African automotive industry position itself to maximise opportunities and minimise risks in pursuing a sustainable competitive advantage.

Exports have fuelled the growth of the South African automotive industry and supplying automotive components and completely built-up units (CBUs) to the world has grown from virtually no exports before 1995 to become a major South African industrial activity (DTI, 2003b:59). Export earnings have been significant while increased industry profitability was achieved amidst unfavourable market conditions globally and domestically in several years since 1995. The increased levels in capital investment and profitability in the industry by the OEMs and their suppliers support the sustainability of growth recorded over the period since the MIDP was implemented. The extent to which the rand depreciated against the major currencies since 1995 until the end of 2001 contributed to the positive developments. From 2002 onwards the increased strength of the rand has resulted in a sharp fall in inflation and substantial interest rate relief, thereby enhancing domestic demand. On the other hand, the strong rand has significantly hampered the country's export competitiveness and, as a result, the performance of its manufacturing sector (DTI, 2004:50).

The research problem requires an intimate understanding of the extent, functioning and complexities of the MIDP as well as its relevance and role as a promotional tool in respect of the achievements of the domestic automotive industry over a relatively short period of time, taking into account the impact of a range of external factors. The primary and secondary objectives of the study will be discussed in the next section.



#### **1.4 OBJECTIVES OF THE STUDY**

In view of the research problem identified above, the primary objective of the study is

- to analyse the MIDP as a promotional tool for the South African automotive industry in the global automotive environment (promotional tool refers to the broader context of promoting the domestic automotive industry and not the narrow focus of what promotion entails).

Since knowledge resides in the minds of individuals, the challenge is to capture that knowledge in a form that it can be retained and nurtured over time and be shared by a wide group of people (Aaker, 2001:13). More specifically, the aim of the research will be to establish and measure the relevance and value of the MIDP as a promotional tool in the global automotive environment by capturing the responses and perceptions of direct automotive industry exporters and automotive industry stakeholders for

- the South African automotive industry in general, and
- the companies forming part of the empirical survey.

The secondary objectives of the study are

- to assist government and industry, by way of frequent reviews of the MIDP, in their approach to dealing with global automotive opportunities and challenges within World Trade Organisation (WTO) guidelines in amending and improving the MIDP as a promotional tool for the South African automotive industry in the global automotive environment
- to add informational value to government and industry offensive and defensive strategies and planning in respect of current and future investment and export patterns in adapting the MIDP to be better equipped to seize global opportunities and minimise risks
- to add value to related key economic sectors, via their synergies with the automotive value chain, as raw materials such as metals, plastics, rubber,

chemicals and leather, among others, also benefit from increased exports and investments in the automotive sector.

The awareness and promotion of the MIDP as an innovative mechanism for attracting interest to South Africa as an investment destination of choice and preferential supplier-based source of completely built-up vehicles and automotive components are critical steps towards achieving the programme's objectives for the country's automotive industry. The MIDP's objectives focus on improved levels of international competitiveness, employment creation and sector growth. Linkages with multinational companies, mainly to obtain project funding or the relevant licence or technology agreements to manufacture and export, are imperative in the global automotive environment.

The theoretical rationale for the research in respect of global marketing strategies and competitiveness is based on the work of Czinkota and Ronkainen (2004), Gillespie, Jeannet and Hennessey (2004), Strydom (2004), Burns and Bush (2000), Aaker, Kumar and Day (1995) as well as Aaker's (2001) strategic marketing management analysis. Porter's (1990) notion of the competitive advantage of nations (CAN) in achieving a sustainable competitive advantage in the global environment is also analysed. The marketplace varies and is becoming increasingly competitive, and strategies have to be developed that are both efficient and effective. Firms have to take external and internal factors into consideration in strategic choices to obtain a sustainable competitive advantage. Strategic marketing management focuses on external factors such as the environmental analysis, competitor analysis, market analysis and customer analysis as well as internal factors such as a performance analysis and determinants of strategic options. The relationship between theory and practice will be analysed in more detail in Chapter 5 to link up with the scope of the research as discussed in the next section.

## **1.5 SCOPE OF RESEARCH**

The scope of the literature research in Chapters 2, 3, 4 and 5 covers the broad spectrum of the automotive value chain in order to provide an understanding of how

the decisions of the OEMs impact on the global automotive environment and specifically the South African automotive industry. A value chain describes the links in the chain of production of a product or service. Usually the value chain involves backward linkages (upstream) in the supply of inputs from the lower tier suppliers to the first tier suppliers to the OEM. These chain linkages are not only important upstream but also downstream, the latter in benefiting or adding value to the inputs in transforming the inputs into the end product. The global automotive value chain, which will be analysed in more detail in Chapter 2, is dominated by a relatively small number of OEMs, which are supplied by first tier or mega-suppliers globally, responsible for components or systems assembled from different components and subcomponents, such as the entire dashboard. The lower tier suppliers are mainly restricted to their domestic markets and are responsible for supplying subcomponents to the first tier suppliers. Automotive manufacturing in the value chain focuses on passenger cars, light, medium and heavy commercial vehicles and buses as well as original equipment components and aftermarket or replacement parts for these vehicles.

All the major OEMs in the world are represented in South Africa. A large number of multinational suppliers or foreign owned first tier suppliers operate in co-operation with South African suppliers, mainly the second and third tier suppliers, via joint ventures, licence or technology agreements and other arrangements.

The scope of the empirical research involves an empirical survey of the direct automotive exporters from South Africa. The survey sample includes the eight OEMs, 37 component manufacturing companies and 12 key industry stakeholders. The research design and methodology will be discussed in more detail in Chapter 6. The importance of the empirical research has its aim to establish the primary and secondary objectives of the study as outlined in the next section.

## **1.6 IMPORTANCE OF THE RESEARCH**

Despite the significance of the automotive industry to the South African economy, it could disappear from the global environment up to 50 times over – given South Africa's 2004 global vehicle production market share of 0,7 percent and the estimated level of global overcapacity of up to 35 percent – without even denting the capability of the global automotive industry to service global market demand. In addition, more than 85 percent of South Africa's exports travel more than 8000 km, further than the exports of any other significant trading partner (Graham, 2004:4). The primary aim of the study is therefore to understand the current extent of the relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment, as well as its perceived contribution to the positive developments achieved in the domestic automotive sector since the programme was implemented in 1995. In addition, the aim is to understand the future potential of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment in view of the phasing down of the MIDP benefits in a changing environment.

The secondary aim of the study is the following:

- Since the South African automotive industry has been integrated into the global networks of major multinational companies, it is imperative for South African role-players to consider and understand the multinational companies in terms of the roles they play within the international demand for and supply of vehicles, as well as the major global trends by which these multinational companies are currently governed. The global automotive industry is at the cutting edge of technology and major global trends have significant implications for the automotive value chains across regions. The study will aim to assist the South African government and the automotive industry in their offensive and defensive approaches to dealing with the global opportunities and challenges within WTO guidelines.
- The extension of the MIDP from 2002 to 2007 and again from 2008 to 2012 takes the domestic automotive industry into a new era in which

trading conditions could change significantly in the domestic and global markets. The benefits of the MIDP will be phased down as part of the extension of the programme, which means that exports and/or local content need to increase every year to generate the same benefits as currently enjoyed. In addition, the import duties into South Africa will be reduced, resulting in increased competition from imports in the domestic market. The emergence of global automotive emerging markets such as China and India and the impact on global trading patterns will also place escalating demands on industry role-players in South Africa as well as those in other countries. The South African automotive industry therefore requires intense promotion of the industry as an investment destination of choice and preferential supplier-based source for completely built-up vehicles and automotive components. The study will aim to add value to government and industry defensive and offensive strategies and planning in respect of current and future investment and export patterns.

- The automotive sector has synergies with many other manufacturing sectors such as metals, leather, textiles and plastics (Damoense & Alan, 2004:252). The study will therefore aim to add value to and benefit the other related key sectors, directly and indirectly, through increased automotive exports and investments. In view of the extension of the MIDP until 2012, potential opportunities in the automotive sector and related sectors might be lost if concerted efforts are not proactively pursued to promote a key export sector such as the South African automotive sector.

## **1.7 RESEARCH DESIGN AND METHODOLOGY**

The research design includes

- a literature study
- an empirical survey.

The literature study includes a study of the key characteristics of both the global and the South African automotive industries, the evolution of automotive policy in South

Africa, the rationale behind the implementation of the MIDP, the operations of the MIDP, the perceived achievements under the MIDP in terms of its objectives, as well as a theoretical study on global marketing strategies, competitiveness and related issues.

The empirical survey aims to obtain perceptions and inputs from direct South African automotive exporters and included surveys of the eight OEMs, surveys of 12 key industry role-players, including senior government officials and an academic, as well as surveys of 37 companies, which participated in the DTI organised automotive missions and events abroad during the 2004/2005 financial year as well as the previous financial years. The empirical research will aim to establish the relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment in line with the objectives of the study.

The methodology for this study incorporated an extensive research phase (qualitative and quantitative) followed by an analysis of key issues and the synthesis thereof into meaningful conclusions. The questionnaire data were captured and processed by the Bureau for Market Research (BMR) at Unisa from July 2005 to April 2006. Various statistical analyses were conducted on the data in order to facilitate a discussion of the research results. Tabulation was done using Statistical Package for Social Sciences (SPSS) and Excel computer programs.

Cross-tabulations were also used to determine the effect of certain dependent variables on certain independent variables. The frequency tables and indexes will be further analysed in order to determine more detailed relationships based on a breakdown of the respondents. The breakdown will be categorised in OEMs responses, key industry stakeholder responses and automotive component companies' responses, as well as a further breakdown of component companies' relationships between those registered under the MIDP and those not registered. The frequency tables and indexes will be supported by a descriptive analysis based on processed responses captured from the empirical survey as well as the literature study, and will be discussed in detail in Chapter 7.

## **1.8 OUTLINE OF THE STUDY**

The structure of this report follows the logic applied in the methodology in order to achieve the objectives of the study, which is as follows:

- Chapter 1 covers the introduction to the problem statement, objectives and scope of the study.
- Chapter 2 provides an overview of the dynamics and key trends of the global automotive industry that impact on the South African automotive industry as a result of its full integration into the global automotive environment.
- Chapter 3 provides an overview of the policy regime in the South African automotive industry and the context in which the MIDP, as a structural adjustment programme, was introduced, followed by details of the rationale and operations of the MIDP.
- Chapter 4 focuses on the characteristics of the South African automotive industry and the achievements under the MIDP, in line with the objectives of the study.
- Chapter 5 focuses on the theoretical principles of marketing strategies and competitiveness accompanied by practical examples of the behaviour of global and South African automotive firms.
- Chapter 6 builds on the foundation of the previous chapters in order to present the research design and methodology of the study.
- Chapter 7 covers the processed research findings in the context of the study, which is to analyse the value and relevance of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment, based on an empirical survey covering the responses of direct automotive exporters and relevant key automotive industry stakeholders.
- Chapter 8 assesses the research findings in the context of the study, with conclusions and recommendations on the value and relevance of the

MIDP as a promotional tool for the South African automotive industry in the global automotive environment.



## **CHAPTER 2: OVERVIEW OF THE GLOBAL AUTOMOTIVE INDUSTRY**

### **2.1 INTRODUCTION**

The automotive industry is often thought of as one of the most global of all industries. Its products have spread around the world and it is dominated by a small number of companies with worldwide recognition (Humphrey & Memedovic, 2003:2). Chapter 2 provides an overview of the early developments in the global automotive industry, highlights its key characteristics, maps the key role players globally on the supply side and the demand side, and analyses the major global trends and developments impacting on the performance of the global automotive industry. The vehicle manufacturers (original equipment manufacturers – OEMs) play a dominant role and determine the direction of this industry. In light of this, the roles and influences of individual OEMs as well as different countries and regions are analysed, as the actions of the OEMs, countries and regions could have a direct impact on the South African automotive industry.

### **2.2 EARLY DEVELOPMENTS IN THE GLOBAL AUTOMOTIVE INDUSTRY**

A century ago the car industry invented modern industrial capitalism. The car started life in Germany and early development of the industry began in France (hence automobile, originally a French word) in the 1900s, but it was in America that it came of age (Carson, 2004:3, 4). Henry Ford's adaptation of the moving assembly line he had seen in Chicago slaughterhouses for car making marked the birth of mass production. Ford applied these techniques to a vehicle that resembled a horse-drawn carriage, with a body laid onto a separate chassis. Modern car manufacturing was born in the mid-1920s.

Modern cars have a monocoque steel body in which the strength is built into the pressed steel floor, sides and roof. It was invented by Edward Budd, taken up by Dodge and Citroen in Europe, and then by all volume carmakers. Toyota refined the process in the 1960s through its lean-manufacturing (just-in-time) techniques. General Motors revolutionised the young car industry in the second half of the 20th

century. The company was the leader in planned obsolescence, which involves the frequent changes in design that tempt customers to switch frequently to a new model. In the 1970s, as the oil prices quadrupled, the industry found itself under attack from environmentalists outraged by its products' gas-absorbing habits. It was among the first to come under close government scrutiny from safety concerns to environmental issues and antitrust worries. The car industry also found itself at the cutting edge of capitalism in another sense. As mass production techniques developed in the 1920s and 1930s, its workers increasingly pushed for unionisation (ibid, 2004:3, 4).

Today the motorcar is the epitome of mass production, mass marketing and mass consumption, with some of the strongest brands in the world. Modern factories have to be large to reap the biggest economies of scale, around 250 000 units a year for assembly plants and one to two million units for body panels. Few other consumer-goods industries depend so heavily on a thriving second-hand market for their products. It is therefore not surprising that all governments, both regional and national, from across the world have been extremely active in attempting to attract international automotive companies to their regions. Given the early developments of the global automotive industry, the next section focuses on more recent key characteristics of this industry.

### **2.3 KEY CHARACTERISTICS OF THE GLOBAL AUTOMOTIVE INDUSTRY**

The global automotive industry is regarded as the world's largest manufacturing industry and accounted for about US\$2 trillion of global economic activity in 2003, in the order of 15 percent of the global GDP and one job in nine in the developed nations (Haynes, 2004c). The industry's products are responsible for almost half of the world's oil consumption and its manufacturers use up nearly half of the world's annual output of rubber, 25 percent of its glass and 15 percent of its steel (Carson, 2004:3, 4). There are in the order of 5500 component suppliers and together with the OEMs the automotive sector provided approximately 8 million direct jobs globally in 2003. According to Mercer (2004:18-20) global automotive revenues are divided into

original equipment parts, the largest segment, comprising US\$800 billion, followed by an equal share to vehicles at US\$450 billion and aftermarket parts and labour at US\$450 billion as well as distribution and other related areas at US\$150 billion. The Triad economies represent approximately 70 percent of units sold, 85 percent of revenue gained and 90 percent of the world's automotive profits.

The global automotive industry is technologically advanced, both in terms of manufacturing processes and in its products. It is characterised by economies of scale and low unit costs, despite the increasing complexity of the fundamental product. OEMs are seeking to differentiate their products through technology and branding (Havenga, 1998:9). It is within this fast changing environment that many developing countries, such as South Africa, are seeking to create for themselves a role as producers of vehicles and components. In most cases the ultimate goal for the developing countries is to protect their balance of payments while some intend to establish fully-fledged automotive industries, mainly via protectionist policies to foster domestic development.

## **2.4 MAPPING THE GLOBAL AUTOMOTIVE INDUSTRY STRUCTURE**

The global automotive industry structure consists of a supply side and a demand side. The attempts by the key role-players in the supply side to meet the needs of the demand side find expression in the major global trends and developments governing the global automotive industry. The dynamics of the global automotive industry's supply side and demand side and the consequent impact on its structure and performance are analysed in the next section.

### **2.4.1 THE SUPPLY SIDE**

The supply side section provides a breakdown of the four broad segments of the global automotive supply side as well as a statistical breakdown of the main global automotive production regions, leading OEMs and top global automotive component suppliers.

#### 2.4.2 SEGMENTS OF THE AUTOMOTIVE INDUSTRY SUPPLY SIDE

The global automotive industry supply side is composed of the following broad segments with distinct requirements (Humphrey & Memedovic, 2003:21, 22):

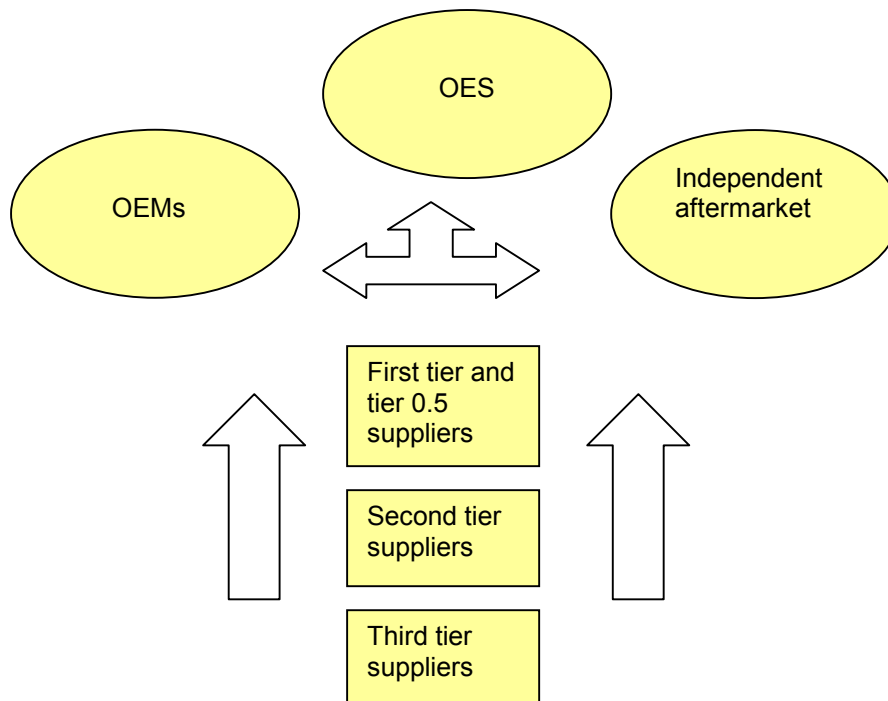


Figure 2.1: Segments of the automotive industry supply side

Source: Humphrey & Memedovic, 2003

- Original equipment manufacturers (OEMs), comprising passenger car, commercial vehicle and bus manufacturing, as well as sales, primarily through dealerships.
- Original equipment suppliers (OESs), who manufacture and supply automotive parts and accessories directly to the OEMs for their service networks. In this way the parts receive the reliability associated with the brand of the vehicle, which is serviced for nine to ten years after production of the vehicle (CBI, 2004b:10). OESs require global coverage and need to provide “black box” solutions (solutions created by suppliers using their own technology to meet the performance and interface requirements set by the OEMs).

- The independent aftermarket, which is responsible for the manufacture and sale of automotive replacement parts and accessories through independent retailers and repair shops directly to the consumer rather than to the OEMs themselves. The aftermarket also re-manufactures, distributes, retails and installs motor vehicle parts and products, other than the original parts and accessories.
- First, second and third tier component manufacturers who supply manufactured parts and accessories to OEMs, OESs and the independent aftermarket. The distinction between the different tiers of component suppliers is indicative of the component manufacturer's role in the value chain. First tier suppliers (also known as sub-assemblers) are responsible for manufacturing components that are supplied to the OEMs and the aftermarket. In some instances they design certain assemblies and assemble modules, such as entire dashboards from different components, and are then referred to as tier 0.5 suppliers. They require design and innovation capabilities, but compared with the OESs their global reach may be limited. Second and third tier suppliers provide parts for first tier suppliers and also OEMs, depending on the product. The third tier suppliers supply mostly basic products and generally only rudimentary engineering skills are required.

### 2.4.3 GLOBAL AUTOMOTIVE VEHICLE PRODUCTION

Globally, automotive manufacturing is spread across six regions, namely the North American Free Trade Area (NAFTA), Western Europe, Japan, Asia-Pacific, Eastern Europe and South America. Table 2.1 provides a breakdown of vehicle production in each of the six regions. Western Europe (excluding the 10 new additional countries as part of the expanded EU since 1 May 2004), with a global market share of 26,3 percent, followed by NAFTA with a global market share of 25,3 percent were the top two vehicle producing regions in 2004. As far as individual countries are concerned, in 2004 the USA, included in the NAFTA region, remained the top producing country in the world with nearly 12 million units or 18,7 percent of global vehicle production, followed by Japan, Germany and China, the latter having moved ahead of France

into fourth position since 2003. By 2010 China is projected to become the world's second largest automotive producer trailing only the USA (KPMG, 2005a:4). South Africa was ranked nineteenth in 2004 with a market share of 0,7 percent of global vehicle production. Passenger cars comprised 69,3 percent of total global vehicle production followed by light commercial vehicles comprising 24,7 percent, medium and heavy commercial vehicles comprising 4,0 percent and buses and coaches comprising 0,6 percent (NAAMSA, 2005:46, 47).

Table 2.1: World vehicle production by region ('000 of units)

	1997	1998	1999	2000	2001	2002	2003	2004
<b>NAFTA</b>	16 018	16 009	17 602	17 697	15 798	16 714	16 243	16 265
<b>W Europe</b>	15 403	16 612	16 912	17 106	17 219	16 871	16 778	16 854
<b>Japan</b>	10 817	10 050	9 908	10 141	9 777	10 257	10 286	10 512
<b>Asia-Pacific</b>	6 416	4 966	6 433	7 830	8 177	9 819	11 701	13 575
<b>E Europe</b>	2 727	2 839	2 901	2 654	2 554	2 605	2 689	3 152
<b>S America</b>	2 326	1 893	1 651	2 089	2 115	2 004	2 037	2 562
<b>Other</b>	727	619	602	857	665	724	929	1 245
<b>World Total</b>	54 434	52 988	56 009	58 374	56 305	58 994	60 663	64 165
<b>Growth %</b>		-2,7%	5,7%	4,2%	-3,5%	4,8%	2,8%	5,8%

Source: International Organisation of Motor Vehicle Manufacturers (OICA)

Following the East Asian crises, the recession and collapsing consumer confidence led to a 69 percent decline in vehicle sales across the ASEAN region between 1997 and 1998. As a result, the prospects of these challengers in claiming market share away from the leading vehicle producing countries were undermined and competition between the Triad producers led to a further concentration of vehicle production in those three regions. The search for cost savings thus became increasingly urgent in the wake of the sluggish market caused by the crises and subsequent global shocks (Humphrey & Memedovic, 2003:2, 3). Table 2.1 reveals that, since 1998, when the global recession bottomed out, there has been an overall increase in production of about 2,4 percent compounded per annum.

This increase is in spite of the decline in production of 3,5 percent during 2001, with strong positive growth of 4,8 percent in the 2002 and 5,8 percent in 2005, driven

primarily by growth in demand within China. The next section will focus on the roles of the dominant OEMs in the global vehicle supply side.

#### 2.4.4 GLOBAL MOTOR VEHICLE MANUFACTURERS (OEMs)

The top 10 OEMs accounted for more than 72 percent of total global vehicle production representing in the order of 46,3 million units in 2004. Table 2.2 provides a breakdown of vehicle production by the top 10 OEMs revealing that General Motors was the top producing OEM in 2004 followed by Toyota and Ford. The most significant developments in the top 10 rankings between 2003 and 2004 were Toyota's surpassing of Ford as the second largest vehicle manufacturer in the world as well as Honda moving ahead of Nissan into seventh position (NAAMSA, 2004:26; NAAMSA, 2005:46).

Table 2.2: World motor vehicle production by manufacturer, 2004

Group	Total	Passenger Cars	Light Commercial Vehicles	Heavy trucks and buses	Brands
<b>1. General Motors</b>	8 066 536	4 502 680	3 530 767	33 089	Bedford, Buick, Cadillac, Chevrolet, GMC, Holden, Hummer, Isuzu, Oldsmobile Opel, Pontiac, Saab, Saturn, Subaru, Suzuki, Vauxhall
<b>2. Toyota</b>	6 814 554	5 869 629	676 399	268 526	Lexus, Daihatsu, Toyota
<b>3. Ford</b>	6 644 024	3 497 334	3 071 784	74 906	Aston Martin, Ford, Jaguar, Land Rover, Lincoln, Volvo, Mazda, Mercury
<b>4. Volkswagen Group</b>	5 095 480	4 892 529	168 840	34 111	Audi, Bentley, Bugatti, Lamborghini, Seat, Skoda, Volkswagen
<b>5. Daimler Chrysler</b>	4 627 883	1 913 693	2 368 437	345 753	Chrysler, Dodge, Jeep, Maybach, MCC, Mercedes
<b>PSA 6. Peugeot-Citroën</b>	3 405 245	3 004 710	400 535	-	Citroën, Peugeot
<b>7. Honda</b>	3 237 434	3 183 269	54 165		Acura, Honda
<b>8. Nissan</b>	3 190 219	2 423 893	615 628	150 698	Infiniti, Nissan
<b>9. Hyundai-Kia</b>	2 766 321	2 377 546	146 883	241 892	Hyundai, Kia
<b>10. Renault</b>	2 471 654	2 163 620	308 034	-	Alpine, Renault, Dacia, Samsung

Source: National Association of Automobile Manufacturers of South Africa, 2005

Between 2000 and 2004 Toyota's global sales increased by 14,5 percent from 5,95 million units to 6,8 million units, while Ford's sales declined by nearly 10 percent over the same period (NAAMSA, 2001:29; NAAMSA, 2005:46). Toyota's production projection, in excess of 9 million vehicles in 2006, could see the company replacing General Motors in top position (Wasserman, 2006:19).

The increasing number of new models launched annually signals the OEMs' product offensive to win market share. KPMG's global automotive survey (2005b:2; 2006:2, 3) revealed that product quality and new products were the major issues on the minds of automotive executives in 2004 and 2005. Only about 40 new models were launched globally in the 1990s, but increased competition and the ability to accelerate product development pushed this above 50 new models for the first time in 2003 and to 65 new model launches in 2004. This development is the result of the OEMs' costly attempts to place more models in a growing number of niche segments.

The pursuit of higher sales volumes by constantly changing products has led to the gross overcapacity and quality problems that result in the sales of millions of cars and trucks having to be subsidised through cash-backs and other incentives that topped US\$5000 a unit and up to 17,6 percent of the vehicle list price in 2004 in the USA (Haynes, 2004f). However, the expansion of the OEMs' product ranges has been met with stable demand in the main markets. Consequently, the average model lifecycle of the vehicles is about to shrink, thereby reducing the period in which the OEMs are able to achieve a return on their investment (Engineering News, 2005a). The proliferation of models and the development of niche market products could, however, open up important new opportunities for developing, lower cost producing countries such as South Africa.

The unfolding developments of the OEMs impact significantly on the developments of the automotive component suppliers, which will be discussed in the next section.



#### 2.4.5 GLOBAL COMPONENT SUPPLIERS

The global automotive component industry is characterised by a limited number of large global suppliers (typically OESs and first tier suppliers) as well as a large number of smaller companies supplying on a national or regional basis.

Table 2.3: Top twenty component suppliers by revenue, 2003

Rank & company	Total global sales US\$ millions	North America sales %	EU sales %	Asia sales %
1. Delphi Corp.	26 200	74	21	3
2. Robert Bosch GmbH	23 200	23	61	-
3. Denso Corp.	16 856	23	12	65
4. Visteon Corp.	16 513	67	18	8
5. Lear Corp.	15 747	60	36	-
6. Magna International Inc.	15 345	68	30	1
7. Johnson Controls Inc.	15 192	53	39	7
8. Aisin Seiki Co. Ltd.	13 534	12	7	80
9. Faurecia	12 700	10	86	3
10. TRW Automotive Inc.	11 300	41	50	-
11. Siemens VDO Automotive	9 500	18	73	7
12. Valeo SA	8 879	19	71	7
13. ZF Friedrichshafen AG	8 200	20	70	7
14. Dana Corp.	7 918	70	19	6
15. Continental AG	7 600	30	60	5
16. ThyssenKrupp Automotive AG	7 300	50	46	1
17. Yazaki Corp.	5 900	38	11	43
18. DuPont	5 510	50	35	11
19. CalsonicKansei Corp.	5 436	26	8	66
20. Autoliv Inc.	5 301	35	50	10

Source: Automotive World, 2003

Table 2.3 reveals the top 20 global suppliers by revenue. Delphi Corporation was a spin off from General Motors in 1999 and Visteon Corporation a spin off from Ford in 2000 (SACG, 2004:37). Denso Corporation, mainly resulting from its close relationship with Toyota, has improved its position from fourth to third position from 2002 to 2003. In addition, Johnson Controls Inc, Valeo SA, Dana Corporation and ThyssenKrupp Automotive AG have all improved their rankings by one position from 2002 to 2003. CalsonicKansei Corporation and Autoliv Inc. improved their rankings

the most by moving up several positions to feature in the top 20 rankings in 2003 for the first time. Industry analysts predict that Robert Bosch GmbH could surpass Delphi Corporation as the largest global OEM supplier if the US dollar maintains its record low levels against the euro.

The offensive strategies by the OEMs to win market share in an intensely competitive environment impact on the developments of the first tier automotive component suppliers and subsequently the lower tier suppliers. The relationships between the OEMs and the leading suppliers, as well as the countries and regions the multinational companies operate in, will present opportunities as well as risks. Managing the supply side to correlate with the demand side, which will be discussed next, is an ongoing process in a competitive global automotive environment.

## **2.5 THE DEMAND SIDE**

Factors that make a nation attractive to sell vehicles include the basics of sound gross domestic product and growing per capita levels, good road infrastructure, elasticity of demand, requirements for domestically adapted vehicles – (either from consumer or regulation demand), the availability of financing instruments as well as favourable tax and tariff structures, which lead to inherent market stabilities (Mercer, 2004:18-20). Global vehicle sales trends involving the leading OEMs in the main automotive producing regions and future vehicle demand will now be discussed.

### **2.5.1 GLOBAL VEHICLE SALES**

Global vehicle sales have been relatively stable over recent years up to 2003 and analysts' projections are for limited growth over the next seven years. Sales of around 60 million light vehicles per year reached in 2003 are therefore expected to increase to only 70 million in 2010. The limited growth is problematic and is driving the restructuring of competitiveness dynamics within the global automotive supply chain.

Global vehicle sales in 2003 were strongly dominated by the NAFTA region (19,6 million units) and Western Europe (16,3 million units). Japan and the rest of Asia (most notably China) are also important regional markets (VDA, 2004:28). Recent growth rates in each of the regions have however been highly variable, with certain markets (particularly South East Asia, and within this region China) performing exceptionally well and others performing rather poorly. Declining global market shares are expected in all of the mature markets. However, these markets are not expected to decline in absolute numbers, only in terms of relative importance.

The USA remains the largest single market for new vehicles but the American brands are losing market share with particularly the Japanese brands capitalising. The market share of the Big Three USA OEMs namely, General Motors, Ford and DaimlerChrysler, declined to 60,2 percent from 2002 to 2003, and their market share is projected to decline to 50 percent over the next five years. The Japanese brands in the USA increased their market share to a record high level of 28,9 percent in 2003. The USA market is dominated by light trucks, which have been growing annually over the past two decades, and comprised a market share of 54,2 percent of total USA new vehicle sales in 2003. The Big Three's share of light trucks comprised 66 percent of the volume and 73 percent of this market segment, which is also their most profitable area (SACG, 2004:6, 7). The ever-increasing market share in sales and profits of light trucks explains the increased focus by existing as well as new entrants into this segment.

As far as passenger car growth, the largest global segment, is concerned, the period from 2002 to 2003 saw an increase in demand by 1 percent to 47,3 million, with an increase in sales in excess of 6 percent for commercial vehicles. Although there was a decline in the North American and the Western European markets during 2003, Asia has continued to grow. The Chinese market has not reached its saturation point as yet and had grown by a high percentage of 35 percent, which contributed to the sales impetus in the Asian industry overall by 11 percent from 2002 to 2003 (VDA, 2004:28). The future demand of the developing regions is a main focus area and will be discussed in the next section.

### 2.5.2 FUTURE VEHICLE DEMAND

It is projected that by 2020 the developing country region will have overtaken the more developed country region in terms of the numbers of vehicles on its roads, but will still be behind in the vehicle ownership measure. This is because by 2020, despite a near doubling of the global parc between 2000 and 2020, world vehicle ownership will be 175 vehicles per 1000 population with 631 vehicles per 1000 population in the more developed countries but only 112 vehicles per 1000 population in the developing countries. This massive increase in the vehicle parc presents a profound challenge to the industry and to the world. To make this happen, it is recognised that the mass of new vehicles will simply have to be broadly smaller, lighter, more fuel efficient, cheaper and with narrower margins.

This reality is not a welcome prospect in an industry that is already in ferocious competition and makes the current trials in the Triad countries, with plant rationalisation, high-cost vehicle and component production facilities, the move towards locating new and existing facilities in lower-cost countries as well as strikes, pale into insignificance when compared with what the future may well hold (Haynes, 2004g).

## 2.6 SUMMARY

The supply side and demand side of the global automotive industry represent powerful forces that could profoundly change the industry. On the global automotive supply side, the Triad economies of North America, Europe and Japan represent approximately 70 percent of global vehicle production. The offensive strategies of a few dominant OEMs to win market share in an intensely competitive global environment impact significantly on the developments of the automotive component suppliers in the supply side. The demand side for vehicles, which is declining in the mature Triad markets, is problematic as supply is exceeding demand. The surge for cost savings by the OEMs is a priority area. Developing countries and regions, providing lower cost manufacturing and huge growth potential for both the global automotive supply and demand sides, are increasingly important focus areas.

## **2.7 MAJOR AUTOMOTIVE GLOBAL TRENDS AND DEVELOPMENTS**

One of the key features of industrial change over the course of the 20th century has been the globalisation of production. Instead of a product being manufactured from start to finish within a single factory (Fordism), products are now manufactured in networks of firms each specialising in a part of the production process (post-Fordism). These networks or value chains do not necessarily require geographic proximity in order to function and different stages of production are distributed throughout the world (KZN, 2002:1).

The consequences of globalisation for the automotive industry include the fragmentation of the market to lower production runs, dissatisfaction with the costly system of building cars for stock, not to order, innovative modular construction in which an increasing part of the car is assembled by parts suppliers as well as a possible switch to alternative energy powered cars. According to PriceWaterhouseCoopers (2005:6) the increased price competition reflects the decision of nearly every significant industry player to explore new geographies, new segments and new technologies in an effort to capture growth and create differentiation. The major identifiable global automotive trends and developments impacting on the global automotive industry are mergers and acquisitions, global production overcapacity, outsourcing and sourcing strategies, environmental requirements, and innovation and new technology. The next section analyses the major global automotive trends and developments and the consequent challenges faced by the automotive industry role-players.

### **2.7.1 MERGERS AND ACQUISITIONS (M&A)**

The automotive industry has been one of the leaders in merger and acquisition activity and has been consolidating since its establishment. In the 1920s there were 270 car companies, mostly in America, before the big three, General Motors, Ford and DaimlerChrysler, acquired the majority of them. Today, there are only seven big groups and three smaller groups dominating the global automotive environment

(Economist, 2004:15, 16). Both the OEMs and the component suppliers have responded to the changing economic and strategic climate by consolidating their companies, acquiring new companies and forming strategic alliances. The consolidation through mergers, acquisitions and alliances is driven by companies striving for economies of scale within a low-growth, low-margin market and with excess capacity on the supply side.

In 2004 M&A activity in the automotive sector increased in value by 26 percent to US\$26 billion from the US\$21 billion recorded in 2003, despite the number of deals declining to 512 from the 588 in 2003 (PWC, 2005:41). The net result of this M&A activity is the emergence of global groupings and evidence of subsectors becoming increasingly dominated by fewer and fewer firms. The consolidation trends by the OEMs will now be discussed.

#### 2.7.1.1 Consolidation trends by the OEMs

Most OEMs are dramatically reducing their use of unique, major platforms and extending these platforms more widely across group marques where appropriate. The total major platform numbers are forecast to fall by 17 percent between 2000 and 2007 with declines forecast in excess of 20 percent at Renault-Nissan, Hyundai and Toyota. Average production by platform is set to rise by just under 27 percent to 158 121 units strongly led by Honda, Renault-Nissan, Hyundai and Toyota (Whitebread, 2003:10). According to PriceWaterhouseCoopers, in the order of 16 to 18 percent of the world's vehicles came from similar platforms in 2003 and by 2006 this number is projected to be 40 percent (Haynes, 2003e).

The M&A trend amongst the OEMs is expected to continue and it would not be unrealistic to predict the existence of five or six dominant OEMs within the foreseeable future. However, instead of increased profitability, the M&A actions have mostly been considered to result in increased competition. In addition, not all mergers have been successful. A case in point is General Motors' US\$2,4 billion equity stake in Fiat, without gaining any perceived benefits. Furthermore, to end the partnership, General Motors had to pay an additional US\$2 billion (Beeld, 2005a:25).

The M&A strategies by the OEMs impact significantly on the automotive component suppliers, and this will now be discussed.

#### 2.7.1.2 Consolidation trends by the component suppliers

Consolidation among the OEMs is most likely to be mirrored in the first tier suppliers, where the emergence of a limited number of dominant players can be expected. This trend is, however, not only driven by factors such as economies of scale, but also by the strategies of OEMs to access new markets, avoid trade barriers, decrease dependence on home markets, produce less expensive alternative models, obtain technical skills, procure from fewer companies on a global scale, and shift increasing responsibility for design, engineering and production of components as well as assemblies to such suppliers (Beeld, 2004:2). Over the past 20 years the number of first tier suppliers to an OEM has declined to approximately 200 from more than 2000 (Haynes, 2003e). The main future action is expected to be among the next level, the second tier suppliers. Consolidation will continue to be driven by strategic, operational and financial objectives. The target countries and regions included in the OEMs' consolidation strategies will be discussed next.

#### 2.7.1.3 Consolidation trends in countries/regions

The Asian car market is now the last frontier for the M&A wave that has already swept through the EU and USA segments of the industry. The Asia-Pacific region, most notably China, is expected to contribute significantly to global automotive production growth over the next six years. Western OEMs are eager to tap into this growth to establish business in underdeveloped markets, and a successful strategy to capitalise on the future potential in emerging markets is critical to long-term survival. However, investments in Asia are not without risk and companies may not be able to move as aggressively as they would like. KPMG (2005b:9) concludes that the miracle of consolidation is increasingly being viewed with some suspicion. One argument against M&A activity and its consequent globalisation is that it has created much of the excess capacity that exists. The global overcapacity problem will be discussed in the next section in more detail.

### 2.7.2 GLOBAL OVERCAPACITY

New plants in the developing countries and the duplication of capacity between acquiring and acquired companies tend never to be fully compensated for by the closure of traditionally less productive plants. The reality is that between 1995 and 2004 industry has made little progress in matching supply with demand. Even after closing five to 10 plants a year over the last decade and cutting hundreds of thousands of units annually, the industry has simultaneously opened an average of 15 plants a year over the same period, resulting in a net increase in capacity (PWC, 2005:6). The overcapacity and the fact that new plants in developing countries often struggle to achieve critical mass effectively prevents the full economic benefit of consolidation and globalisation from being achieved.

Since different global companies and different countries are performing at various levels, it is making the overcapacity challenges more intricate. International analysts disagree on the exact level of vehicle production overcapacity, but the consensus appears to be that it is in the region of 25 to 35 percent. Overcapacity is expected to worsen dramatically increasing from the estimated 32,1 million units in 2003, which are equal to about 100 assembly plants, to 42,1 million units by 2010 (Haynes, 2003b).

The Triad countries, where nearly 70 percent of the world's cars and trucks are sold, have been running out of growth. In America, the arrival of European, Japanese and South Korean carmakers has created overcapacity. Moreover, as America's own OEMs constantly improve their productivity to catch up with these new rivals, their own improved efficiency increases capacity by about 3 percent a year. In Germany and France rigid labour laws and in Japan the close industrial relationships have inhibited the closure of old redundant factories.

In Japan only Toyota and Honda have remained in Japanese hands. The smaller Japanese producers make little or no profit at home and are struggling to be profitable in Europe. Even for the big companies, America provides the best opportunities for growing profits. The rest of the world presents a mixed picture. In



Asia the 1997 financial crises dealt the South Korean car industry a huge blow. Today only Hyundai survives as an independent company. In South America the economic collapse in Brazil and Argentina prevented a rapid expansion of the car industries there. The boom in China is getting everyone excited, but it needs to be kept in perspective. For all the huge percentage increases in China, working from a low base, the annual value of that market is equivalent to approximately a month's sales in the rest of the world (Carson, 2004:3, 4).

However, global overcapacity per se is not regarded as the problem, but where the overcapacity is located. The capacity issue needs to be viewed country by country and company by company. The winners will be those companies that are best able to develop production strategies in anticipation of future developments over the next decade. The OEMs doing their global capacity balancing acts most successfully at present are Toyota, Renault-Nissan, BMW and the Peugeot-Citroen group (Haynes, 2003d). As exchange rates and other economic factors vary and market trends around the world fluctuate, companies find that they need more capacity because their production resources are in unfavourable locations with the wrong build types and facilities. The outsourcing and sourcing strategies by the multinational companies are therefore important aspects to consider and manage and will be discussed in the next section.

### 2.7.3 OUTSOURCING AND SOURCING STRATEGIES

OEMs and mega automotive component suppliers need global reach, innovation and design capabilities as well as considerable financial resources (Humphrey & Memedovic, 2003:21). Increasingly, volume car manufacturing is a cost-driven business and manufacturing investment projects continue to be allocated to the less-developed countries that offer the twin benefits of huge factor cost savings and enormous growth potential (Oxford Intelligence, 2003:1). The intention was to spread vehicle development costs, establish cheap production sites for selected vehicles and components as well as for access to new markets for higher-end vehicles still produced in the Triad economies (Humphrey & Memedovic, 2003:1-5).

The outsourcing and sourcing strategy concepts as well as the target countries and regions for outsourcing and sourcing will now be discussed in more detail.

#### 2.7.3.1 Outsourcing

After mass production in the 1920s and “lean production” in the 1980s, the automotive industry has been undergoing a new revolution since the 1990s. By 2015 automotive suppliers will have taken over large parts of research and development (R&D) and production from the OEMs, achieving a total growth of 70 percent in this process. During the same period OEMs will give up 10 percent of their current value creation, even though their output will increase by 35 percent (Fraunhofer, 2002:1-6).

The development and production capacities of the OEMs will be focused in future on those modules and components that are most critical to the success of their brands. These trends will be driven in part by new technologies, the growing complexity of vehicles and the exploding diversity of models, all of which make development and production considerably more expensive. Moreover, OEMs increasingly find that investing in service capacities is more lucrative than investing in production capacities. Owing to increased modularisation concepts, there is a shift from production-orientated plants to assembly-orientated plants (Mawson, 2005a).

The automotive component industry in the Triad economies has considerably restructured as a result of the combination of changes in the relationships between the suppliers and the OEMs and the increasing global reach of the OEMs. Three significant changes have taken place. Firstly, there has been a shift in design responsibilities from the OEMs to suppliers, secondly, there has also been a shift towards the supply of systems sub-assemblies or modules, rather than individual components, and thirdly, the OEMs have become more involved in the specification of production and quality systems for their suppliers owing to the requirements of just-in-time (JIT) and just-in-sequence (JIS) supply (Humphrey & Memedovic, 2003:20, 21).

The greater responsibility places escalating demands on these suppliers, including more investment in innovation and development, more responsibility for tooling and logistics, greater responsibility for larger modules and systems and increased responsibility for second tier suppliers. Inevitably this means that suppliers are potentially exposed to greater risks. Management of risk exposure thus becomes a key objective of corporate strategy.

The consequences of the increasingly progressive changes in the outsourcing strategies by the OEMs, the relationships between the OEMs and their suppliers, as well as the sourcing strategies of the OEMs, will have a tremendous impact on the strategic objectives and business strategies of all industry role-players. The sourcing strategies and consequent challenges to the supply chain will now be discussed.

#### 2.7.3.2 Sourcing strategies

Evaluation of OEM sourcing strategies requires an in-depth analysis of the following three key areas (Whitebread, 2003:2):

- Firstly, the identification of the major trends in purchasing, manufacturing and product development at all the major light vehicle OEMs.
- Secondly, an assessment of the levels of corporate and market risk associated with current and expected strategic sourcing policies.
- Thirdly, the quantification of the likely volumes for major platforms and individual model programmes under development at the same OEMs.

The sourcing strategies of the OEMs followed by the sourcing strategies of the automotive component suppliers will now be discussed in more detail.

##### 2.7.3.2.1 OEM sourcing strategies

Many OEMs continue to take unique positions reflecting their own philosophies and stances on a competitive advantage. Differences in the OEMs' current and future sourcing strategies could play a major part in driving suppliers to increasingly favour one OEM over another. The different approaches by the different OEMs, indicating

the challenges the component suppliers have to cope with, in particular those supplying to more than one OEM, are summarised below (Whitebread, 2003:6-8).

- *General Motors/Fiat:* Widely regarded among the supplier community as taking the most uncompromising stance with suppliers, especially in the EU. General Motors's new purchasing contract allows it to switch suppliers with only 30 days notice, potentially affecting thousands of suppliers around the world. Independent businesses could be pressured into making big investments without any real security of ongoing business to recoup their costs, let alone a working profit. The new contract clause gives suppliers 30 days to match a rival's lower price or else lose the business. General Motors can terminate the contract with no cost or liability (Haynes, 2003g). However, the group is at the leading edge of transferring complete system responsibilities to their first tier suppliers.
- *Toyota:* Very demanding of suppliers, especially in the quality field, but widely respected by its supply base and still leads the industry with regard to its development/improvement programmes for suppliers. Its increasing global manufacturing footprint has placed significant demands on vendors. The company's conservative stance with regard to module development and supplier responsibility remains.
- *Ford Group:* Management changes in 2004 heralded a new public approach to sourcing strategies, particularly in the EU. Ford's core value of "think value not price" is being emphasised (SACG, 2004:41). Ford employees are urged to treat the company's suppliers better to become the customer of choice. In exchange the suppliers are required to dedicate their best people, invest their best resources and offer their newest technology and innovation to Ford to achieve a competitive advantage. A concern raised was that the company already outsourced too much of its previous core engineering expertise in certain areas to suppliers.
- *Volkswagen:* Continues to pursue many independent strategies and is reluctant to follow new industry trends, especially in the e-commerce area. It was into the platform rationalisation move early but prefers to focus on

modular components that can be used across a wide range of models. High volumes are available for key suppliers. The move towards a *BMW* supplier relationship model is apparent as its previous emphasis on secrecy dissipates.

- *DaimlerChrysler*: The company's global structure preserves the differentiation between its Mercedes-Benz and Chrysler brands. Its attitude towards suppliers has hardened in recent years as the emphasis has shifted to performance and accountability.
- *Peugeot-Citroen PSA*: Led the platform rationalisation trend in the EU, driving component commonality and economies of scale. Supplier rationalisation resulted in a core of 20 suppliers now accounting for 40 percent of total procurement.
- *Honda*: Highly respected by suppliers for its product engineering and manufacturing integrity. It retains its fairly conservative but very loyal stance towards its supply base because of its traditional emphasis on increased leaning of international processes. Strong commitments are made to source in the USA and elsewhere.
- *Renault-Nissan*: The Renault-Nissan Purchasing Organisation was formed and is becoming a dominant influence on sourcing, although the two companies' separate structures continue to exist. The short-term emphasis is to cut Nissan's purchasing budget and the long-term strategy will mirror Renault's traditional approach to suppliers.
- *Hyundai*: Traditionally has very close ties with its supply base in South Korea but is likely to break with tradition as its manufacturing operations are extended to the USA and the EU. The technical capabilities of its existing suppliers, including in-house operations, are suspect and joint ventures with global first tier suppliers are being encouraged. The company's expanding volumes and more global approach to sourcing are attractive features for suppliers.
- *BMW*: Has a conservative stance towards outsourcing and supplier responsibilities but has a high reputation amongst its supply base for engineering depth and genuine desire for developing partnerships.

However, the company demands very high quality and product development standards and is prepared to be first to market models with technical innovations developed by or with major first tier suppliers.

Ownership and management changes have been frequent in the last few years and suppliers can experience considerable upheavals in long-standing relationships when ownership changes at OEMs occur.

OEMs overall approaches to new model programmes, especially the focus for extensions/additions are of vital concern to suppliers and a long-term view of the dynamics at work is essential (Whitebread, 2003:9). The notion of a supplier choosing a specific OEM, the reverse of the traditional relationship, may seem far-fetched, but there are strong drivers for this happening. The impact of the OEMs' sourcing strategies on the automotive component suppliers' strategies will now be discussed.

#### *2.7.3.2.2 Component supplier sourcing strategies*

First tier suppliers are expected to cut costs typically by 4 to 5 percent annually (Haelterman, 2004:56-60). To achieve this, suppliers are pursuing similar strategies to their demanding OEM customers in an effort to reduce their own purchasing costs. These strategies include reducing the numbers of their own suppliers, which is a disturbing development for smaller companies. The pressure to globalise and the subsequent growing need for greater operational scales is forcing suppliers to relocate manufacturing to lower-cost production areas, to change and reduce the numbers of lower-tier suppliers as well as to more effectively manage their own supply chains. In many cases, suppliers are simply duplicating the hard-hearted measures of their OEM customers. They demand annual price reductions from lower tier suppliers, backed by threats of re-sourcing. As a result, low-cost country sourcing is regarded as the single biggest new strategy in future (Haynes, 2003d). The "made in China" stamp is already a symbol of the pitfalls of globalisation as a threat to the economic prosperity of many countries.

China's economic surge and entry into the WTO have sparked an alarm across the developing world. Cost differentials from automotive suppliers in China can reduce costs of products by some 70 percent in certain cases (Perrie, 2004:36, 37). As a result of the surge to reduce costs, lower cost countries are a main target area in the sourcing and outsourcing strategies of multinationals, which will be discussed in more detail in the next section.

#### 2.7.3.3 Target countries for potential future sourcing and/or outsourcing

The key reason for developing countries to promote a vehicle assembly industry is to encourage the development of a domestic automotive components industry, which will create jobs, reduce the effect on the balance of payments, stimulate technological capability and stimulate a spill over effect into other economic sectors (Humphrey & Memedovic, 2003:19).

The Asian Tiger countries benefited from the relocation of old business and the establishment of new business in their region as a result not only of low costs, but also the region's ability to master efficient production, offer required service levels to customers and access complex technologies of new products. The integration of regions and countries into global production chains has much to do with changes in ownership, which result from changes in political and trade regimes (KZN, 2002:1, 2).

General Motors went on record in 2004 as saying that it planned to source more parts from low-cost countries to replace some 97 percent of domestically sourced components going into vehicles it builds in the USA. South Africa, Eastern Europe and Asia-Pacific are being investigated for the role they can play as suppliers to General Motors (Haynes, 2003c). The success of South Africa and Eastern Europe in attracting global automotive manufacturers is not only due to the level of incentives and low cost of labour, but also their high quality of labour and emerging market advantages. Both only became open regions of production recently, having for historical reasons been relatively unavailable prior to 1990 (Humphrey & Memedovic, 2003:29-34).

The relevance of target countries and regions in OEM sourcing and outsourcing strategies becomes evident when considering that Japan transformed its automotive production from inferior to quality in 20 years and at the same time offered cost benefits over the EU and North America. The Koreans, using advanced technologies, were able to narrow the gap in under 10 years while further reducing relative costs. In a similar manner, the Chinese are able to leapfrog competitive suppliers in cost reductions while producing quality products. The Chinese have some distinct advantages over both the Japanese and the Koreans, as they are able to widen the cost differential substantially and position themselves as serious contenders for automotive world supply dominance. In this regard Brazil and India are also target regions. Economies of scale offered by a rampant OEM sector and rapidly growing aftermarket provide lower prices. Global competitiveness is enhanced by access to the large markets of the world, the availability of cheap labour and the ability to gear up with the latest technology (Perrie, 2004:36, 37). However, the growth of China's automotive industry has several important hidden weaknesses such as the mandatory joint venture policy, which is being forced on the Western companies as their only way to exploit the potential for volume sales into the world's fastest growing vehicle market. This exploits the industry's obsession with volumes when profitability is far more important in the long term. Already profit expectations from China are falling. Several legal disputes over intellectual property and product pirating are also surfacing with Western companies complaining that the Chinese are ripping off their designs and technologies, even whole car designs. There is a completely different business culture in China over intellectual property rights and sticking to business deals (Haynes, 2004d).

The associated risks in the continuous surge for cost savings, increased market share and higher profit margins are evident in the global automotive environment. In addition, new technology and innovation in products are ongoing in an attempt to differentiate products from those of competitors as well as to satisfy demanding consumers. Global automotive trends and developments in innovation and new technology will be discussed in more detail in the next section.



#### 2.7.4 NEW TECHNOLOGY AND INNOVATION

The integration of electronics into motorcars has been the greatest paradigm change in automobile design since the car was first developed (Campbell, 2004b:21). The two biggest changes in cars themselves over the next ten years are expected to be in electronics and in engines. Electronics in cars are becoming more important in a variety of ways. Electronic circuits determine the optimum fuel/air mixture, ignition sequence and valve timing on a modern engine. Without that kind of technology none of the dramatic improvements in cars' fuel economy over the past 20 years would have featured. As far as safety is concerned, electronic devices decide within microseconds of a crash how to inflate the airbags.

The Toyota Prius represents the quiet revolution that is about to engulf the car industry itself. Toyota is leading the revolution and is pioneering the industry's move into new kinds of environmentally friendly vehicles with a cleverly marketed and commercially viable product. The widespread use of all-electric, non-polluting vehicles, using hydrogen fuel-cell systems is probably still 10 to 20 years away. The Prius, with its little electric motor performing as a supplement to its petrol engine, is just a small step in that direction. However, it is significant because it represents two things that promise to transform the entire car industry – new technology and new production methods (Smeets, 2004:11).

Automotive technology stems mostly from the USA with a 40 to 50 percent share, the UK with 20 percent and Germany with 20 percent, although technological innovation, with increasing frequency, is coming from Japan (Mabokano, 2004:7; KPMG, 2005b:12).

The main thrust of global automotive competition at present is in product development. Each OEM is trying to compete in every segment of the market with a plethora of niche models designed to attract particular groups of consumers and to renew the models rapidly enough to keep interest fresh (Mercer, 2004:18-20). Owing to intense competition and the stagnant markets, the only way to grow is to take

market share away from competition. Being the first in a new segment will result in quick sales, higher profit margins and a higher market share.

In 2003 globally less than 5 percent of new cars sold had telematics-enabled features, but this is projected to escalate to about one third of new cars sold in the developed nations by 2008. Already electronics account for 18 to 35 percent of the cost of producing a vehicle and in a premium car can contribute as much as 50 percent of the OEM's profit (Haynes, 2003a). The aftermarket also capitalises by introducing portable solutions almost as fast as the trends begin to appear (Magney, 2005:45). However, electronic systems have proved to be particularly vulnerable, forcing some ambitious telematics strategies to be delayed or shelved completely as the industry experienced new record levels of approximately 40 million recalls globally in 2004 (Haynes, 2005a). These recalls are adding billions of dollars of additional and largely unnecessary costs to the OEMs' operations. Recalls have now become a major factor in the operational losses OEMs make on their core business. Several hundred dollars are being added to the cost of each vehicle by this global epidemic of quality and design faults and the problem will remain as vehicles are becoming more complex and are being introduced at a faster rate than ever before.

The attempts by the global automotive industry role-players to introduce new technology and innovation into products are not necessarily driven by consumer demand but by global regulatory demand. The automotive environmental requirements will be discussed in the next section.

#### 2.7.5 AUTOMOTIVE ENVIRONMENTAL TRENDS

A balance must be struck between the needs of the industry, the demands of the market and the vital preservation of the earth's environment. Whether in the area of fuel or noise reduction, lowering of emissions, raising of safety standards or recycling, the automotive industry has already made big leaps forward. Today's vehicles are less polluting, more fuel efficient, quieter, safer and more recyclable than ever before.

Dr Thomas Weber, DaimlerChrysler management board member, states that by 2050 the projection is for about 2 billion cars worldwide, which raises the concern that the world's oil stocks will decline and the need for more fuel-efficient systems or alternative fuel or power sources will increase (as cited in Campbell, 2004a).

The need exists to reduce gaseous and particulate emissions from motor vehicles for health and environmental reasons and the standards are getting stricter. These emissions include hydrocarbons, particulates, nitric oxides and carbon dioxide. Five clear phases in future energy for vehicles have been identified:

- Optimisation of the internal combustion engine
- Improvement of conventional fuels
- CO<sub>2</sub>-neutral biofuels
- Hybrid vehicles
- Fuel-cell technology

The leading obstacle to fuel cells is the infrastructure that will have to be created to support them, not necessarily the manufacture, transportation, storage, distribution and retailing of hydrogen. It is estimated that the current cost of fuel cells must be cut by at least 50 percent to be economically viable (Campbell, 2004b:21). Fuel cells are still about ten times more expensive to make than internal-combustion engines, while costs, technical and safety problems remain to be resolved in setting up a distribution system to get hydrogen into cars (Mercer, 2004:18-20; Emslie, 2005:16).

The latest emission limits to be introduced on vehicles in Europe and the USA will make further reductions in air pollution despite traffic growth. In 2004 passenger cars produced 95 percent fewer emissions than in the mid 1970s and trucks 90 percent fewer emissions than in 1985. Waste is one of the biggest environmental problems of the future and the reason to minimise the impact of end-of-life vehicles (Blum, 2000:4, 5). The OEMs have taken a global lead in respect of environmental protection and have worked hard over many years to produce cleaner vehicles.

## **2.7.6 SUMMARY OF MAJOR AUTOMOTIVE GLOBAL TRENDS AND DEVELOPMENTS**

The global automotive industry is experiencing the effects of change in an accelerated way owing to the globalisation of production. The cost-cutting strategies of the OEMs and as a consequence their suppliers as well are fundamentally driven by certain strategic underlying global trends. Most notably the challenges are induced by major global trends, including M&As, global production overcapacity, outsourcing and sourcing strategies, new technology and innovation, as well as environmental requirements. These realities have important implications for the automotive industry, especially in developing countries. Developing countries, increasingly integrated into the global automotive value chain of global role-players, not only have to cope with and incorporate the direct impact of the major global trends on their operations, but also have to compete with each other for sourcing and outsourcing opportunities. In order to capitalise offensive and defensive strategies by all automotive industry role-players are required to maximise global automotive opportunities and minimise risks.

## **2.8 GLOBAL AUTOMOTIVE INDUSTRY PERFORMANCE INDICATORS**

Maxton (as cited in Haynes, 2004f) calculates that the automotive sector has an economic value of US\$5 trillion for developed countries and, after deducting the sector's costs, the net direct value amounts to US\$3,6 trillion. In contrast, the economic value for developing countries amounts to only US\$0,6 trillion and with costs of US\$1,4 trillion the net negative value amounts to US\$0,8 trillion. The direct value is reflected in terms of jobs, employment and taxes with an estimated add on for the added value of the mobility that vehicles provide. Therefore, attracting investment in car assembly plants or opening doors to free trade and a flood of vehicle imports are not the win-win situation as often portrayed. However, the long-term implications of market maturity in the Triad economies and substantial opportunity in others force a reshuffling of the global ranking order in relation to automotive vehicle production and sales. The drivers for change will come both from within and without the global automotive industry, but cumulatively will have a profound effect on the industry and its financial performance, employment levels and

investment intensity (Mullineux, 1999:3). The global automotive industry performance indicators in respect of its financial performance, employment levels and investment intensity will be discussed in the next section.

## **2.9 GLOBAL AUTOMOTIVE FINANCIAL PERFORMANCE AND PROFITABILITY**

For most of the last ten years the automotive industry has performed poorly. The consequence is that the entire sector has lost its importance to financiers. If this situation does not change, many jobs will be lost, many more companies will fall into the financial difficulties faced by Fiat and Mitsubishi in 2004 and many valuable skills will be lost (Haynes, 2004f).

The 2004 Fortune 500 ranked the automotive sector near the bottom of all 47 industries in return on assets, return on revenue, return on equity and all other metrics. Similarly, the Standard and Poor 500 highlighted the automotive sector as having the worst results of any industry, with a net margin of 1,6 percent and a return on invested capital of -4,7 percent (PWC, 2005:5). Profitability projections by the OEMs, as well as automotive components suppliers, from 2004 to 2009 are downward owing to the continued transfer of market share from Detroit to Tokyo and Seoul, record oil prices, record high sales incentives, rising steel, rubber and plastics costs, coupled with rising interest rates in Triad countries as well as the persistently weak US dollar. The highly competitive atmosphere and the pressure to cut costs are having a significant impact on industry profitability, with the OEMs more pessimistic in their profitability expectations than the automotive component suppliers. The reason for the price war is simple – increased competition (KPMG, 2005b:3; KPMG, 2006:3, 4).

### **2.9.1 OEMS PROFITABILITY**

According to Carson (2004:3, 4), the OEMs' average profit margins have declined from 20 percent or more in the 1920s to around 10 percent in the 1960s and less than 5 percent over the years up to 2004, while some are losing money. For most of the last ten years the automotive industry has performed poorly. Volkswagen,

General Motors, Ford, Mazda, Mitsubishi, Chrysler, Fiat and Renault – some of the biggest names in the business – are currently all destroying value. Many car brands continue to lose money from their core operation of making cars and are surviving by cross-subsiding this high profile part of their business with financing and inflated parts prices. In 2003 the car industry represented 1,6 percent of Europe's stock market capitalisation and 0,6 percent of America's, compared to two decades ago when these were 3,6 percent and 4 percent, respectively.

Von Keyserlingk (2005:3) indicates that, based on the 2003 financial performance of all the leading OEMs, out of the world's top 17 car companies only half are earning more than the cost of their capital. The value creators were Porsche, the Mercedes part of DaimlerChrysler, BMW, Peugeot, Toyota, Nissan, Honda, Hyundai and Kia. America's big three were all in the value-destruction group along with Renault, Fiat, Mazda, Mitsubishi and Volkswagen. The overriding reason for the lack of profits is the excess capacity in mature markets. In contrast, Japan's Honda, Toyota and Nissan are growing and making healthy profits as they have managed to address the problems facing OEMs, which include too little growth, too many factories, poor management and a refusal to make strategic changes when they should. A way out for the weak OEMs is to make some major changes to their businesses soon. They need to reconstitute their businesses in a more rational way by reducing the number of models, eliminating weak brands, closing excess production lines and working in proper partnership with suppliers and dealers. The combined market value of all the troubled OEMs in the world is not even half of that of the most successful firm, Toyota (Haynes, 2005b). In 2004 General Motor's total debt, resulting from retrenchment packages and early retirements, amounted to US\$301 billion compared to its market capitalisation of US\$16,7 billion. In 2004 its average profit per vehicle amounted to US\$290 per vehicle compared to Toyota's US\$2000 per vehicle. Ford's total debt amounted to US\$150 billion and its average profit per vehicle amounted to US\$38 in 2003 (EIU, 2003). In 2003 Toyota had a greater intrinsic value than any of General Motors, Ford, Volkswagen and DaimlerChrysler and was actually worth more than their combined market capitalisation value. Toyota

was ranked number one in profitability in 2003 and added value well ahead of the rest of the industry (Haynes, 2004e).

According to Katz (2003:23) smaller carmakers, with annual production volumes of fewer than four million units, will gain global market share up to 2008. Smaller, more flexible OEMs, including Peugeot-Citroen, Honda, Hyundai and BMW, will grow at about 5,3 percent globally up to 2008. The six major OEM groups, General Motors, Ford, DaimlerChrysler, Toyota, Renault/Nissan and Volkswagen, will grow at only about 1,8 percent globally up to 2008 (Economist, 2004:15, 16). Excluding the rapidly expanding Toyota from the major OEM group, prospects for the future look grim.

Competition amongst the OEMs is unlikely to dissipate. The established OEMs will have to reinvent themselves to seek profit and not just market share, otherwise new, nimbler competitors will take advantage of technological changes to do the job for them. The impact of the pressure on the OEMs' profitability and consequently on the automotive component sector's profitability will now be discussed.

#### 2.9.2 COMPONENT SECTOR PROFITABILITY

OEMs are increasingly moving vehicle manufacturing down the supply chain to the point that suppliers are responsible for two-thirds or more of the content of many car models globally. This makes both the component suppliers and the OEMs vulnerable if the relationships between them deteriorate. In far too many cases these values are based on the principle of coercion, not collaboration. The attitudes of the OEMs are reflected in their financial performance and the value of their companies. A positive sign is that more OEMs have realised that such damage to their supply chains will be to their own detriment. The emphasis is starting to move from forcing cost reductions out of suppliers to collaborating with them to get costs down, while preserving viable margins. Toyota, the fastest growing global OEM, has the development of good relationships as one of its core values and is now worth five times as much as Ford, although both produce about the same number of vehicles. Ford and DaimlerChrysler, two global OEMs that are currently in crisis, have pursued cost-

cutting strategies that have created particularly adversarial relationships with their suppliers. Toyota and Honda have placed the emphasis on collaborative partnerships with suppliers resulting in jointly solving problems. The best performing global supplier, expanding rapidly in Europe and Asia, is Denso Corporation, Toyota's closest partner (Haynes, 2004a).

However, despite severe cost-cutting strategies, most automotive component suppliers are reporting either losses or steep falls in earnings. Predictions are that 50 percent of first and second tier suppliers could be out of business by 2012 as 47 percent of USA suppliers, 26 percent of European suppliers and 36 percent of Asian suppliers have experienced financial difficulties in 2003. The financial difficulties could be attributed to the switch to emerging markets where the cost of manufacturing is on average 33 percent lower than in the USA, Europe and Japan (Haynes, 2003b). The fourth ranked global automotive supplier Visteon Corporation has acknowledged that even it is not big enough to establish a viable business that does not remain dependent on Ford, its biggest customer and previous owner. Some suppliers are abandoning sectors in which they acknowledge they can no longer compete. The actions by the automotive component suppliers are indicative of how tight margins are and how tough the challenge is to remain viable, even if a company can achieve the enormous volumes achieved by the top global OEMs and have control of new technologies to enjoy competitive advantages.

OEMs are becoming more active in pursuing a larger share of the aftermarket and are increasing their participation in aftermarket sales and services through car dealerships, enabling them to dictate the terms to parts suppliers. The aftermarket, defined as the manufacture and sales of replacement parts and accessories, has been neglected but is profitable and could compensate for decreasing profits. The number of vehicles in use increases annually and the aftermarket, supplying replacement parts, is growing in tandem. The poor financial performance of the global automotive industry will not however be resolved over the short term and its consequent impact on the industry's employment levels will be discussed in the next section.



## 2.10 AUTOMOTIVE EMPLOYMENT

The International Organisation of Motor Vehicle Manufacturers (OICA) revealed that direct global automotive employment represented in excess of 5 percent of the world's total manufacturing employment in 2003 (OICA, 2004). Comparable global employment data has a time lag of some three years but, as Table 2.4 reveals, nearly 8 million persons were directly employed in the manufacture of vehicles and automotive components in 2003. China, with 1 154 000 persons, employed the most direct employees in the automotive sector in 2003, ahead of the USA, Japan and Germany.

Table 2.4: Direct automotive industry employment by country, 2003

Country	Direct employment
China	1 154 000
USA	912 000
Japan	858 000
Germany	764 000
Russia	755 000
South Korea	333 000
France	320 000
Spain	317 000
India	270 000
UK	229 000
Other	2 047 000
Total	7 959 000

Source: International Organisation of Motor Vehicle Manufacturers (OICA), 2004

Figure 2.2 reveals that the employment trend is downward as automotive employment data for the top 15 automotive manufacturing countries showed a decline of almost a quarter of a million jobs from 1999 to 2002, representing a loss of more than 5 percent of total employment. Stagnant demand and low profit margins experienced over the last decade have resulted in a restructuring throughout the automotive supply chain. The mature markets have also run out of growth and if the situation does not change, jobs and valuable skills losses will continue.

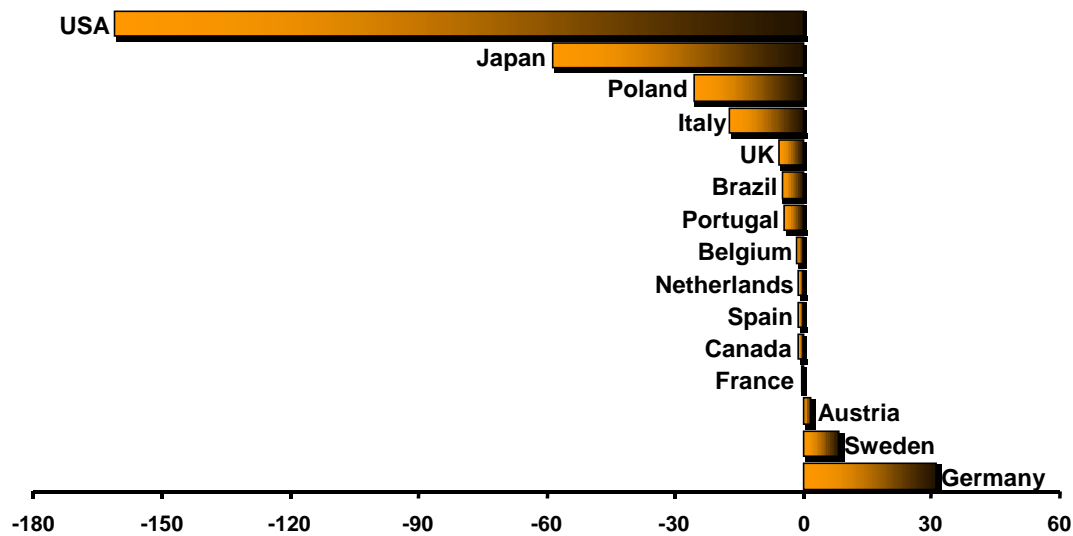


Figure 2.2: Automotive employment trends, top 15 automotive producing countries 1999-2002 ('000 of jobs)

Source: VDA, 2002

Figure 2.2 reveals that the USA accounted for two-thirds of employment reduction over the period, with a decline of about 160 000 jobs, while Japan saw a decline of around 60 000 jobs. The USA and Japan combined accounted for 90 percent of the job reduction for the given period. A few countries like Germany (31 000 jobs), Sweden (8000 jobs) and Austria (2000 jobs), however, recorded employment gains between 1999 and 2002.

More details relating to the employment impact on the OEMs and the automotive component suppliers will be discussed next.

#### 2.10.1 OEM EMPLOYMENT

The inability of many leading USA and EU OEMs to be competitive in Western Europe is due to strong currencies coupled with high wages and health, pension and other social measures. General Motors, Ford, Volkswagen and DaimlerChrysler are all planning retrenchments in their European operations, particularly in Germany from 2004 onwards (Haynes, 2004f). General Motors, in what is regarded as one of the most inclusive retrenchment plans in the USA since 2002, is planning to close 12 plants and retrench 30 000 employees from 2005 onwards. Together with the 4000

employees retrenched by Ford, the 89 000 employee losses experienced in 2005 in the USA automotive sector were close to the record set in 2001 (Beeld, 2005b:28). The developments by the OEMs will subsequently impact on the automotive component suppliers' employment levels as well. However, expansions of foreign operations in low cost areas could benefit from the plant closures in the USA. In this regard South Africa has already benefited via the investment by General Motors in the production of the Hummer 3 (H3) in the country for exports to main markets from 2006 onwards.

#### **2.10.2 COMPONENT SECTOR EMPLOYMENT**

In view of the big global squeeze being applied on suppliers, Delphi Corporation, the world's largest automotive component supplier revealed in 2004 that it plans to reduce its workforce worldwide by another 8500 jobs from its already slimmed 187 000 employees (Haynes, 2003f). Visteon, ranked number four, is also aiming to reduce its head count and its costs after sustaining a net loss resulting from competing with low cost producers in China and other territories.

All the OEMs and suppliers are now turning to global purchasing, particularly sourcing from China, to try and balance their books in a climate of unprecedented pressures on their pricing. The price pressures not only impact on employment levels in the industry but also drive the investment decisions, which will be discussed in more detail in the next section.

#### **2.11 AUTOMOTIVE INDUSTRY INVESTMENT INTENSITY**

Despite the automotive sector's weak performance, projections are that the demand for vehicles over the next 20 years will exceed the demand of the previous 110 years since the industry's existence. The increased demand would need 170 to 180 new assembly plants alone, each producing 300 000 units. The need for the new capacity would see investments worth about US\$80 trillion going into the industry (Haynes, 2003f; Lourens, 2005b).

Table 2.5 reveals that the OEMs have continued to add new assembly capacity around the world. Comparable investment data has a time lag of three to four years and is complicated by different definitions used by different countries but in 2003 in excess of 66 billion euros was invested in research, development and the production of vehicles and automotive components. The automotive industry also plays a key role in the technology level of other industries.

Table 2.5: Investments in euro billion by country in research, development and production, 2003

Country	Investment euro billion
USA	13 060
Germany	12 300
Japan	5 309
France	5 039
Spain	3 592
UK	3 180
Italy	3 150
China	3 092
South Korea	2 518
Canada	2 496
Other	12 316
Total	66 052

Source: International Organisation of Motor Vehicle Manufacturers (OICA), 2004

OEMs are constantly looking for areas and nations that are attractive to sell in and, aside from domestic demand situations, also countries that are sufficiently attractive to establish manufacturing facilities in. Factors that make a nation attractive for establishing a manufacturing facility include the basics of access to transport, raw material availability, relevant utilities, labour skills and economic and political stability. The stability aspects include local content prescriptions, tariffs, a facility for profit repatriation, incentives in the structure and trade agreements (Mercer, 2004:18-20). Foreign direct investment is increasingly moving to higher labour skills and competitive advantages include lower wages, a well-educated labour force and proximity to markets (CBI, 2004a:9).

China's automotive sector, in accordance with its commitments under the WTO trade liberalisation, is transforming greater space for foreign automotive companies. China's market size is potentially huge and is used as the main leverage for luring automotive investments. Several foreign OEMs have announced investment plans amounting to US\$13 billion in the country over the next few years. China has more than 5000 component production plants and 130 vehicle facilities. An ambitious export plan, which aims to export cars and automotive components of between US\$70 billion and US\$100 billion by 2010, has been unveiled. Foreign OEMs are required to operate via a joint venture, with a 50 percent ceiling on their interest. Component manufacturers are not subject to this restriction (Business Day, 2004a; Davies, 2004; KPMG, 2005a:6).

In the 1990s when the OEMs invested in emerging markets, the major component suppliers were pressured to follow their major customers and were attracted by the growth potential of these markets. However, the attractions of follow sourcing have been eroded by the volatility of demand in emerging markets, which undermined profitability. The follow sourcing strategy does not appear to create opportunities for domestic firms in developing countries, as in most cases OEMs choose transnational firms who already supply the OEMs to supply the parts. With the restructuring of the supply chains this means that opportunities for domestic component manufacturers are mainly confined to the second tier manufacturers with limited design functions. The opportunities for second tier suppliers are associated with specialisation and upgrading competences, with some development for product innovation, as well as privileged access to the Triad markets through trade preferences. The future of the automotive industry, however, is shaped largely by the production and sales strategies of transnational companies (Humphrey & Memedovic, 2003:31-33).

## **2.12 SUMMARY**

Increased competition has resulted in a disappointing financial performance by the OEMs, which, as a consequence, is mirrored in the financial performance of the automotive component suppliers as well. Short to medium-term projections in

respect of industry profitability remain pessimistic in the face of an expanding list of structural and cyclical challenges. The poor financial performance by both the OEMs and their suppliers also impact negatively on the employment levels in the industry, which is in a declining trend. However, the production and sales strategies of the OEMs and their suppliers to increase market share, mainly in the developing countries, determine the investment intensity of the global automotive industry. Despite global overcapacity, significant investments have occurred in production capabilities and are projected to continue over the medium term, most notably in China.

## **2.13 SUMMARY OF CHAPTER 2**

The automotive industry is a global industry dominated by a few OEMs, mainly concentrated in the Triad countries of North America, Western Europe and Japan. The markets in the Triad countries are mature and plagued by vehicle production overcapacity, cost pressures and poor financial performance. The intense competition for increased market share by the OEMs is resulting in challenges as well as opportunities for developing countries that are able to provide the twin benefits of huge factor cost savings and enormous growth potential. Owing to the different approaches and cost-cutting strategies of the leading OEMs in the Triad economies to balance the automotive supply and demand sides, major global trends arise. These underlying global trends include mergers and acquisitions, global production overcapacity, outsourcing and sourcing strategies, new technology and innovation as well as environmental requirements. These major global trends have a significant impact on the development and future of the global automotive value chain role-players as well as the developed and developing automotive producing countries and regions. Developing countries, which are targeted to add value to the global strategies of the multinational companies, attract large-scale investments in production facilities for completely built-up vehicles and automotive components. Governments around the world are therefore actively attempting to promote their countries in attracting automotive investments via government policy and support

measures in recognition of the sector's benefits, despite the current under-achievement by the leading OEMs and their suppliers.

## **CHAPTER 3: THE EVOLUTION OF SOUTH AFRICAN AUTOMOTIVE INDUSTRY POLICY**

### **3.1 INTRODUCTION**

Chapter 3 focuses on the evolution of the automotive industry policy in South Africa over the past century. Key automotive government policy instruments, including the MIDP introduced in September 1995, as well as the consequent impact and implications of these policy changes on the South African automotive industry will be analysed. The background information serves as a frame of reference for the study to analyse the role and relevance of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment.

### **3.2 OVERVIEW OF EARLY DEVELOPMENTS IN THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY**

A successful automotive industry is often seen as an emblem of economic success and, especially in developing countries, as a sign of mastery of modern technologies (Flatters, 2002:2). South Africa industrialised its economy by pursuing a policy of import substitution. From the 1940s to the 1970s this route to economic development was popular with most countries aiming to catch up with developed countries such as the USA, France and Great Britain. Japan and the Asian countries were able to build a strong industrial manufacturing base through the import substitution process. However, import substitution carried the dangers of price inefficiencies and stagnation as a result of monopolistic tendencies (Chiaberta, 2004a:25-28). Table 3.1 summarises the key policy instruments used by the South African government to develop the domestic automotive industry as well as the impact and developmental consequences thereof.



Table 3.1: Summary of automotive policy development in South Africa

Period	Key automotive policy instruments	Development and comments
<b>1910</b>	Import duty on cars set at 15% ad valorem with a 3% rebate facility and on aftermarket components set at 20% ad valorem (ITAC, 1949:62).	(1913) Chevrolet started to distribute cars to South Africa (Botha, 2003).
<b>1915</b>	Increase of the import duty on cars to 20% ad valorem with a 3% rebate facility (ibid, 1949:62).	
<b>1925</b>	<p>Increase in the import duty on passenger cars to 20%, 22% and 25% ad valorem, where the higher duties applied to the higher value cars. The 3% rebate facility was withdrawn on British cars (ibid, 1949:62).</p> <p>Increase in the import duty on assembled or unassembled trucks from 3% ad valorem to 20% ad valorem and on chassis for these vehicles, assembled or unassembled, to 5% ad valorem (ibid, 1949:69).</p>	(1924) Establishment of Ford Motor Company of South Africa. The coastal location allowed for the easy importation of components (ITAC, 1949:5).
<b>1926</b>	<p>Reduction of the import duty on chassis for bodies from 20% to 10% ad valorem to promote domestic body manufacturing (ibid, 1949:63).</p> <p>The first reference to used cars in the Tariff with the import duties set at similar rates to those for new cars (ibid, 1949:66).</p> <p>Reduction of the import duty on parts and materials for chassis and bodies for cars to 15% ad valorem, subject to certain conditions (ibid, 1949:64).</p>	(1926) Establishment of General Motors South African Limited (ibid, 1949:5).
<b>1929</b>	Reduction of the import duty on assembled or unassembled chassis on trucks from 5% to 3% ad valorem (ibid, 1949:67).	(1929) The South African Bureau for Labour Statistics indicated that the automotive industry showed the greatest instability of employment of all the industries. The changing of models annually, which caused certain plants to close down for a month, the perception of automotive assembly as low and semi-skilled as well as low unemployment rates at the time were reasons mentioned for this phenomenon (ibid, 1949:35).
<b>1931</b>	Provision of the first rebate facility for the importation of certain parts and materials for the assembly of cars and bodies for cars (ibid, 1949:73, 74).	
<b>1932</b>	<p>Increase in the import duty on cars by an additional 5% (ITAC, 1932a:3).</p> <p>Imposition of an exchange dumping duty on cars from the UK and Canada (ibid, 1932b:2).</p>	

<b>1934</b>	Various rates of protective duties on identifiable automotive components recommended and implemented based on industry petitions (ITAC, 1949:71-73). Provision for unassembled chassis for cars set at 10% ad valorem and for bodies, parts and materials set at 12,5% ad valorem (ibid, 1949:65).	(1934) Automotive policy shifted towards vehicle assembly instead of manufacturing due to the economically unviable low volumes. Long-term policy was still to encourage domestic manufacturing of components as well as for the import duty difference between assembled and unassembled cars not to be too big (ITAC, 1960:29, 83).
<b>1939</b>	Ad valorem import duties on cars, chassis and body parts switched to specific duties equal to the ad valorem duty rates (ibid, 1949:62).	(1939) The average South African vehicle age was 5,5 years (ITAC, 1949:13).
<b>1947</b>	The specific import duties were switched back to ad valorem duties as well as increased to 25% and 30% ad valorem on cars, where the higher duties applied to the higher valued cars (ibid, 1949:63).	(1943 to 1945) Imports and assembly of cars came to a standstill due to World War II (ITAC, 1960:15). (1947) Five assembly plants operational in South Africa with a capacity design of 83 000 units all focusing on USA brands, except for General Motors which also assembled the British Vauxhall (ITAC, 1949:6, 7). (1947) South Africa was ranked seventh out of 141 countries in terms of global vehicle use with a ratio of 26 persons per car (ibid, 1949:5). (1948) The first installation of moving production lines at General Motors and Ford (ibid, 1949:38).
<b>1956</b>	An excise duty was introduced on cars based on vehicle mass (ITAC, 1960:59).	(1958) South Africa ranked ninth in the world's passenger car parc above other vehicle producing countries such as Brazil, India, Japan and various European countries (ITAC, 1960:9).
<b>1959</b>	Recommendations were made to develop the automotive industry in South Africa, which included an increase in duty on passenger cars and light commercial vehicles, to levy an excise duty on domestically assembled vehicles and completely knocked down kits, to provide additional protection to domestic component manufacturers and to create rebate provisions subject to local content requirements (ibid, 1960:85).	(1958) Eight OEMs operated in South Africa of which five were foreign owned and assembled 75% of vehicles while three OEMs assembled vehicles on contract on behalf of other companies. Seven of these firms were situated at the coast with the component manufacturers in close proximity. The increase in local content from single digit levels to 18% was regarded as a significant process of evolution (ibid, 1960:15, 22).

<b>1961–1963</b>	<p>Phase I of the local content programme was introduced to increase local content in mass from 15% to 40% (ITAC, 1988:4).</p> <p>The ad valorem duty on imported motorcars was set at 35% plus an additional percentage up to a maximum of 100% depending on the value and the weight of the car. The level of excise rebates on motorcars varied between 15% (for a local content of between 25% and 30% by weight) and 75% (for a local content of more than 70%). Components generally attracted a duty of 20% ad valorem (ITAC, 1965:2).</p>	<p>(1960) South Africa produced 87 000 vehicles, more than any other developing country in the world (Black, 1998:5).</p> <p>(1963) The main competition for the domestic vehicle did not stem from imported cars but from other domestically assembled vehicles with a lower local content. The position vis-à-vis a competitor was broadly determined by the degree to which the cost premium attached to the higher priced domestically sourced components were off-set by the additional excise rebates for the higher local content (ITAC, 1965:2).</p>
<b>1964–1969</b>	<p>Phase II of the local content programme was introduced to increase the nominal local content in mass from 45% in 1964 to 55% 1969, which was equivalent to a 50% net local content as redefined. The determination of the net local content was complicated and required government approval for certain parts, sub-assemblies or materials as local content (ITAC, 1988:4; ITAC, 1965:22).</p>	<p>(1964) Record new vehicle sales of 143 373 units achieved in the domestic industry (ibid, 1965:7).</p>
<b>1971–1976</b>	<p>Phase III of the local content programme was introduced with a minimum net local content of 52% at the beginning of 1971 to increase to 66% on 1 January 1977 (ITAC, 1988:4).</p>	<p>(1975) The 13 OEMs operating in South Africa produced 39 models serviced by 300 component manufacturers. The GDP contribution of the automotive sector was 3,3% (ITAC, 1977:8, 70).</p>
<b>1977–1978</b>	<p>Phase IV of the local content programme comprised a two-year “standstill” phase to assist industry in consolidating its position after the severe narrowing of profit margins the previous three years (ibid, 1988:4).</p>	<p>(1979) Disinvestment by General Motors and Ford occurred due to the sanctions against South Africa (Gelb, 2004:41-45).</p> <p>(1976–1986) The number of OEMs decreased from 16 to seven and the number of models from 53 to 20 due to recessionary conditions, the significant devaluation of the rand in 1984 and 1985 and escalating domestic inflation. All seven OEMs recorded losses in 1985 (ITAC, 1988:26, 63, 64).</p>
<b>1980–1988</b>	<p>Phase V of the local content programme was introduced with a minimum net local content of 66% by mass in respect of motorcars and 50% by mass in respect of light goods vehicles and minibuses (ibid, 1988:7).</p>	<p>(1980–1984) The introduction of locally manufactured engines, gearboxes and axles for commercial vehicles. ADE and ASTAS were accorded the rights to be the sole manufacturers for the engines and gearboxes, respectively, for commercial vehicles. The ADE engine had a price disadvantage of 100% against the free on board value of an imported engine. 19 commercial vehicle assemblers operated in the domestic market (ITAC, 1985:8, 10).</p>

<b>1989–1995</b>	<p>Phase VI of the local content programme was introduced and involved a radical change in the calculation of local content based on value as opposed to mass. Phase VI encouraged local motor vehicle assemblers to increase local content from an industry average estimated at 55% at the inception of the programme to 75% (including exports) by the year 1997. Phase VI sought to reduce the foreign exchange used by the vehicle manufacturing industry by about 50% over the period 1989 to 1997. Local content was defined as the ex-works price less foreign currency used, including profit and overheads, which mean that pricing could be used to create local content. The import duty on aftermarket parts and components for motor vehicles was increased to 50% ad valorem and on passenger cars to 100% ad valorem, whether or not assembled, while exports were allowed and accounted to be part of the local content value. An excise duty of 40% on the value of locally assembled vehicles applied, of which up to 37,5% was rebated based on the local content level (ITAC, 1989:26-33). The effective rate of protection for the industry was calculated to be in excess of 400% (MITG, 1994:31).</p>	<p>(1989) A budgetary constraint was placed on Phase VI in that the programme had to be self-funded. Thus the ordinary excise duty and excise duty rebate would have to be equal (ITAC, 1992:2).</p> <p>(1991–1994) Samcor (1991), Volkswagen (1992) and BMW (1994) exported vehicles from South Africa (Damoense &amp; Alan, 2004:264).</p> <p>(1992) Price comparisons of passenger cars between South Africa and Germany, Japan, the USA, the UK and Australia indicated a South African price disadvantage of up to 72%. The lowest-priced car category prices were competitive but in the higher-priced categories the price inelasticity enabled OEMs to achieve higher margins (IDC, 1993:15-17).</p> <p>(1993) The seven vehicle assemblers produced 39 different passenger car and light commercial vehicle models (MITG, 1994:35).</p>
<b>1994</b>	Reduction of the duty on passenger cars to 80% ad valorem from 1 January 1994.	
<b>1995</b>	<p>Reduction of the duty to 75% ad valorem from 1 January 1995 on passenger cars as well as the exemption from the payment of the 15% surcharge on passenger cars and 5% on commercial vehicles (ITAC, 1994:1).</p> <p>Implementation of the MIDP.</p>	

### 3.3 IMPACT DERIVED FROM SOUTH AFRICA'S AUTOMOTIVE POLICY EXPOSITION

Past experience has shown that the overall regulatory regime in South Africa is very important in determining the actions of automotive firms. High tariffs were placed on CBUs, which, when combined with a rapidly growing market, acted as a magnet to a large number of initially foreign OEMs, which established assembly plants in the domestic market. These operations, although in many cases highly profitable, were

very small in international terms with correspondingly high unit costs. Production was aimed solely at the domestic market and South African assembly plants were kept isolated from the global production networks of the parent companies except as markets for completely knocked down (CKD) packs (Black, 1998:5). The key automotive policy developments in South Africa will now be discussed in more detail.

### 3.3.1 AUTOMOTIVE INDUSTRY DEVELOPMENT IN SOUTH AFRICA UP TO 1961

The initial phase of automotive industry protection, lasting until 1961, was one of classic import substitution favouring simple assembly for the domestic market. As revealed in Table 3.1, high protective tariffs on imported vehicles fostered the development of an industry of small plants producing a relatively wide variety of models in small volumes at high cost and with low local content. Local content requirements were supported by punitive tariffs on imported components. After World War II, government targeted the automotive sector as an economic growth area as it accounted for 15 percent of total imports in 1960 and it was seen to have both growth potential and synergies with other economic sectors (Flatters, 2002: 2).

### 3.3.2 PHASE 1 TO PHASE 5 OF THE LOCAL CONTENT PROGRAMMES

Between 1961 and 1995 five distinct phases of government support for the industry were identified, as revealed in Table 3.1. The phases featured continued domestic market protection and a variety of incentives and requirements for increased local content and to further encourage OEM-component linkages (Gelb, 2004:41-45). Industry's reliance on imported tooling and designs, technologically sophisticated plant and machinery as well as high-value automotive parts contributed to the large outflow of foreign exchange. The depreciation of the domestic currency also increased import prices (Damoense & Alan, 2004:264). The real price variance set in after 1984, just when the rand's exchange rate went into freefall against major automotive-source currencies (Zhuwakinyu, 2003:7).

Contrary to government expectations, rising local content requirements did not reduce the number of assembly operations in the country. Rapid growth was thus

accompanied by an increase in the number of OEMs and also the development of a low volume component industry oriented towards the production of heavier components, due to local content being measured on a mass basis.

A series of International Trade Administration Commission (ITAC) (previously Board on Tariffs and Trade, previously Board of Trade and Industry) reports recognised the need to encourage higher production volumes, the advantages of standardisation and the need for rationalisation. However, proponents of more interventionist policies, based on the need to rationalise the industry by limiting the number of OEMs and pushing up the local content level to 90 percent, did not prevail. Thus, prohibitive rates of protection were maintained on CBUs, no restrictions were placed on the number of OEMs entering the market and local content requirements remained at fairly low levels (Black, 1998:5).

Government attempted to keep pace with the automotive industry by correcting for unanticipated responses to each set of new incentives. It was not recognised, for instance, that defining local content requirements in terms of weight of components would have perverse effects on the mass of South African vehicles. Another problem identified was that maintaining high nominal protection resulted in increases in effective protection, perpetuating inefficiencies due to excessive product variety and short production runs. Government responded to the latter problem with increases in local content requirements, which were intended to raise production costs and thus force some rationalisation of production. In the late 1970s this had the desired effect of rationalising the range of product lines, but at the expense of higher production costs and hence increased consumer prices (Flatters, 2002:5). The situation was aggravated by a severe slump in the economy, which followed the golden boom of the early 1980s. Exports were minimal, but with the increased introduction of highly sophisticated components, it had become increasingly easy to meet the mass-based local content requirements while increasing the value of imported components (Black, 1998:6).

During the 1980s the international campaign against the apartheid regime intensified as political instability in South Africa increased and many foreign companies exited (Gelb, 2004:41-45). A distinctive feature to the development of the South African automotive industry relates to the imposition of sanctions, which resulted in disinvestment by the two largest North American OEMs, General Motors and Ford, the early pioneers in South Africa, with both firms selling their holdings to domestic parties. At the same time two new Japanese entrants, who came to have a dominant share of the market, Toyota, and to a lesser extent Nissan, started to assemble vehicles in South Africa under franchise. Not all OEMs responded in this way to the sanctions environment and the two German assemblers, Volkswagen and BMW continued to operate in South Africa through wholly owned subsidiaries whilst another German assembler, Mercedes-Benz, maintained its 50 percent equity in Mercedes-Benz South Africa.

Apart from this direct German equity in the OEM industry, there was very little foreign presence in the industry through to the early 1990s. The various local content programmes and the sanctions era created an artificially diverse domestically owned automotive components industry in South Africa. In essence, government's various policy mechanisms forced OEMs into purchasing from domestic component firms, thus giving the components industry a level of political economic leverage. Up until the mid-1990s the automotive industry in South Africa was dominated by mainly domestically owned OEMs encouraged into "partnership" with domestic component firms. The encouragement firstly took the form of a carrot, as the domestic OEMs were provided significant levels of protection from their global competitors to the extent of 115 percent, and secondly as a stick, as they had to meet the government's local content requirements and purchase much of their inputs from uncompetitive domestic component manufacturers or pay severe excise penalties. Very little new automotive investment was recorded over this period from the late 1980s to the mid-1990s (Gelb, 2004:41-45).

### 3.3.3 PHASE 6 OF THE LOCAL CONTENT PROGRAMME

Phase VI of the local content programme, introduced in 1989, marked a substantial change of direction. It was the first attempt to address the problems of an inwardly oriented, overly fragmented industry with low volume output and associated high unit costs. Local content was to be measured by value rather than mass.

Most importantly, local content was to be measured not just by the value of domestically produced components fitted to domestically assembled vehicles, but on the net foreign exchange usage basis. In other words, exports by an OEM counted as local content. Exports, especially of components, grew. Firms cited the increased availability of incentives, the desire to increase the scale of production as well as improved product quality as the major factors motivating exports. Rising exports gave the OEMs greater flexibility in their sourcing arrangements (Black, 1998:6).

After observing the export success of the East Asian economies, a variety of steps were taken during the 1980s by government to promote exports from South Africa, particularly via the General Export Incentive Scheme (GEIS) in the late 1980s. During the period 1 April 1990 to 30 June 1997 South African automotive exporters registered under the GEIS scheme, mainly bodybuilders for medium and heavy commercial vehicles, received R250 million in assistance from the DTI in terms of the GEIS scheme (DTI, 1997:9). Light motor vehicles and components thereof were excluded from the GEIS scheme. Instead, light vehicle exports were funded through the excise duty structure. Consequently the cost of the incentive was built into the price of the domestically assembled vehicle (MITG, 1994:14). In addition, producers in South Africa were still insulated from more demanding markets and continued with outdated forms of manufacturing organisation.

Phase VI was intended to encourage both local content and specialisation. However, it did not address the major factor impacting on the scale of production in the component sector and the proliferation of makes and models in the domestic market. In fact, the impact was rather the reverse. By increasing the flexibility of component sourcing and hence reducing protection on components, but at the same time



maintaining the high nominal protection level on CBUs, the effective rate of protection on CBUs increased sharply under Phase VI. This led predictably to an increase in the variety of models and makes being assembled domestically, in spite of the stagnant market. Phase VI came in for heavy criticism, resulting in frequent changes, adding to the atmosphere of uncertainty. In 1992 the Motor Industry Task Group (MITG) was appointed to re-examine the programme and the future development of the South African automotive industry (ITAC, 1995:5). The MITG's recommendations led to the formulation of the Motor Industry Development Programme (MIDP), which will be discussed in more detail in the next section.

### **3.4 MOTOR INDUSTRY DEVELOPMENT PROGRAMME (MIDP)**

The MIDP, implemented on 1 September 1995, was the next stage and continued the direction of Phase VI and entrenched the principle of export complementation. However, it went a step further by abolishing local content requirements and introducing a tariff phase down (Black, 1998:6). The rationale behind the implementation of the MIDP, the aim of the MIDP, the programme's objectives, the operations of the MIDP, the two MIDP Reviews, as well as the technical parameters of the MIDP, will now be discussed.

#### **3.4.1 RATIONALE BEHIND THE IMPLEMENTATION OF THE MIDP**

Most developing economies rely on the primary sector for external revenue (DTI, 1997b:3). Hence a crucial consideration in developing countries, and specifically South Africa, is how to base the process of continued liberalisation on the growth of an export-oriented secondary or manufacturing sector. This notion of export-oriented industrialisation, driven by the manufacturing sector, has become a key ingredient in South Africa's economic growth strategy. South Africa has gone through a double liberalisation since 1994, namely political and economic. Economic liberalisation started as the country reintegrated into the global economy but was given further impetus in the late nineties by policy-driven trade and financial liberalisation. For such liberalisation to provide any benefits, a consistent package of policies, including some level of macroeconomic stability, was implemented (Davies & Van Seventer,

2003:9). It was recognised that South Africa had a small domestic market and increasing global market access for domestic goods and services became one of the key elements identified to grow the South African economy (Chiaberta, 2004a:25-28). Furthermore, government introduced policy initiatives such as trade policy reforms, changes to its Competition Policy, geographic incentives such as the Industrial Development Zones (IDZs) and labour policy reforms. The adoption of the Growth, Employment and Redistribution (GEAR) strategy implemented in 1996 required government commitment to trade and industrial policies, which aim to promote an export-oriented industrial economy, integrated into the regional and global environment and fully responsive to market trends and opportunities (Gekis, 2004).

In October 1992 a Motor Industry Task Group (MITG) was appointed to make recommendations for encouraging the automotive industry to become more productive, increasingly internationally competitive and a provider of stable employment, as the future viability of the industry under Phase VI was in doubt. Furthermore, the burden placed on consumers by the industry had to be reduced.

The MITG's recommendations entailed that the extent to which manufacturing participants would be able to import components duty free, would be determined by each plant's achievement of minimum production volumes per model and its ability to export. The results of the new development programme to be achieved were also not so much dependent on the mechanics of the programme but on the attitude of people in industry in respect of co-operation and commitment. The programme initially focused on passenger cars and light commercial vehicles, while a programme for medium and heavy commercial vehicles was to be submitted later. The commencement of both programmes was initially set for 1 January 1995 and would be tariff based. The South African offer submitted to the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) allowed for a ceiling rate of 50 percent ad valorem for motor vehicles and 30 percent ad valorem for completely knocked down components. A period of eight years was negotiated to comply with the requirements (MITG, 1994:17). The MITG decided to use the basic structure of

the Australian Automotive Industry Plan or “Button Plan” in its new development programme. The proposal was a tariff-based programme that would be progressively lowered in order to increasingly allow imported competition into the domestic market and exert downward pressure on vehicle prices. It would also include a duty-free allowance to import a portion of the components duty free as well as an export facilitation scheme to earn export credits against the importation of CBUs and components providing an incentive for the export of competitively priced vehicles and components (IDC, 1993:1, 2).

The overarching objective of the revised customs dispensation for the light motor vehicle industry was to improve the industry’s competitiveness to such an extent that it would not only survive in the long term but increase manufacturing activities with much lower protection levels. The long-term strategic objective for the medium and heavy commercial vehicle sector customs dispensation was to reduce the cost of these vehicles as capital inputs to the economy with a commensurate reduction in the cost of the inputs used to manufacture these vehicles (ITAC, 1995:1, 2).

As the long-term objectives for this customs dispensation could not be achieved in the short term, ITAC’s recommendations to achieve these objectives sought to allow the domestic industry time to adjust to increased international competition. The recommendations entailed that the excise dispensation be abolished and that customs duties on completely built-up motor vehicles were to be reduced over an eight-year period for light motor vehicles and a five-year period for medium and heavy motor vehicles. Government saw the automotive industry as a key growth area for the future and the policy pursued could be termed “guided integration”. The phased reduction of tariffs combined with the encouragement of exports aimed at achieving a greater level of specialisation and economies of scale and encouraging improved productivity was aimed at improving the competitiveness of the domestic motor vehicle industry (ITAC, 1995:9-14).

### 3.4.2 AIM OF THE MIDP

In essence the main aim of the MIDP is to encourage the domestic OEMs to specialise in one or two high volume models, obtain economies of scale benefits to export competitively and in turn import the models not assembled in the domestic market at low to duty-free levels. This approach would also assist the automotive component suppliers to achieve higher volumes in the domestic market to become economically viable.

### 3.4.3 MIDP OBJECTIVES

The MIDP involves a gradual reduction in assistance up to the year 2012 (although the extension of the programme from 2010 until 2012 still has to be legislated by way of the 2005/6 MIDP Review). Government's role is to set a clear policy agenda, maintain good communication with the automotive industry, provide efficient administration of the MIDP, monitor developments closely and provide support for initiatives in respect of technology, productivity upgrading and new investments, which could increase employment and/or the competitiveness of the industry.

The MIDP, introduced on 1 September 1995, was aimed at the development of an internationally more competitive and growing automotive industry, which would be able to (DTI, 1997a:2)

- provide high quality and affordable vehicles and components to the domestic and international markets
- provide sustainable employment through increased production
- make a greater contribution to the economic growth of the country by increasing production and achieving an improved sectoral trade balance.

These national objectives were to be achieved by

- encouraging a phased integration into the global automotive industry
- increasing the volume and scale of production by the expansion of exports and gradual rationalisation of models produced domestically

- encouraging the modernisation and upgrading of the automotive industry in order to promote higher productivity and facilitate the global integration process.

The major policy instruments to achieve these objectives have been the following:

- A gradual and continuous reduction in tariff protection so as to expose the industry to greater international competition.
- The encouragement of higher volumes and a greater degree of specialisation by allowing exporting firms to earn rebates on automotive import duties.
- The introduction of a range of incentives designed to upgrade the capacity of the industry in all spheres.

#### 3.4.4 OPERATIONS OF THE MIDP

Participation in the MIDP is contingent on fulfilling a number of requirements. OEMs, automotive component manufacturers exporting themselves and exporters on behalf of automotive component manufactures, in association with the manufacturer, have to register with the DTI annually. The custodian of the MIDP is the DTI with the Trade and Investment South Africa division responsible for the automotive policy and the International Trade Administration Commission (ITAC) division responsible for its administration. The MIDP is contained in the Customs and Excise Act, 1964 as a rebate item in the third schedule to the Customs and Excise Act under rebate item 317.04.

Participants in the MIDP have to comply with many provisions of the Customs and Excise Act, which is administered by the South African Revenue Service (SARS) and also involved in the implementation of the MIDP. As part of the previous local content programmes, the manufacture of a vehicle domestically gave rise to an excise duty liability. This excise duty liability was then reduced by increasing the local content and by exporting. Under the MIDP, which is a customs duty driven system, the duty liability of the OEM arises on the importation of CBUs and automotive components.

The OEM will have a duty liability on the components it imports and on the imported content of components sourced domestically. The duty liability in 2006 is 32 percent ad valorem on CBUs and 26 percent ad valorem on original equipment components, which will be reduced to 25 percent ad valorem and 20 percent ad valorem by 2012, respectively. The duty liability is reduced in various ways. To promote the domestic manufacture of vehicles the OEM receives a first cut rebate called a duty-free allowance (DFA), which is effectively calculated at 27 percent of the wholesale selling price of cars manufactured and sold in the domestic market. Assembly from completely knocked down (CKD) components is regarded as a prerequisite for access to a DFA. The first cut rebate, however, is not enough to ensure that the OEM does not pay duty. An additional duty-free allowance in the Small Vehicle Incentive (SVI) was granted in respect of motor vehicles below a net ex-factory selling price of R40 000 to encourage the manufacture of more affordable light motor vehicles. The incentive was calculated to be 3 percent for every R1000 below a vehicle price qualifying value of R40 000 (ITAC, 1995:23; ITAC, 2003c:1-60; ITAC, 2003d:1-17).

Exporters of motor vehicles, components and automotive tooling earn credits based on their export performance. This export performance is calculated as the net of the export-selling price, normally the free on board (FOB) value less all imported content in the product exported. The monetary value of the local content of components and light and heavy motor vehicles that have been exported may be used to import an equivalent monetary value of automotive components and CBUs. An exporter will submit an IRCC claim to the DTI once it has received proof of the repatriation of funds from its overseas client and they have been audited by a qualified auditor. The IRCCs are then used by the OEMs to offset their duty liability on CBUs or original equipment automotive components. Materials such as fabrics, carpets in rolls and steel sheets, goods in bulk, tooling and parts for the aftermarket would be subject to the applicable customs duties levied on importation and will not be offset against the IRCC. Imports against the IRCC should take place within one year. Eligible exports of automotive components qualify for an IRCC if the components have been wholly or partly manufactured in the common customs area and if not less than 25 percent

of the production cost, excluding packaging, is represented by the cost of labour, raw materials, subcomponents, direct factory overheads expenses to manufacture such a product and the final process of manufacture of such a component is carried out in the common customs area. To promote more exports, the value of the IRCCs has been reduced with effect from 1 January 2003 to 94 percent of their value. The percentage will be reduced to 70 percent by 2009 (Newman, 2003:60).

For medium and heavy commercial vehicles, the same duty structure for original equipment components for light vehicles applies, but the duties are rebated in respect of driveline components including the engine, transmission, gearbox and axle. All the other components are free of duty with the exception of tyres, which are fixed at a rebate of 15 percent ad valorem below the applicable CKD duty rate for the specific year. The duty of the completely built-up medium and heavy commercial vehicle and bus has been fixed at 20 percent ad valorem. The same conditions in respect of the IRCCs apply to the medium and heavy commercial vehicle industry exporters (ITAC, 1995:24-29; ITAC, 2003c:1-9).

All the technical parameters of the MIDP will be summarised after the MIDP Reviews, which will be discussed in the next section.

#### 3.4.5 MIDP REVIEWS 1999 AND 2002

The purpose of the MIDP reviews in 1999 and in 2002 and the changes resulting from the reviews were aimed at corrective action to encourage the industry towards sustainable future growth. Global trends indicate that most developed countries are looking at lower cost countries to produce vehicles and large component manufacturers are normally required to follow the OEMs to supply systems in a just-in-time (JIT) fashion to the assembly plants. South Africa has to follow these emerging global patterns. The two MIDP reviews will now be discussed.

#### 3.4.5.1 1999 MIDP Review

Since a stable and predictable government policy and tariff regime that would facilitate long-term planning towards sustainable economic development was required, the MIDP was further refined and extended from 2003 to 2007 as part of the 1999 Review. In line with the extension, and to stimulate healthier competition, tariffs on CBUs will be reduced from 2003 onwards by 2 percent per annum to 30 percent ad valorem in 2007. In addition, the small vehicle incentive (SVI) was phased out by 2003.

Although the SVI enabled the industry to offer older generation entry-level products at affordable prices during the early transformation phases of the programme, price trends revealed that the instrument had lost its purpose. The import rebate credit facility, which encourages OEMs to find markets beyond the country's borders, has had a profound impact on the transformation and repositioning of the domestic assembly industry. As the OEMs achieve long-term sustainable critical mass the support afforded the OEMs will be reduced from 2003 onwards from the current 1:1 to 1:0,7 by 2007. In order to achieve healthy competition the tariffs on CKD components will be reduced from 2003 by 1 percent per annum to 25 percent in 2007. Rationalisation by the OEMs will ensure the same effect for the component manufacturers. Component manufacturers will have to adopt a strategy of partnering with new leading-edge technology providers and increased investment in state-of-the-art plant and machinery to be able to compete for higher volume contracts in a sustainable fashion (ITAC, 2000b:1-3).

The ratio of the import rebate credit facility was reduced in a similar way for the component exporters, while the ratio of components versus CBU light motor vehicle imports was adjusted from 1:0,75 to 1:0,6 to encourage higher levels of economic activity in component manufacture. Catalytic converters demonstrated a propensity to penetrate global markets in sizeable quantities and have achieved a global price leading status through globally competitive volumes and value chain management. It was foreseen that the growth in the export of catalytic converters would continue, which together with the price of the platinum group metals (PGMs) could distort the



development of the domestic vehicle assembly and component-manufacturing base. It was therefore necessary to adjust the level of support afforded to the PGM content in a phased reduction to 40 percent by 2003 (ibid, 2000b:1-3).

A major global trend is to use common platform engineering to save costs through parts commonisation to achieve greater scale economies. Investments elsewhere in the developed economies are often based on single platform manufacturing with reduced numbers of component manufacturers. Since the South African automotive industry is following these trends, large-scale assembly plant modernisation is required to achieve this. In order to encourage further investments of this nature a new support package has been introduced in the form of a productive asset allowance (PAA). The PAA is a non-tradable duty credit calculated at 20 percent of the qualifying investment in productive assets, which will be spread equally over five years. OEMs will be able to utilise the duty credit against CBU imports only, which will sustain the range of products being offered to the consumer but not necessarily produced in domestic assembly plants. Marginal low volume products could therefore be eliminated and productive capacity rather focused on higher volume products for global consumption.

Component manufacturers which are being encouraged by OEMs to invest in new plant and tooling to support their own expectations will be awarded the same PAA as above with the proviso that 80 percent of the duty saved be passed on to the component manufacturer. The 20 percent remaining duty saved by OEMs on such investments will serve as encouragement for strategic component investments being attracted to supply domestic assembly plants. The nature of the productive assets to be included will normally consist of the latest technology production equipment, such as new or unused robotised body shops, paint plants utilising environmentally acceptable materials required by destination countries, assembly lines, logistical material handling systems fully integrated and compatible with external suppliers' plant as well as machinery and tooling required to localise suitable components in support of the business plan. Dedicated buildings required for these production processes are also included under the PAA (ITAC, 2000b:27-29; ITAC, 2003f:1-25).

The medium and heavy commercial vehicles, regarded as capital assets, are major cost drivers to the economy and protection should only be afforded to manufacturing activities in the economy. The duty of 20 percent ad valorem will remain but all original equipment drive train components are to be brought in duty free since the termination of diesel engine manufacture and insignificant manufacture of gearboxes and drive axles. All tyre manufacturers are making major capital investments for the manufacture of steel radial tyres for medium and heavy vehicles and are in the process of undergoing meaningful globally competitive transformation, which will provide a long-term sustainable foundation for growth. The duties on tyres are fixed at a rebate of 15 percent ad valorem below the applicable CKD duty rate (ITAC, 2000a:1, 2; ITAC, 2003d:1-17).

#### 3.4.5.2 2002 MIDP Review

The 2002 Review intended to provide an extended period of policy certainty. The former Minister of Trade and Industry, Alec Erwin, announced in December 2002 that the MIDP would be extended until the end of 2012 and that a formal review of the MIDP was planned for 2006 to assess developments up to that time to give effect to the extension of the programme (DTI, 2002b:1, 2). The proposed framework from 2008 to 2012 entailed that assistance to the automotive industry would continue to decline while the MIDP would strive to strike a balance between further opening the domestic market to international competition and maintaining a certain measure of protection.

The 2002 Review recommended that the percentage of the eligible export value that is used as a basis for the calculation of the value of IRCCs be phased down by 4 percent per annum from 2004 onwards to reach 70 percent by 2009, and not by 2007 as initially legislated, and that the rates of duty on light motor vehicles and original equipment components be phased down from 1 January 2008 from 29 percent and 24 percent ad valorem respectively, to 28 percent and 23 percent ad valorem respectively in 2009 (ITAC, 2003a:1-9). The technical parameters of the MIDP from 1995 until 2012 will now be summarised and discussed.

### 3.4.6 TECHNICAL PARAMETERS OF THE MIDP

Table 3.2 reveals the technical parameters of the MIDP in respect of the tariff phase down for light vehicles (LVs – passenger cars and light commercial vehicles), medium and heavy commercial vehicles (MCV/HCVs), completely knocked-down (CKD) kits, also defined as original equipment components, the eligible qualifying values derived from exports under the MIDP, as well as investment benefits in terms of the productive asset allowance (PAA), which is the automotive specific investment incentive.

Table 3.2: Technical parameters of the MIDP (1995 to 2012)

				Value of export performance			Tooling & components* ratio of exports vs. imports			
Year	CBU duty %	CKD duty %	DFA %	CBUs %	Compo- nents %	Qualifying PGM value %	HCV & * vs CBU & LV	Vehicle & * vs HCV & *	CBU LV vs CBU LV, HCV & *	PAA %
1995	65	49	27	100	100	100	100:75	100:100		-
1996	61	46	27	100	100	100	100:75	100:100		-
1997	57,5	43	27	100	100	100	100:75	100:100		-
1998	54	40	27	100	100	100	100:75	100:100		-
1999	50,5	37,5	27	100	100	90	100:75	100:100		-
2000	47	35	27	100	100	80	100:70	100:100		20
2001	43,5	32,5	27	100	100	60	100:70	100:100		20
2002	40	30	27	100	100	50	100:65	100:100		20
2003	38	29	27	94	94	40	100:60	100:100		20
2004	36	28	27	90	90	40	100:60	100:100		20
2005	34	27	27	86	86	40	100:60	100:100		20
2006	32	26	27	82	82	40	100:60	100:100		20
2007	30	25	27	78	78	40	100:60	100:100		20
2008	29	24	27	74	74	40	100:60	100:100		To be reviewed
2009	28	23	27	70	70	40	100:60	100:100		
2010	27	22	27	70	70	40	100:60	100:100		
2011	26	21	27	70	70	40	100:60	100:100		
2012	25	20	27	70	70	40	100:60	100:100		

Source: International Trade Administration Commission Report No 3625, 1995, Department of Trade and Industry Motor Industry Development Report, 2003a

It is clear from Table 3.2 that the MIDP involves a gradual reduction in support to the South African automotive industry in order to facilitate its integration into the global automotive environment. In addition to the customs duty on passenger cars, an excise or fiscal duty, calculated on a sliding scale to a maximum of 20 percent according to the ex-factory selling price of the vehicle, is leviable on imported and domestically assembled light vehicles. At R100 000 the duty is about 1 percent and at R950 000 the maximum duty is leviable. The value for fiscal duty purposes may be reduced under the IRCC system as the fiscal duty is leviable after the import duty has been partly or fully rebated via the IRCC system (Williams, 2004b:8, 9).

Table 3.3: Import Rebate Credit Certificates (IRCC) on completely knocked-down (CKD) kits imports (1995 to 2012)

Year	Export value	Value portion	CKD duty %	Import rebate for OEMs	Independent exporters' OEM portion*	Value to independent exporters*
1995	100	100	49	49,0	9,8	39,2
1996	100	100	46	46,0	9,2	36,8
1997	100	100	43	43,0	8,6	34,4
1998	100	100	40	40,0	8,0	32,0
1999	100	100	37,5	37,5	7,5	30,0
2000	100	100	35	35,0	7,0	28,0
2001	100	100	32,5	32,5	6,5	26,0
2002	100	100	30	30,0	6,0	24,0
2003	100	0,94	29	27,26	5,452	21,808
2004	100	0,90	28	25,2	5,04	20,16
2005	100	0,86	27	23,22	4,644	18,576
2006	100	0,82	26	21,32	4,264	17,056
2007	100	0,78	25	19,5	3,9	15,6
2008	100	0,74	24	17,76	3,552	14,208
2009	100	0,70	23	16,1	3,22	12,88
2010	100	0,70	22	15,4	3,08	12,32
2011	100	0,70	21	14,7	2,94	11,76
2012	100	0,70	20	14	2,8	11,2

\* Assuming that independent exporters are able to negotiate an 80:20 ratio on the value of their IRCCs when trading with the OEMs.

Source: Department of Trade and Industry Motor Industry Development Report, 2003a

Table 3.3 summarises the Import Rebate Credit Certificate (IRCC) benefit or value derived from the export of CBUs or automotive components to the exporter in the importation of CKD kits. The benefit accrued amounted to 39,2 percent in 1995 and

will be reduced to 11,2 percent by 2012, which means that industry is forced to improve its competitiveness, productivity and efficiency annually in line with the reduced benefits. In addition, to secure a similar scale of benefits enjoyed under the MIDP in 2002, before the phasing down of the qualifying benefits under the MIDP started, exports and/or local content will have to increase by some margins until 2012.

Table 3.4: Import Rebate Credit Certificates (IRCCs) on completely built-up unit (CBU) imports (1995 to 2012)

Year	Export value	Value portion	CBU adjust-ment	CBU Duty %	Import rebate for OEMs/ Importers	Independent exporters' OEM/Importer portion*	Value to independent exporters*
1995	100	1,00	0,75	65,0	48,750	9,750	39,0
1996	100	1,00	0,75	61,0	45,750	9,150	36,6
1997	100	1,00	0,75	57,5	43,125	8,625	31,875
1998	100	1,00	0,75	54,0	40,500	8,100	32,4
1999	100	1,00	0,75	50,5	37,875	7,575	30,3
2000	100	1,00	0,70	47,0	32,900	6,580	26,32
2001	100	1,00	0,70	43,5	30,450	6,090	24,36
2002	100	1,00	0,65	40,0	26,000	5,200	20,8
2003	100	0,94	0,60	38,0	21,432	4,2864	17,1456
2004	100	0,90	0,60	36,0	19,440	3,888	15,552
2005	100	0,86	0,60	34,0	17,544	3,5088	14,0352
2006	100	0,82	0,60	32,0	15,744	3,1488	12,5952
2007	100	0,78	0,60	30,0	14,040	2,808	11,232
2008	100	0,74	0,60	29,0	12,876	2,5752	10,3008
2009	100	0,70	0,60	28,0	11,760	2,352	9,408
2010	100	0,70	0,60	27,0	11,340	2,268	9,072
2011	100	0,70	0,60	26,0	10,920	2,184	8,736
2012	100	0,70	0,60	25,0	10,500	2,100	8,4

\*Assuming that independent exporters are able to negotiate an 80:20 ratio on the value of their IRCCs when trading with the OEMs or Independent Importers. This benefit excludes the savings which the importer achieves on the excise or fiscal duty, which would provide a further benefit of between 0,5% and 20% of the CBU duty applicable each year.

Source: Department of Trade and Industry Motor Industry Development Report, 2003a

Table 3.4 summarises the IRCC benefit or value derived from the export of CBUs or automotive components to the exporter in the importation of CBUs. The benefit accrued amounted to 39 percent in 1995 and will be reduced to 8,4 percent by 2012, which means that industry is forced to improve its competitiveness, productivity and

efficiency annually in line with the reduced benefits. In addition, to secure a similar scale of benefits enjoyed under the MIDP in 2002, before the phasing down of the qualifying benefits under the MIDP started, exports and/or local content will have to increase by some margins until 2012.

The 2005/6 MIDP Review, which commenced during the course of this study, will aim to provide automotive policy certainty between 2009 and 2012 as well as post 2012. The Review will include a review of the Productive Asset Allowance (PAA), a comprehensive review of the medium and heavy commercial vehicle sector, an accelerated review on automotive leather to address automotive leather exports to Australia, as well as a general MIDP review taking account of (Lamprecht, 2005a:13, 14):

- South Africa's international trade obligations
- Government's strategic objectives in respect of the Integrated Manufacturing Strategy (IMS), the DTI's strategy to harness the central role of manufacturing in the South African economy to contribute towards accelerating growth, employment creation, and greater equity.
- New challenges and opportunities facing the industry.
- Simplifying the administration procedures in respect of the MIDP.

### **3.5 SUMMARY OF CHAPTER 3**

The origins of South Africa's inward-focused automotive industry developmental path revert back to the introduction of tariffs during the early part of the 20th century. The introduction of local content requirements in developing countries has contributed significantly to the internationalisation of the automotive industry's manufacturing base where vehicle-manufacturing operations have been established and were integrated into worldwide production systems. In the pre-MIDP period the South African government followed global trends and implemented a vast, complex set of tariffs and quantitative restrictions to encourage the development of a domestic

automotive industry in recognition of the direct and indirect benefits of such a sector to the economies of developed and developing countries.

The small domestic market and the large number of OEMs operating in South Africa prompted a re-examination of the automotive sector in line with the country's trade and economic liberalisation in 1994 to ensure its future viability. The MIDP was implemented in 1995 to assist the domestic automotive industry's gradual integration into the global automotive environment. In essence the MIDP's aim was to provide incentives to rationalise vehicle and consequently automotive component production into a smaller range of products in achieving economies of scale benefits via exporting. The MIDP progressively exposes the domestic automotive industry to the pressures of global competition and the need for efficiency improvements. The MIDP was intended to end in 2002, but the programme was extended twice during the 1999 and 2002 reviews. The 2005/6 MIDP Review will again aim to provide longer-term policy certainty, up to and beyond 2012, to foster the momentum and the sustainable future growth of the automotive sector in South Africa.

## **CHAPTER 4: THE PERFORMANCE OF THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY UNDER THE MIDP**

### **4.1 INTRODUCTION**

Significant structural changes have taken place in the South African automotive industry over the past decade since the introduction of the MIDP in 1995. Chapter 4 focuses on the vision of the South African automotive industry after the period of trade liberalisation, the key characteristics of the domestic automotive industry, leading performance indicators as well as external factors impacting on the performance of the domestic automotive industry under the MIDP.

### **4.2 SOUTH AFRICAN AUTOMOTIVE INDUSTRY VISION UNDER THE MIDP**

In 1995, all automotive industry stakeholders formulated a common vision for the automotive industry and this is used as a platform for government, business and labour to determine the future direction of policy. The vision is to establish a viable, competitive industry, domestically and internationally, capable of achieving both continuous growth and sustainable job creation (DTI, 1999:2).

The DTI export strategy for the automotive sector (DTI, 1997b:4) explained the automotive industry vision under the MIDP as follows:

- Viable in order to be profitable, innovative, productive, efficient, rationalised and customer focused.
- Internationally competitive to be working towards the highest global standards of quality, price, service delivery times and inventory levels.
- Continuous growth to be new investments from global and domestic players, skills development, increased exports and increased volumes.
- Sustainable employment levels to be similar to the levels on the commencement of the MIDP in 1995.



The MIDP is playing a multifunctional role in the South African automotive industry and could be regarded as a trade, economic, financial and social instrument based on its contribution to the vision of the South African automotive industry.

#### **4.3 KEY PLAYERS IN THE DOMESTIC AUTOMOTIVE INDUSTRY**

In 2005 the South African automotive industry comprised eight OEMs, 278 first tier suppliers and in the order of 300 lower tier suppliers (DTI, 2004:42). In the 1980s most OEMs extended operations to include the assembly of medium and heavy commercial vehicles (DTI, 2001:11). In 2004 there were 15 assemblers and importers in the South African truck and bus market (DTI, 2004:26).

The main role-players in the South African automotive industry are all part of the Motor Industry Development Council (MIDC), which was established in 1996 as a joint industry-government-labour body and is the major influence on strategies and policies for the automotive sector. The MIDC provides an effective platform for communication and co-operation and for all the relevant stakeholders to interact on automotive issues. Stakeholders include government, labour and business (DTI 2004:99).

Government is represented by

- Trade and Investment South Africa
- the International Trade Administration Commission (ITAC) (formerly the Board on Tariffs and Trade – BTT)
- the South African Revenue Services (SARS – Customs and Excise Department)
- South African Bureau of Standards (SABS)

Labour is represented by

- the National Union of Metalworkers of South Africa (NUMSA)

Business is represented by

- the National Association of Automobile Manufacturers of South Africa (NAAMSA)
- the National Association of Automotive Component and Allied Manufacturers (NAACAM)
- the Retail Motor Industry Organisation (RMI)
- the South African Tyre Manufacturers Conference (SATMC)
- the Catalytic Converter Interest Group (CCIG)

Several subcommittees have been formed to provide expert advice on relevant matters and the Council has been actively involved in issues such as monitoring MIDP developments and potential free and preferential trade agreements. Four MIDC Task Teams were established in 2003 to investigate and resolve concerns in the areas of vehicle affordability, raw materials, automotive employment and trade issues.

#### **4.4 KEY CHARACTERISTICS OF THE DOMESTIC AUTOMOTIVE INDUSTRY**

In 2004, the South African automotive industry was the leading manufacturing sector representing the third largest sector in the South African economy, after mining and financial services, and accounted for just less than 30 percent of the country's manufacturing output. In the same year, South Africa was ranked nineteenth in terms of global vehicle production with a share of 0,70 percent and comprised 87 percent of Africa's vehicle production. The South African automotive industry's total contribution to the country's gross domestic product (GDP) of R1 375 billion in 2004 was in the order of 7,2 percent (NAAMSA, 2005:17, 46).

In 2005 the eight OEMs operated from seven plants producing 13 brands. In total, 15 passenger car and commercial vehicle brands were available in South Africa before 1994 compared to the 48 brands from 13 countries in 2005 (Kok, 2006:22). The vehicle assembly industry is concentrated in three of South Africa's nine provinces in close proximity to its suppliers. Gauteng is home to BMW SA, Nissan SA

incorporating the assembly of Fiat Auto SA, as well as Ford Motor Company of Southern Africa incorporating the assembly of Mazda, Volvo and Land Rover. KwaZulu-Natal is home to Toyota SA Motors and the Eastern Cape is home to Volkswagen of SA, DaimlerChrysler SA and General Motors SA.

In 2004 in the order of 18 000 enterprises were active in selling and providing aftermarket support to a national vehicle parc of nearly 7,5 million of which 4,3 million or 57,3 percent comprised passenger cars. South Africa's motor vehicle population is concentrated in Gauteng and comprises 38 percent of vehicles followed by the Western Cape with 17 percent, Kwazulu-Natal with 13,8 percent and the other provinces with less than 10 percent each (DTI, 2004:94; NAAMSA, 2005:35, 45). Total South African automotive industry revenue, excluding exports but including new and used vehicle sales, workshop revenue and spares and accessories, amounted to R168,4 billion in 2004 compared to the R146,4 billion in 2003, an increase of 15 percent. Capital invested by OEMs and the component sector combined was in excess of R23 billion at replacement value in 2004 (NAAMSA, 2005:35, 36).

The South African automotive industry, as everywhere else in the world, is strongly controlled and governed by the OEMs. The industry's structure and evolutionary path is therefore tightly aligned with OEM strategies in both domestic and global markets. The increasing export orientation of OEMs has thus fundamentally changed the structure of their own operations as well as those of the automotive component industry (Barnes & Black, 2004:5). Key decisions about South Africa's automotive business are determined in Germany, the USA and Japan. South Africa's participation in the WTO, its competitive advantages and its special relationships with the EU and other trading regions make it fit into their broader global sourcing strategies (DTI, 2003b:21). The performance indicators of the South African automotive industry under the MIDP will now be discussed.

## **4.5 PERFORMANCE INDICATORS OF THE DOMESTIC AUTOMOTIVE INDUSTRY UNDER THE MIDP**

The MIDP's objectives focus on the growth of the automotive sector, improved international competitiveness and sustainable employment. In the next section the performance of the domestic automotive industry will be analysed and measured against the programme's objectives in order to obtain a better understanding of the role and relevance of the MIDP in the context of trade liberalisation and the industry's integration into the global automotive industry.

### **4.5.1 SOUTH AFRICAN AUTOMOTIVE SECTOR GROWTH**

The growth of South Africa's production of motor vehicles has historically depended on the growth of the domestic motor vehicle market, and hence on the growth of the South African economy.

#### **4.5.1.1 Domestic market and production**

Table 4.1 reveals that the demand for new vehicles since 1960 has escalated at an average of 2 percent annually and has grown at a slower rate than the economy's average growth rate of 3 percent annually due to declining affordability. The real variance set in after 1984 when the rand's exchange rate went into free fall against major automotive-sourced countries' currencies (Zhuwakinyu, 2004:7). Following the sales boom of 1995 and 1996, the emerging market crisis and international financial market instability in 1997 led to the imposition of very high interest rates in South Africa, which severely impacted on the domestic market for vehicles (DTI, 2000:6). In 2000 and 2001, falling interest rates and innovative financial packages gave impetus to the rise in new vehicle sales. In 2002, the adverse effects of the global economic slowdown on inflation rates, interest rates and vehicle prices, compounded by the September 11 event in 2001, constrained the rising new car sales cycle (DTI, 2002a:9).

Since 2004, positive macroeconomic fundamentals, positive consumer and business sentiment, new vehicle price deflation, attractive incentives, the entry of about 300

000 black buyers and the abundance of new product offerings have been the main driving forces behind the buoyant market (Kok, 2004; NAAMSA, 2006:11). The domestic automotive market achieved all-time records in 2004, which suggests just how sluggish the domestic market had been since the early 1980s. The consecutive new vehicle sales record achieved in 2005, together with upbeat industry projections, presents an optimistic future.

Table 4.1: New vehicle sales in South Africa (units) (1960 to 2005)

Year	Total sales (units)
1960	119 164
1970	297 573
1980	404 766
1981*	453 541
1990	334 779
1995	399 967
1996	421 076
1997	399 275
1998	351 510
1999	325 775
2000	354 632
2001	382 529
2002	363 184
2003	382 600
2004	481 520
2005	617 450
2010**	1 000 000

\* Previous record

\*\* Projected figure

Source: National Association of Automobile Manufacturers of South Africa Annual Report, 2005

Figure 4.1 reveals that historically domestic vehicle sales have correlated closely with the movement of the real GDP growth rate in South Africa. With the anticipated higher economic growth rates of 4 percent and more from 2005 onwards, this trend is set to continue (DTI, 2004:24). This projected trend underpins the potential of the South African automotive industry's projections of a million new vehicle sales in the domestic market by 2010. Industry projections are that total new vehicle sales could reach a million units with a growth rate of 10 percent per annum within eight years or

a growth of 15 percent per annum within five years (Crawford, 2004a:24; Kok, 2004:1).

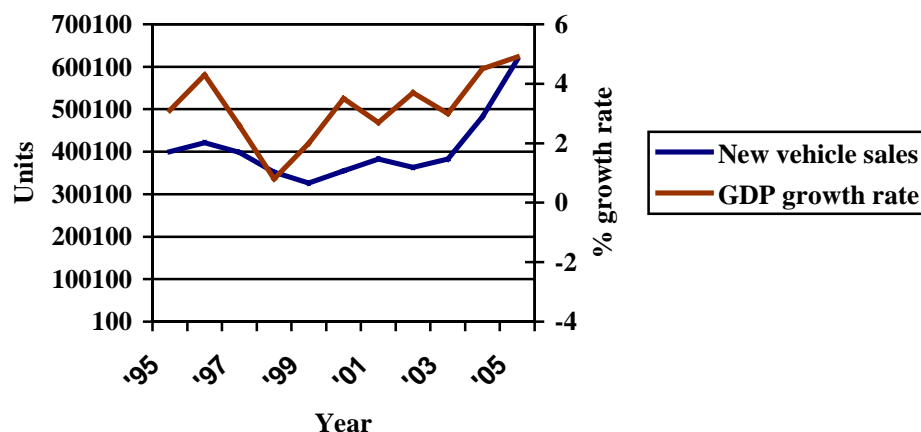


Figure 4.1: New vehicle sales and GDP growth rate

*Source:* Statistics South Africa, National Association of Automobile Manufacturers of South Africa Annual Report, 2005

Table 4.2 reveals that the breakdown of exporting and domestic sales figures reflects the fundamental shift that has occurred over the last few years in the South African automotive industry. The period since 1998 has seen the domestic production of passenger cars becoming de-linked from the growth of the domestic market. As a batch producer of vehicles, the South African automotive industry provides certain competitive advantages, such as its flexibility and ability to produce short production runs more competitively than its competitors, which are often compelling in terms of creating multidirectional trade. South Africa has insufficient domestic demand to warrant economic production of a broad range of passenger cars (DTI, 2004:41); however, to be a meaningful global player South Africa's production output will have to be around 4 percent of the global market share (Crawford, 2004a:24). This will require a very substantial investment and a lot of goodwill from the respective parent companies. At the moment South Africa simply lacks production capacity as the design capacity of the OEMs is in the order of 900 000 units per annum.

The potential for growth is that there are still major markets for right-hand drive vehicle exports in Japan, the UK and Australia. In addition, left-hand drive models

are already being exported by BMW SA and Volkswagen of SA with other OEMs also indicating their intentions to focus on left-hand drive models for exports as part of their future generation export model programmes (Crawford, 2004b:30).

Table 4.2 reveals the domestic production of vehicles from 1995 to 2005 and highlights the fact that the growth in passenger car assembly has not been matched by light commercial vehicle assembly, which has remained relatively stable. Up to 2004 light commercial vehicle assembly was still principally focused on the domestic market, hence the flat to deteriorating trajectory evident since 1995. Exports of passenger cars to global markets have increased significantly by nearly 1300 percent between 1995 and 2005. Exports of light commercial vehicles were mainly destined for Africa between 1995 and 2005, which presented limited scope for significant numbers (DTI, 2003a:8).

Table 4.2 further reveals that domestic medium and heavy vehicle sales have been proportionately higher than passenger car sales since 2002. These vehicles are considered fixed investments and capital inputs to the economy, therefore sales growth in this sector illustrates South Africa's increasing investment in productive equipment. The trend indicates that South African companies have remained largely resilient to global uncertainties since 2002, hence the significant growth (DTI, 2003b:12).

Table 4.2: Production of vehicles from 1995 to 2005 – South Africa (units)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>PASSENGER CARS</b>											
<b>Domestic market</b>											
	233 512	231 616	215 784	174 870	159 944	172 373	172 052	163 474	176 340	200 264	210 976
<b>Export market</b>											
	8 976	3 743	10 458	18 342	52 347	58 204	97 599	113 025	114 909	100 699	113 899
<b>Total production</b>											
	242 488	235 359	226 242	193 212	212 291	230 577	269 651	276 499	291 249	300 963	324 875
<b>Exports as a % of production</b>											
	3,7	1,6	4,6	9,5	24,7	25,2	36,2	40,9	39,5	33,5	35,1
<b>LIGHT COMMERCIALS</b>											
<b>Domestic market</b>											
	127 363	128 516	113 204	98 056	95 326	104 121	113 111	101 956	102 007	123 467	146 933
<b>Export market</b>											
	6 356	7 125	8 000	6 806	6 581	9 148	10 229	11 699	11 283	9 360	25 589
<b>Total production</b>											
	133 719	135 641	121 204	104 862	101 907	113 269	123 340	113 655	113 290	132 827	172 522
<b>Exports as a % of production</b>											
	4,8	5,3	6,6	6,5	6,5	8,1	8,3	10,3	10,0	7,0	14,8
<b>MEDIUM AND HEAVY COMMERCIALS</b>											
<b>Domestic market</b>											
	12 753	14 617	13 759	12 811	11 736	12 275	13 323	14 335	16 957	21 464	27 450
<b>Export market</b>											
	432	685	1 111	748	788	679	465	582	469	448	424
<b>Total production</b>											
	13 185	15 302	14 870	13 559	12 524	12 954	13 788	14 917	17 426	21 912	27 874
<b>Exports as a % of production</b>											
	3,3	4,5	7,5	5,5	6,3	5,2	3,4	3,9	2,7	2,0	1,5
<b>TOTAL PRODUCTION</b>											
<b>Domestic market</b>											
	389 392	386 302	362 316	311 633	326 722	356 800	406 779	405 071	421 965	455 702	525 271
<b>Export market</b>											
	15 764	11 553	19 569	25 896	59 716	68 031	108 293	125 306	126 661	110 507	139 912
<b>Exports as a % of production</b>											
	4,0	3,0	5,4	8,3	18,3	19,1	26,6	30,9	30,0	24,2	26,6

Source: National Association of Automobile Manufacturers of South Africa Annual Report, 2005

The impact of the production trends on the automotive industry's capacity utilisation will be discussed next.



#### 4.5.1.2 Capacity utilisation

The South African automotive industry's capacity utilisation rate, on a weighted average basis, is broadly in line with the global average utilisation rate of about 75 percent. Table 4.3 reveals that the industry's capacity utilisation rates reflect the underlying conditions in the domestic and export markets. Domestic sales in the different vehicle segments and passenger car exports in particular support the varying production capacity levels. The investments for export programmes by all the OEMs have increased the production capacity levels of the industry while the trend is increasingly for the OEMs to operate on a multishift basis in the production of vehicles for domestic and export markets (NAAMSA, 2006:2).

Table 4.3: Vehicle manufacturing capacity utilisation (%)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Cars</b>	84,3	78,9	77,3	64,3	64,6	66,1	72,2	73,2	77,2	79,7
<b>Light commercials</b>	81,7	75,9	70,6	59,1	57,5	60,2	62,6	70,6	69,6	72,1
<b>Medium commercials</b>	81,3	80,0	77,6	73,6	69,7	64,2	69,8	67,8	60,7	57,2
<b>Heavy commercials</b>	81,9	68,3	74,2	69,3	61,9	74,8	78,1	85,7	85,6	86,0

Source: National Association of Automobile Manufacturers of South Africa Annual Report, 2005

#### 4.5.1.3 Imports of vehicles into South Africa

Strict control measures ensure that only a limited number of legal import permits are issued to allow used vehicles into South Africa. In terms of current legislation, used vehicles qualifying for an import permit include those for returning residents and immigrants, vintage cars, racing cars, donated vehicles for welfare organisations and adapted vehicles for persons with physical disabilities (DTI, 2004:36).

As far as new vehicles are concerned, the nature of the South African vehicle parc, also defined as the number of registered vehicles, is changing under the MIDP. In 1995 buyers in the passenger car segment had 250 choices in the domestic market compared to over 1100 model variants in 2004, the biggest ratio compared to its market size in the world (Preuss, 2005:1). CBU exports exceeded imports for the first time in 2001. However, imports into the domestic market are increasing at a rapid pace negating some of the benefits of a growing domestic market. Table 4.4 reveals

that total passenger car and commercial vehicle imports increased significantly from 26 339 units in 1995 to 232 091 units in 2005. This trend is indicative of the aim of the MIDP to encourage domestic companies to specialise in a few high volume models, obtain economies of scale benefits to export competitively and in turn import the models not manufactured in South Africa (DTI, 2004:32). The domestic model mix can now be arranged to provide the most effective combination of domestically assembled and imported models to satisfy consumers. However, the small car segment is posing a threat to South Africa's manufacturing industry. At the end of 2002, 11 domestically assembled models cost less than R100 000, but this figure dropped to six in 2005. Simultaneously, only seven imported makes were available under R100 000 in 2002, whereas ten were available in 2005 (De Lange, 2005).

Table 4.4: Completely built-up vehicle imports from 1995 – 2005 (units)

Year										
1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Passenger cars</b>										
22 305	41 768	51 978	59 951	54 426	61 749	79 508	78 128	81 919	127 389	208 892
<b>Light commercial vehicles</b>										
4 034	4 559	4 550	5 122	4 343	4 114	4 535	5 291	5 377	8 938	23 199
<b>Total</b>										
<b>26 339</b>	<b>46 327</b>	<b>56 528</b>	<b>65 073</b>	<b>58 769</b>	<b>65 863</b>	<b>84 043</b>	<b>83 419</b>	<b>87 296</b>	<b>136 327</b>	<b>232 091</b>

Source: National Association of Automobile Manufacturers of South Africa Annual Report, 2005

The evolutionary path of the OEMs in the domestic market impacts significantly on the automotive component suppliers as well, which will be discussed next.

#### 4.5.1.4 Automotive component imports into South Africa

In the early 1990s the majority of South African-based OEMs were South African owned, operating under licence to multinational corporations and manufacturing exclusively for the domestic market and small sub-Saharan African market. By 2004 seven of the OEMs were fully and one majority owned by foreign parent companies. This had a direct impact on the composition of the automotive components industry

with multinational component manufacturers establishing Greenfield/new operations or purchasing existing operations.

Capital-intensive components such as the engines, gearboxes and interior electronic components are mainly imported and the remainder sourced in the domestic market. The large number of model derivatives imported has widespread implications for the aftermarket. The availability of parts, especially for increasing telematics components and complex sensor systems, are making repairs difficult and expensive (DTI, 2004:34). However, the import/export complementation scheme of the MIDP allows for imports of products not manufactured in South Africa to complement the ranges manufactured in the domestic market via exports. The domestic industry's export performance will be discussed in the next section.

#### 4.5.2 SOUTH AFRICAN AUTOMOTIVE INDUSTRY EXPORT PERFORMANCE

Figure 4.2 reveals that the South African automotive industry finds expression in its export growth. A compounded annual growth rate of 28,2 percent in value terms for CBUs and automotive components exports has been achieved since 1995. South Africa exported automotive component and CBUs in significant volumes to 126 countries in 2004 (Lamprecht, 2005b:49, 50). The MIDP has proved successful from both the component and vehicle export perspectives.

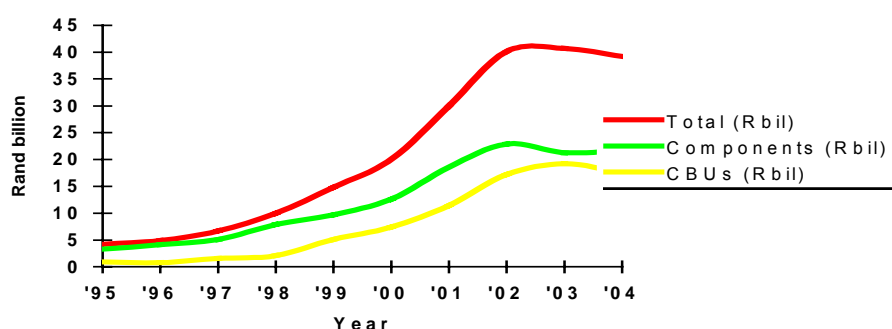


Figure 4.2: South African automotive exports from 1995 to 2004 (rand billion)

Source: Department of Trade and Industry Current Developments in the Automotive Industry, 1999 and 2004

The South African automotive industry enjoys significant advantages compared with many other exporting countries. Its flexibility in producing short runs, abundance of raw materials and low energy costs combined with the expertise, advanced technology and established business relationships of parent companies ensures that the South African industry increasingly adds value to the global strategies of parent companies. Most developing nations build mass-produced cars for targeted markets. In contrast, South Africa sells to various niche markets, which protects the industry from the cyclical fluctuations that affect exporters who are exposed to a single market. South Africa is also an ideal location for specific R&D, such as technologies for rugged or tropical conditions. Advantages include expertise in electronics arising from the defence industry and metallurgy as a result of the country's extensive mining and metals know-how (Holmes, 2001:67).

Globally, flexibility is considered an essential competitive advantage for fast model changes and for successful niche marketing, both of which require an ability to use the same platform to produce low volumes in a particular model derivative. The South African automotive industry has retained its capability where single production facilities manufacture a range of products at competitive prices to satisfy the domestic market. Given this flexibility, South Africa has a unique competitive advantage when it comes to low volumes, as is the case with lower volume vehicles and niche markets or run-out model, compared to other countries where production is set up for long high-production runs (DTI, 2004:65).

Furthermore, the South African automotive industry has established international credibility for its ability to supply products reliably to required quality levels and at competitive prices. In 2002, BMW's plant in South Africa was included in the Europe section of the JD Power Initial Quality Study, regarded as the industry's benchmark for assessing the quality of new vehicles, and won the highly prestigious European Gold Plant Quality Award. BMW SA was therefore ranked first among European plants for construction quality. BMW SA has beaten major car manufacturing plants throughout the world indicating that the drive towards achieving world-class quality is

succeeding (DTI, 2002a:21). The export performance of the OEMs will now be discussed in more detail.

#### 4.5.2.1 Completely built-up (CBU) unit exports from South Africa

In 2004 CBU exports from South Africa comprised 91,1 percent passenger cars, 8,5 percent light commercials and 0,4 percent medium and heavy commercial vehicles. BMW SA, DaimlerChrysler SA, Volkswagen of SA and Toyota SA Motors exported 98,4 percent of the passenger cars. In the past Volkswagen was the biggest exporter from the African continent until BMW SA and DaimlerChrysler SA surpassed it in 2001(DTI, 2001:16). Toyota SA Motors only started its export programme in 2003 but is set to become the leader in the export race with its Innovative/International Multipurpose Vehicle programme from mid-2005 onwards (Venter, 2005).

Passenger car exports as a percentage of passenger car production was 33,5 percent in 2004 compared to the 3,7 percent in 1995. Right as well as left-hand drive models are exported from South Africa by certain OEMs. Total CBU exports doubled from 1999 to 2003. New export contracts will reinvigorate CBU exports from 2005 after slowing in 2004 and exports are projected to double again by 2007 (DTI, 2004:41).

The successful implementation of export projects by the German-based OEMs has broken ground for the higher volume models. The Japanese and USA-based OEMs have subsequently joined with export programmes. After obtaining the majority equity share in Toyota SA Motors, the domestic subsidiary has been incorporated into Toyota's global strategy to become the number one vehicle manufacturer in the world. Toyota SA Motors is regarded as the pioneer of Toyota's foreign production and has been selected as one of the key players in Toyota's global supply network with the International/Innovative Multipurpose Vehicle (IMV), which is a global strategic model. Toyota SA Motors's overall vehicle production will increase to over 200 000 units per annum, which is comparable with some of the top facilities globally. Toyota SA Motor's total export contract over the product's lifetime is worth R120 billion, the biggest to date in South Africa. The investment by Toyota SA

Motors will not only contribute to increased business confidence, but will also ensure that the company will be able to satisfy domestic consumers with a broader range of products via the MIDP's import/export complementation scheme (De Vos, 2005:62, 63; Kok, 2005:19).

The important objective in terms of model rationalisation is not just to reduce the number of models but also to increase the model volumes of those models assembled in the domestic market as well as the local content in line with average volume increases. The average volumes of passenger cars per model produced by the OEMs have increased from 11 500 units in 1995 to 19 400 units in 2003 (DTI, 2004:68).

Table 4.5: Top destinations of South African vehicle exports by value from 1995 to 2004 (passenger cars and light commercial vehicles)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Total export value (R billion)</b>	R0,8	R0,7	R1,4	R1,8	R4,8	R7,0	R10,8	R16,3	R18,6	R17,0
<b>Country/Region</b>	%	%	%	%	%	%	%	%	%	%
<b>Japan</b>	-	-	-	-	-	11	13	18	35	32
<b>UK</b>	1	3	2	15	13	9	18	17	16	24
<b>Australia</b>	4	11	19	15	10	12	10	11	15	19
<b>USA</b>	-	-	-	-	-	7	18	23	20	14
<b>Germany</b>	-	-	5	25	57	37	19	12	3	1
<b>Other</b>	95	86	74	45	20	24	22	19	11	10
<b>EU</b>	-	3,7	7,2	41,2	69,9	52,8	37,6	29,9	19,5	24,5
<b>NAFTA</b>	-	-	-	-	1,0	7,3	17,9	22,6	19,5	13,9
<b>SADC</b>	44,0	64,3	46,3	27,0	11,3	11,9	9,2	10,2	5,6	3,9

Source: National Association of Automobile Manufacturers Annual Report, 2005, Department of Trade and Industry Current Developments in the Automotive Industry, 1999 and 2004

Table 4.5 reveals that CBU exports are developing rapidly in the direction of new demanding markets such as Japan and the USA. From 1995 to 1997, the South African Development Community (SADC) was the main destination for CBU exports, while a single consignment by Volkswagen of SA to China in 1995 comprised 40 percent of the export value during that year (DTI, 1997a:6). Following investments to

accommodate export programmes by the mainly German-based OEMs, CBU exports increased by 131 percent in value terms and by 185 percent in units from 1998 to 1999 (DTI, 2000:11). Opportunities presented by the African Growth and Opportunity Act (AGOA), which was implemented on 1 January 2001 by the USA in respect of 37 African countries, allowed for duty and quota free access of a variety of products to the USA market. This trade arrangement provided impetus for the automotive sector's export drive and BMW SA in particular seized the opportunity to export left-hand drive 3-series models to the USA. In 2004, the South African automotive industry exported passenger cars and commercial vehicles to 56 destinations worldwide, of which 32 were in Africa and 24 outside Africa. South Africa is regarded as the logical portal into the sub-Saharan African market for automotive products, distribution, product development and manufacturing (NAAMSA, 2005:8).

The growing vehicle exports have been a spur to many domestic component suppliers to set their sights on increasing their export business too, which will be discussed next.

#### 4.5.2.2 Automotive component exports

A diverse range of automotive components is exported from South Africa, although the bulk consists of a fairly limited range of products (DTI, 1998:11). The domestic component sector has benefited from global developments and has received substantial export-oriented investment from domestic and foreign sources, which is evident in the rapid growth of exports since 1995 (DTI, 1999:11, 12). The focus of exporters tends to be on high value domestically beneficiated components that consume as little transport and space as possible.

Table 4.6 reveals that catalytic converters have been the main component exported under the MIDP since 1999. The catalytic converter category's share of total exports reached 48,4 percent in 2001 but has subsequently declined, mainly reflecting the impact of the strong rand since 2002 on the platinum group metals price. The catalytic converter industry in South Africa became a lucrative hub comprising 60

leading global multinationals in the supply chain, employing about 4000 persons, investing R2 billion in plant, equipment, land and buildings and using 33 000 tons of stainless steel a year (Holmes, 2002:67; Venter, 2004b). South Africa supplies approximately 15 percent of the global market for catalytic converters and in 2003 South Africa was the most important provider of the product to the EU (DTI, 2004:42). Furthermore, Ford's Rocam engine programme, with a capacity of 240 000 units per annum, is the sole supplier of the 1,3 litre engine to world markets. Engine exports are set to increase as full production capacity is achieved (DTI, 2002a:29).

Table 4.6: Major automotive component exports from South Africa, 1995 to 2004 (R billion – FOB values)

Component category	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Catalytic converters	388	485	835	1520	2569	4683	8989	9204	8104	8289
Stitched leather components	1109	1259	1408	1854	1888	1926	2391	3184	2899	3113
Tyres	219	296	342	498	639	682	781	1379	1278	1285
Engine parts	112	137	285	390	383	409	520	771	843	894
Road wheels and parts	175	227	325	446	518	551	725	955	809	753
Engines	10	86	111	334	54	76	88	623	564	701
Silencers/exhaust pipes	76	170	151	493	598	377	282	340	327	407
Automotive tooling	259	279	309	256	264	362	441	363	529	383
Wiring harnesses	41	92	136	207	304	319	391	457	427	359
Transmission shafts/cranks	29	38	7	62	85	127	149	236	263	332
Automotive glass	49	71	105	112	147	171	241	328	307	311
Car radios	7	4	29	47	73	89	115	171	332	257
Ignition/starting equipment	4	16	30	47	94	128	195	231	270	230
Filters	13	42	55	72	85	118	114	184	142	164
Radiators	77	107	93	108	111	72	70	199	191	162
Brake parts	23	29	38	76	79	95	118	215	198	146
Gauges/instruments/parts	18	28	29	30	59	64	77	119	128	142
Axles	2	3	3	7	13	63	81	129	119	140
Body parts/panels	18	39	39	30	75	84	107	140	168	116
Batteries	53	60	88	79	68	100	116	150	106	114
Other components	636	583	697	1227	1568	2144	2595	3505	3265	3435
<b>Total component exports</b>	<b>3318</b>	<b>4051</b>	<b>5115</b>	<b>7895</b>	<b>9674</b>	<b>12 640</b>	<b>18 586</b>	<b>22 883</b>	<b>21 269</b>	<b>21 733</b>

Source: National Association of Automobile Manufacturers Annual Report, 2005, Department of Trade and Industry Current Developments in the Automotive Industry, 1999 and 2004



Component exports are as much a part of business focus as are the CBU exports. The diversification of automotive exports is important because it heralded a longer-term export future for the industry. The South African domestic market generally is not large enough to generate sufficient economies of scale for world-class production and exporting needs to be viewed as a necessary step in the rapid movement towards international competitiveness (Barnes, 1997:39).

The strong rand has, however, resulted in a growing divergence between increased domestic demand and falling exports due to the loss of export competitiveness since 2002, and is only one of many increasing pressures being put on suppliers. Component strategies, therefore, depend on aspects such as the individual company's international links, the need for technology and licences or sale of equity, the position in the aftermarket, the focus on niche markets, the type of product, the volume requirements and the dependence on OEMs. Component manufacturers, due to the MIDP, have tended to reduce their product lines and specialise, thus reducing costs and increasing exports in a narrow range of products. These component production programmes not only benefit the country in terms of earning foreign exchange, but also bring new technologies to South Africa and create new job opportunities (DTI, 2004:44).

In many cases, domestic firms have been required to acquire a foreign technology partner, which has eased access to foreign markets. The automotive industry's high level of technological sophistication, its globalised nature and the high barriers to entry that are generally evident, militate against the small owner-managed operations. Even when production remains in the domestic market, design and contract allocation is increasingly global (Humphrey & Memedovic, 2003:46). Multinational control of international marketing networks makes independent exporting extremely difficult (Barnes, 1997:6; Barnes, 1999:15; Black 2001:11). Failure to rise to the challenge by finding new markets and products could result in stagnation of exports and it is essential that focused activities, both ongoing and through projects, be established and maintained. The current global economic

environment is dominated by intense competition for export markets, investment and technology. This makes it important to gain and maintain access to these markets.

Table 4.7: Top destinations of South African automotive component exports, 1995 to 2004

Country/Region	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	%	%	%	%	%	%	%	%	%	%
<b>Germany</b>	45,0	47,1	48,9	49,1	46,1	41,0	37,4	37,5	34,5	35,9
<b>UK</b>	6,4	8,0	9,5	9,1	10,3	9,5	10,7	9,5	7,9	9,0
<b>Spain</b>	3,6	2,7	1,7	4,7	4,3	3,4	1,8	3,4	6,8	8,3
<b>France</b>	0,7	0,8	2,1	1,3	1,6	4,4	7,5	7,6	8,8	7,9
<b>USA</b>	4,2	5,0	6,4	6,1	10,0	9,5	12,1	10,5	8,4	7,2
<b>Belgium</b>	8,0	6,2	4,6	5,2	5,6	6,7	5,5	5,1	4,4	3,1
<b>Netherlands</b>	1,9	3,0	2,4	1,6	1,9	1,3	1,3	2,1	2,8	2,8
<b>Italy</b>	1,3	1,5	1,1	2,4	3,3	5,8	4,1	3,7	3,1	2,5
<b>Japan</b>	0,3	0,2	0,2	0,8	1,0	0,9	1,7	3,2	2,6	2,3
<b>Australia</b>	-	-	-	-	-	1,2	0,8	1,4	2,3	2,1
<b>Other</b>	28,6	25,5	23,1	19,7	15,9	16,3	17,1	16,0	18,4	18,9
<b>EU</b>	67,7	69,7	70,7	73,8	73,6	69,8	70,5	70,8	69,9	71,3
<b>NAFTA</b>	4,7	5,3	6,0	7,7	10,3	10,1	12,5	11,1	8,9	8,4
<b>AFRICA (incl. SADC)</b>	13,2	14,6	13,9	10,6	9,2	6,8	7,1	8,0	7,9	7,3
<b>SADC</b>	10,2	13,5	12,7	9,0	7,6	5,6	5,8	6,2	5,8	5,5
<b>MERCUSOR</b>	4,3	3,7	2,2	0,8	0,9	0,4	0,5	0,4	0,7	0,3

Source: National Association of Automobile Manufacturers Annual Report, 2005, Department of Trade and Industry Current Developments in the Automotive Industry, 1999 and 2004

As revealed in Tables 4.6 and 4.7, both the range, in respect of the diversity of automotive products, and reach, in respect of the number of destinations of the exports, are increasing. The majority of the domestic automotive component industry has links with European-based companies, which is largely because the German OEMs put pressure on their European suppliers to form links with South African companies when they instituted their export programmes (Richardson, 2003:44-49). The EU has extensively displaced its own production to lower-cost developing countries such as South Africa (DTI, 2002:40). The level of industry integration increases the export expansion and the degree to which it improves competitiveness. In this regard the integration of component suppliers in the export

value chain has been the great success of the MIDP, as the benefits of the programme has started to trickle down to domestic component manufacturers.

The main destinations for South Africa automotive components remains first-world markets with Europe accounting for nearly 71,3 percent of exports in 2004. However, diversification into new emerging markets is a continuing trend and underlines the automotive industry's competitiveness drive and a widening of the country's traditional trading base. New trade and business links in Africa, Asia, the Middle East, South America and, importantly, the new emerging automotive giants, China and India, are being forged (DTI, 2004:44, 45).

The domestic automotive industry's export performance is in line with the MIDP's objective of an improved sectoral trade balance, which will be discussed in the next section.

#### 4.5.3 TRADE BALANCE OF THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY

Understanding the trade balance of the automotive sector underpins any policy attempts at improving export performance, or reducing the dependence on imports. By examining this data, it is possible to intensify important export markets for the industry and also determine how well the industry competes internationally. Since the introduction of the MIDP, component exports have remained the most significant development for the automotive industry and its trade balance, but from 2006 onwards vehicle exports are expected to overtake automotive component exports (DTI, 2004:48).

Table 4.8 reveals that when the MIDP was introduced in 1995, imports of CBUs and automotive components amounted to R16,4 billion. In 2004 this figure increased to R58 billion, nearly a fourfold increase. Over the same period, exports of CBUs and automotive components increased nearly tenfold, from R4,2 billion to R39,2 billion. In all major foreign currencies the automotive sector's trade deficit has dropped considerably with imports remaining relatively flat while exports increased. Total automotive exports comprised 14,9 percent of total South African exports in 2004, up

from 4 percent in 1995, representing nearly a fourfold increase and indicating the sector's increasing export propensity. Despite the surge in exports, the automotive industry's trade balance, although narrowing, is still showing a huge deficit (Lamprecht, 2004:15). The industry's reliance on imported tooling and designs, technologically sophisticated plant and machinery and high-value automotive components contributes to the large outflow of foreign exchange (Damoense & Alan, 2004:264).

Table 4.8: Trade balance for the automotive industry, 1995 to 2004

	<b>Imports (R billion)</b>	<b>Exports (R billion)</b>	<b>Forex usage (R billion) (imports–exports)</b>
<b>1995</b>	16,4	4,2	(12,2)
<b>1996</b>	19,2	5,1	(14,1)
<b>1997</b>	17,2	6,6	(10,6)
<b>1998</b>	19,9	10,1	(9,8)
<b>1999</b>	22,8	14,8	(8,0)
<b>2000</b>	29,7	20,0	(9,7)
<b>2001</b>	38,0	30,0	(8,0)
<b>2002</b>	50,2	40,1	(10,1)
<b>2003</b>	49,8	40,7	(9,1)
<b>2004</b>	58,0	39,2	(18,8)

Source: National Association of Automobile Manufacturers Annual Report, 2005, Department of Trade and Industry Current Developments in the Automotive Industry, 2004

The MIDP encourages the OEMs to import low-volume models and concentrate on the production of high-volume models. In rationalising the vehicles and components it manufactures, to achieve higher volumes from a much smaller range of products, industry also has to rely on increasing imports to fill the domestic supply gaps. The average local value adding of the top-selling South African assembled models in 2003, mainly influenced by the average age of the model, varied between 37 and 75 percent (DTI, 2004:39). As a result of the imports and the progressive lowering of import tariffs, the percentage of total new vehicle imports in relation to domestic new vehicle sales increased from 6,6 percent in 1995 to 37,6 percent in 2005.

On the automotive component side, a large portion of the automotive imports comprises original equipment components, which are subsequently exported as CBUs after significant value adding. Since the automotive products manufactured in South Africa include imported elements, products produced for exports experience some compensating savings in the cost of the imported parts and materials for the products resulting from the appreciation of the rand since 2002. The variety of available models also influences the nature of the South African vehicle parc, which is changing, and this has profound implications for the aftermarket. Features now include complex sensor systems to trigger safety features, and engines and transmissions that are managed by computerised systems. In addition, the ageing South African vehicle parc calls for more replacement parts for passenger cars and trucks, which need to be imported (DTI, 2004:34).

In 2003, automotive trade between South Africa and the EU amounted to R47,1 billion or 52 percent of total South African automotive trade. Germany remained South Africa's main automotive trading partner comprising R27,2 billion or 30 percent of total South African automotive trade, followed by Japan with R17,3 billion or 19,1 percent, the USA with R8,4 billion or 9,3 percent and the UK with R6,9 billion or 7,6 percent (DTI, 2004:50). However, South Africa's foreign trade has become more geographically diverse. Not only are new markets opening up for South African companies, but new sources of necessary industrial imports are also appearing (Trade secrets, 2004:76). The South African automotive industry looks set to generate increased foreign exchange, given currency stability that enhances future planning as well as the ability of the domestic industry to penetrate new markets, export new products and exploit the opportunities presented by increasing trade arrangements (DTI, 2004:48).

The growth prospects of the automotive sector impact on the financial performance of the sector as well, which will be discussed in the next section.

#### 4.5.4 FINANCIAL PERFORMANCE OF THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY

Table 4.9 reveals the profit performance, before interest and tax, of the eight domestic OEMs from 1995 to 2004. The high profits by the eight OEMs recorded in 1995 resulted from the 24 percent increase in sales volumes experienced during that year as well as the once-off benefit arising from the change from an excise-based programme (Phase VI) to the import-duty based MIDP (DTI, 1997b:9). The main reasons for the depressed profit levels from 1996 onwards were increased competition between the OEMs, the decline in sales volumes and industry revenues together with pressure from imports, which has led to shrinking margins. Owing to contributing factors such as the small vehicle incentive (SVI), the major domestic market growth since 1996 has occurred in the small vehicles segment, which internationally is less profitable.

Table 4.9: OEM industry profitability in nominal terms

Year	R million
1995	2032
1996	520
1997	(547) loss
1998	109
1999	79
2000	1285
2001	3717
2002	4102
2003	4256
2004	5873

Source: National Association of Automobile Manufacturers of South Africa Annual Report, 2005

Industry has adopted strategic relationships with customers where exports are concerned and as a consequence profit margins have been squeezed with automotive component firms reflecting similar depressed profit levels up to 2000 (DTI, 1998:15). However, it takes time to establish new relationships, to establish contacts in new markets, to engage new technology, to set up new production facilities, to train people and then to start supplying (DTI, 1997b:11). The significant increase in OEM profitability from 1999 to 2000 resulted from higher export volumes, increased values of exported units largely attributable to the depreciation of the rand,

higher price increases and a recovery in the domestic market (Business Map Foundation, 2003:1-4). The successful vehicle-exporting OEMs largely determined industry profitability since 2000 (DTI, 2001:27).

A phenomenon of the South African car market is that the luxury car market ratio is substantially higher than in other countries as most of these, higher-margin, less price-sensitive premium cars are financed and bought by companies, which contribute to the OEMs profitability. From 1999 onwards the luxury vehicle market in South Africa comprised between 25 and 35 percent of the domestic new vehicle market and in percentage terms is seven to eight times bigger than those in other countries (De Vos, 2003:63-66). BMW SA has the highest market share of any BMW company worldwide and has established itself as the fastest growing BMW plant in world. The BMW facility has moved from being a world-class operation to the number one position in the Southern Hemisphere in terms of technical advancement (Kok, 2003:4; Czernowalow, 2005).

The profitability and return on total capital in South Africa since 2000, in aggregate terms, is in line with global norms. The earnings before interest and tax (EBIT) by the eight OEMs in South Africa amounted to 5,2 percent in 2003. The average EBIT of OEMs globally over the last 10 years has been 4,8 percent and for the top automotive component suppliers 6,5 percent. South Africa has a good ability to build plants much more quickly and at lower costs than its competitors and to operate profitably with smaller volumes. The combination of existing, under-utilised infrastructure and the benefits of the MIDP are increasingly attracting automotive investor interest into South Africa (DTI, 2003b:35). DaimlerChrysler SA won the new generation C-class for right as well as left-hand drive model versions to be assembled in South Africa from 2007 against stiff international competition. The company indicated that earnings and profitability rose healthily in 2004 and that it had over-achieved on its profit and cash flow targets; this is in stark contrast to the parent company in Germany (Creamer, 2005).

Since investment decisions are based on sound financial returns, the investment intensity in the domestic automotive sector will be discussed in the next section.

#### 4.5.5 INVESTMENT INTENSITY OF THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY

Foreign investment only comes in a stable environment and attracting new foreign direct investment and upgrading technology became a key political goal as was emphasised in the 1996 GEAR policy statement (UNIDO, 2003:5-8). Without foreign direct investment and trade government's growth and employment goals will not be achieved. Government has established investment promotion agencies such as Trade and Investment South Africa to administer a wide range of incentive schemes, and has signed the WTO's Agreement of Trade Investment Measures (TRIMS), ensuring equal treatment of national and foreign investors and free repatriation of capital and dividends, as well as more than 30 bilateral investment treaties (Gelb, 2004:41-45). A recent global survey ranked South Africa among the world's ten leading countries in terms of low cost and ease of compliance in establishing a business in 2003 (Chiaberta, 2004b).

A number of industrial support measures have been implemented to enhance the competitiveness of South Africa's industrial base. To this end government has set in place incentives for value-added manufacturing projects, support for industrial innovation, improved access to finance, creation of an enabling environment for small and medium enterprises (SMEs), Industrial Development Zones (IDZs), export incentives and the promotion of competition and consumer protection. The South African government supports both domestic and foreign investments. The supply-side measures and incentives are aimed at ensuring that domestic companies source their inputs more effectively, market more effectively and manufacture more effectively (DTI, 2003b:37). However, the Minister of Trade and Industry, Minister Mpahlwa has indicated that the package of supply-side measures as a whole are of insufficient scale to restructure the manufacturing sector adequately to deal with the harsh winds of trade liberalisation. Several industry role-players have also stated that there is an urgent need for increased investment incentives from government in



order to compete with the scale of incentives provided in other developing countries (Brown & Mde, 2005; Venter, 2006:17).

The South African automotive industry's aim is to become an investment destination of choice. In this regard modernisation and upgrading of key elements are required to achieve international competitiveness. In 2004 interest rates were at historic low levels, thus reducing the cost of investments. The strong rand could enhance investments and create jobs, among other benefits. A weak currency does not attract foreign or domestic investment, as investors have to make high returns in a weak currency environment to compensate for potential currency losses. The need for higher returns often renders the projects unviable. With the lower inflation and interest rates decreasing the cost of capital, South Africa is heading towards a more favourable long-term investment environment. The benefit of this could be long-term fixed investors and the removal of the incentive for short-term speculative investment as currency stability matters more than the strength or the weakness thereof. The capital investments by the OEMs will be discussed next.

#### 4.5.5.1 Capital investments by the OEMs

Delta Motor Corporation was the first OEM to invest under the MIDP in 1996 (DTI, 1997b:10). Significant investment programmes for new model introductions followed when Ford Motor Company, Nissan, Toyota, Fiat and General Motors took up stakes in domestic operations.

The motivation for parent companies to add plants in developing countries is to increase the competitiveness of their global operations (DTI, 2002a:38). Investment into infrastructure and production capacity has arisen directly as a result of the export opportunities offered by the MIDP (Mawson, 2005b). The automotive industry was recorded as being the second largest recipient of foreign investment of any sector since 1994, indicating the extent to which the MIDP has leveraged investment and access to export markets (DTI, 1997a:11; Humphrey & Memedovic, 2003:37). The minutes of the Monitoring Committee of the MIDC reveal that, since its introduction in 2000, the Productive Asset Allowance (PAA) has attracted 42

applications to the value of R21,4 billion up to April 2006. The objective of the PAA is model rationalisation. The OEMs that have applied under the PAA have reduced the number of model platforms from 31 to 18 and increased the average annual volumes of vehicles produced from 9500 units to 24 000 units between 1999 and 2006. The PAA, however, excludes the medium and heavy commercial vehicle sector as well as component sector investments not dedicated to model rationalisation. An alternative investment incentive available to the component and medium and heavy commercial vehicle sector is the Small Medium Enterprise Development Programme (SMEDP) allowing tax-free cash grants for a period of two years for new or expanding investment projects calculated on a sliding scale up to R100 million. The effective rate of benefit at a maximum level of R100 million is 3,05 percent (DTI, 2004:60). No other investment incentive exists to accommodate investments above R100 million after the Strategic Investment Programme (SIP) was phased out in 2005.

Table 4.10 reveals that the capital expenditure by the eight OEMs has amounted to R17 billion over the past ten years and is projected to achieve similar levels over the next five years. Significant investment programmes driven by export plans have been implemented by all the OEMs since the commencement of the MIDP.

The increase in production volumes owing to CBU exports provides opportunities for component suppliers to increase their levels of production, as well as to attract new component and subcomponent manufacturers, as the viability to manufacture improves. As a consequence exports of CBUs and components are projected to double over the medium term. Owing to the MIDP dynamics, these export targets will only be achieved via foreign direct investments (DTI, 2004:59). The big advantage of the MIDP is the long-term certainty for the investment environment as it is generally regarded as a key requirement by business in taking investment decisions.

Table 4.10: Investment expenditure by the OEMs in South Africa, 1995 to 2004 (R million)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Product, local content, export investments and production facilities</b>	734	996	1024	1144	1314	1311	1800	2311	1989	1816
<b>Land and buildings</b>	35	46	129	60	82	110	33	152	142	130
<b>OEM support infrastructure (including research and development/engineering /technical)</b>	78	129	112	138	115	141	245	263	194	274
<b>TOTAL</b>	847	1171	1265	1342	1511	1562	2078	2726	2325	2220

Source: National Association of Automobile Manufacturers of South Africa Annual Report, 2005

The investment behaviour of OEMs is influenced by a number of industry-specific factors. The importance of economies of scale means that increased competitiveness places some pressure on firms to increase production as a way of reducing unit costs. This in turn may require that the parent company creates export opportunities for the South African subsidiary and invests accordingly. Investments have to be enlarged or firms face the prospect of losing market position and eventually becoming unviable. Hence, to stay in the game the stakes have to be increased.

Key investment decisions made outside South Africa by global parent companies indicate that short-term profitability in a minor South African subsidiary is likely to be a lesser consideration than medium-term market prospects and strategic concerns related to market share and the requirements of global production networks. However, South Africa has the ability to build plants much more quickly and at lower costs than the high-volume producing countries and to operate profitably with smaller volumes (DTI, 2004:57). Rising production efficiencies, pressure on margins as well as clear government policy are necessary to force the hand of the parent company. In South Africa the OEMs rationalising operations in line with the MIDP objective of higher model volumes are therefore in a better position to encourage investments by first-tier suppliers as it reduces complexity (Black, 2001:18, 19).

The integration into the global group of the South African subsidiaries provides opportunities for business, produces synergies in several areas and accelerates the exchange of knowledge, which will enable the domestic subsidiary to be more competitive in the global automotive industry (DTI, 2004:59). The developments by the OEMs had a direct impact on the composition of the automotive components industry with multinational component manufacturers establishing Greenfield operations or purchasing existing operations (Barnes, 2004:6). The investments by the automotive component manufacturers will be discussed next.

#### 4.5.5.2 Investments by the automotive component sector in South Africa

In 2004 seven of the top 10 global OEM suppliers had already invested in South Africa as well as three of the four global tyre manufacturers. The exceptions in the top 10 global suppliers, as indicated in Table 2.3 that have not yet invested in South Africa are Denso Corporation, Magna International Inc. and Aisin Seiki Co. Ltd, while the exception of the four global tyre manufacturers in the tyre sector is Michelin. The capital investments were mainly directed at expanding production for export markets (DTI, 1998:16).

Capital expenditure has increased annually, but despite these investments, increases in R&D have been low. In general the domestic automotive industry remains a technology-taker and the sector's greatest benefits are therefore evident in technology transfers enhancing capacity, quality and standards, which make domestic industry more globally competitive. Investment also facilitates Black Economic Empowerment (BEE) development, an important objective of government policy, which mainly comprises lower tier supplier involvement following outsourcing of certain activities and subcomponents and hence the potential for employment generation (DTI, 2001:29). Since sustainable employment is another one of the MIDP's objectives, the automotive employment levels in South Africa since the introduction of the MIDP in 1995 will be discussed in the next section.

#### 4.5.6 AUTOMOTIVE EMPLOYMENT LEVELS IN SOUTH AFRICA

The automotive industry has a high multiplier effect due to the creation of opportunities in automotive and related areas and has direct linkages with a large number of support services and SMEs. Employment ratios vary from country to country but generally for every worker in the manufacture of a motor vehicle there are at least two or more employed in used vehicle sales, servicing and repair. The MIDP encourages South African manufacturers to be internationally competitive and the need to secure world-size contracts implies that automated business drives job reduction (DTI, 2003b:46).

Table 4.11 reveals that employment in the automotive industry has been fairly stable since 1995. The OEMs generally had a high degree of labour input to production in South Africa, which meant a high degree of flexibility. Most OEMs had spare capacity and could increase production without an increase in employment levels.

Table 4.11: South African automotive industry employment, 1995 to 2004 (number of employees)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Assembly industry</b>	38 600	38 600	37 100	33 700	32 000	32 300	32 700	32 370*	31 700*	31 800
<b>Component industry</b>	65 500	65 500	69 100	69 700	67 200	69 500	72 100	74 100	75 000	74 500
<b>Tyre industry</b>	11 000	10 000	9 500	9 100	6 670	6 575	6 300	6 000	6 000	6 000
<b>Motor trade</b>	178 000	180 000	180 000	170 000	175 000	180 000	182 000	185 000	191 000	194 000
<b>Total</b>	293 100	294 100	295 700	282 500	280 870	288 375	293 100	297 470	303 700	306 300

\*The leather division of BMW SA was sold effectively on 1 July 2002 and, as a result the employment numbers, involving over 1 000 employees, are no longer reflected in terms of the vehicle manufacturing industry but under the automotive component industry.

*Source:* National Association of Automobile Manufacturers of South Africa Annual Report, 2005, Bentley West (2004), Study to explore the retention and creation of employment in the South African automobile sector.

With the main thrust of the MIDP being to improve the international competitiveness of the industry, it was realised that it would be difficult to create employment in the automotive sector and that the emphasis should rather be on maintaining employment at the levels prevailing at the start of the MIDP (ITAC, 1995:13). High

levels of employment relative to the number of vehicles produced meant that existing levels would only be maintained with an increase in production (DTI, 1997b:6).

Globalisation has also led to a restructuring and reshaping of domestic operations and industry has had to deal with obstacles such as the relatively high costs associated with production of low volumes, cost of resources such as steel, aluminium and platinum, the reliance on foreign technology as well as the low research and development budgets (Damoense & Alan, 2004:252, 264). In addition, the drive towards higher productivity and new manufacturing techniques has resulted in full-time jobs being converted into subcontracting, outsourcing, in-sourcing, as well as temporary and casual nature workers, which inhibited growth in employment (DTI, 2003b:46). Production and productivity gains have also been realised by the OEMs. This has been mainly driven by higher CBU exports and economies of scale benefits. The positive output growth has helped to marginalise employment losses in the sector.

In the component and tyre sectors the impetus has been provided through the expansion in component production to supply higher levels of domestically assembled CBUs as well as the increase in exports of a broad range of components. Employment deviations, in areas such as the tyre industry, resulted from investments and restructuring by parent companies to pull the South African manufacturers into their global supply chain. However, growth in exports indicates that those investments have borne fruit (DTI, 2000:20, 21). The increase in the motor trade employment level is largely aligned with domestic market growth and increased new brand availability requiring dealerships in South Africa. Employment increases are also subject to labour costs in an intensely competitive environment, which will be discussed next.

#### 4.5.6.1 Labour costs

Labour costs in the South African automotive sector are competitive with the developed nations, specifically those that the South African industry has close ties with (DTI, 2004:77). Union-employer partnership focuses on results and quantum

improvements in productivity and flexible skills. According to NAAMSA (2005:25), direct labour costs in the vehicle assembly industry decreased by 35 percent over the past eight years up to 2004. The increased focus on manufacturing for export, being more capital and skills intensive, has led to a rise in demand for skilled labour. It was found in South Africa that flexible production lines with lower volume production, using more human workers instead of automating with robots, have advantages without compromising quality. In this regard the highly prestigious JD Power Gold Plant Quality award won by BMW SA in 2002 reiterates the case in point. Raising domestic skills levels and generating employment through more labour-intensive assembly practices represent tangible economic and social long-term benefits (DTI, 2004:72).

The new three-year wage agreement signed in the assembly industry in 2004, without any labour unrest for the first time ever, is indicative that the future of the automotive business in South Africa is dependent on its workforce and on satisfactory relations between the shop floor and management. The commitment and constructive co-operation by all role-players is imperative to ensure sustained export business (DTI, 2004:74). Weak links cannot be afforded in the automotive value chain and in this regard productivity improvements, as will be discussed next, are a key ingredient.

#### 4.5.6.2 Productivity

Since the process design is done in South Africa and the product design done overseas, firms have noted that they have to improve their process capabilities as a precondition for continued supply into the global automotive industry. Productivity in the South African automotive industry is on a par with low-volume countries and between 1996 and 2004 the production of vehicles per employee increased from 7,5 units to 14,4 units (NAAMSA, 2005:15). The relatively low levels of automation contribute to South Africa's competitive advantages in respect of its flexibility, diverse range of products, price competitiveness, quick changing of the configuration of tooling as well as processes according to need. In a 2005 World Bank/Department of Trade and Industry study with comparable middle-income countries, it was found that

South Africa's productivity was three times higher than in China (Mittner, 2005:23). Training is imperative to achieve higher skills and productivity levels and this aspect will be discussed next.

#### 4.5.6.3 Training

The expenditure on training by the OEMs, mainly to accommodate export programmes, amounted to R119,6 million in 2003, a significant increase of 41,7 percent compared to the R84,4 million in 2002 as well as previous years.

As South Africa's main exporter of passenger cars, BMW SA's training expenditure was double the group's international average as a proportion of salaries and wages (DTI, 2004:71). The amount spent by industry is a clear indication of the export focus and participation in global markets. The component sector followed similar trends in expenditure on training. Since the global trend by OEMs is the abdication of power to suppliers in respect of ownership for product development, co-designing and research, the component sector is regarded as the leading manufacturing value-added industry in the world (DTI, 2002:28). The continuous global pressures place escalating demands on suppliers in terms of investment in training due to the massive technological advances in vehicles. Attempts by the OEMs are all focused on price competition and in this regard vehicle affordability, as discussed in the next section, is a major focus area.

#### 4.5.7 VEHICLE AFFORDABILITY IN SOUTH AFRICA

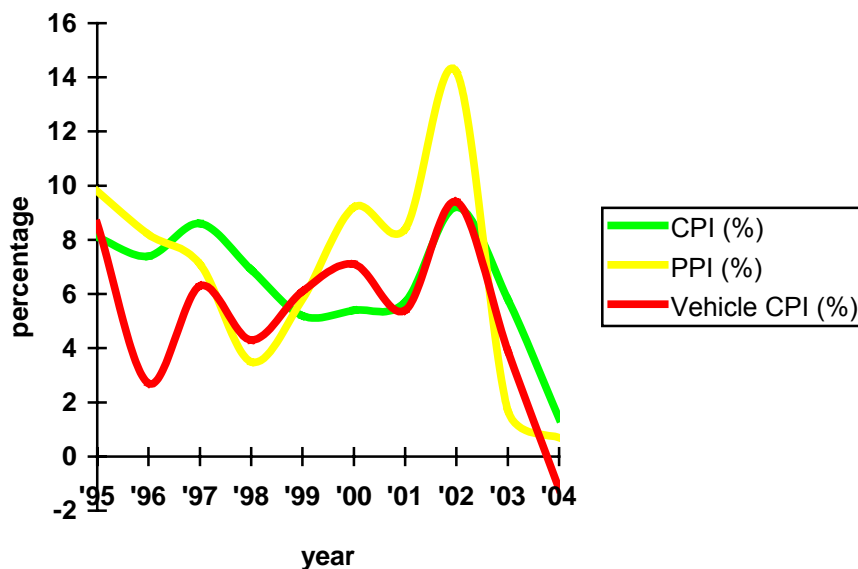
Trade liberalisation tends to reduce prices of liberalised products relative both to other goods in the domestic market and to similar commodities internationally. The orthodox rationale for tariff reductions resulting from globalisation is to realign relative prices, reduce input costs and correct anti-export bias (Black, 2001:4).

Improved vehicle affordability is one of the objectives of the MIDP. Affordability is described as the ratio linking the price of a commodity to the available spending power (Zhuwakinyu, 2003:7). Directly comparing domestic and international vehicle



models and prices presents some difficulty as vehicle performance has improved and new safety features have been added over time. Comparing selected South African retail car prices with those of the UK in 2002, using an average exchange rate for the year, showed that by and large cars in the UK were sold at a premium to those in South Africa, while some South African models were more expensive than in the EU countries. This was the case specifically for models imported into South Africa (Business Map Foundation, 2003:1-4). In a report into excessive pricing in the South African new vehicle market in 2005, the Competition Commission found that in its sample of six vehicles, domestic car prices were 14 percent above prices in European countries (Cokayne, 2006:1).

However, numerous external factors and economic dynamics that affect prices have to be taken into consideration. NAAMSA has indicated that these factors include the customs and excise ad valorem duty or fiscal tax, price of labour, the cost of imported content, other taxes as well as perks, such as vehicle service plans that are included in the purchase price, vehicle enhancement specifications at no cost to customers and extended warranties, which are included in vehicle price. It was indicated that a stronger rand and lower interest rates will not bring about a price decrease, as every OEM has its own cost structure in determining its vehicle prices. The rate at which labour costs rise should be measured against the inflation rate, production stakes and productivity (Msiza, 2004; Robertson, 2004:10). According to NAAMSA (2003), new vehicle prices represent only one element, comprising 55 percent, of the total vehicle ownership cost. Important other aspects include interest rates, financing options and packages, insurance premiums, maintenance and servicing costs, parts pricing as well as disposable income trends and standard of living improvement.



\*The average vehicle consumer price index is calculated by Statistics South Africa (SSA) and is based on new and used vehicle price deviations after discounts.

Figure 4.3: Rate of increase in vehicle prices compared to CPI and PPI for 1995 to 2004

Source: Statistics South Africa, Department of Trade and Industry Current Developments in the Automotive Industry, 1999 and 2004.

The MIDP has resulted in increased competition by reducing protection. Figure 4.3 reveals the price movements of CBUs compared to the consumer and production price indexes. The reduced rate of vehicle price increases and the reduction in certain vehicle categories from 1995 to 1998 was one of the most positive features of the MIDP and was attributed to greater international competition, despite the weaker rand and high imported content. Improved affordability had a significant impact on domestic new vehicle sales (DTI, 1997a:12). Vehicles prices declined by 12,6 percent in real terms from 1995 to 1998 (DTI, 1999:15); however, inflationary pressures, which were not absorbed by the OEMs in the form of price increases during 1998, eventually took their toll and new vehicle price increases exceeded the consumer price index (CPI) in 1999 for first time under the MIDP. If new vehicle prices were indexed back to 1995, however, prices were still 8 to 10 percent lower than they would have been if they increased in line with inflation (DTI, 2000:18). In 2000, new vehicle prices exceeded the CPI for the second year in a row due to

pressure on the production price index (PPI) resulting from high oil prices and rising imported goods prices. Despite the price increases, South African entry-level cars, in US dollar terms, were amongst the cheapest in the world indicating that the MIDP progressively exposed industry to greater pressures of international competition and the need for efficiency improvements (DTI, 2001:31). Overall vehicle prices were below the CPI for six of the 10 years from 1995 to 2004. The MIDP richly deserves the praise for the way it has achieved structural change and real growth in respect of achieving improved affordability (Pretorius, 2004:14). However, varying opinions have been formed in respect of the technical capabilities of the MIDP in terms of its performance since its inception. Some of the main comments by industry role-players will be discussed in the next section.

#### 4.5.8 COMMENTS ON THE TECHNICAL CAPABILITIES OF THE MIDP

The performance of the MIDP has been a topic of discussion by a wide national and international audience in determining the impact, achievements and shortfalls. Some of the main positive and negative comments made on the MIDP, in its ability to achieve its overall objectives to the automotive industry in South Africa, are summarised below.

##### **POSITIVE COMMENTS**

- “The MIDP has attracted a world-class motor industry into South Africa as a result of the protective government policies that would not otherwise have existed. Without the MIDP the domestic manufacture of vehicles and components would have become out of date and unable to attain global standards and the industry may have become extinct” (Business Map Foundation, 2003:1-4).
- Former Minister of Trade and Industry, Mr Alec Erwin says: “The MIDP has been recognised around the world as a successful and innovative national strategy to develop automotive manufacturing and open up a domestic market in the new environment of globalisation” (DTI, 2003b).

- NAACAM Executive Director Clive Williams (2004a:14, 15) says: “The MIDP is an evolutionary thing. There are negatives, but the positives outweigh the negatives. Many analysts predicted that more than half of the component manufacturers would have closed their doors by 2000. In reality, less than 10% actually closed and this was more than compensated for the influx of new entrants. “
- The future of the domestic motor industry is of considerable importance for the development of South Africa’s manufacturing sector and indeed the economy as a whole. It is a generator of inter-industry linkages and has close links with other manufacturing sub-sectors (Damoense & Alan, 2004:251).
- As a result of the MIDP, the automotive sector has turned out to be a fundamental economic asset to South Africa. Another considerable contribution is that German companies have also been successful in the transfer of skills, technology and know-how into South Africa (De Witt, 2004:58).

#### **NEGATIVE COMMENTS**

- “The emergence of dualism under the MIDP due to the growth of a large export sector which is not very closely integrated with a low volume, low local content assembly industry supplying the domestic market” (Black, 2001:22).
- “The MIDP incentives create sizable economic rents. As a result vehicles and components are produced with domestic resources whose opportunity cost is much greater than the export revenues earned or foreign exchange saved through the replacement of imports with domestic production. These inefficiencies of the incentive regime are not just a transfer from one pocket to another but an economic waste. The conclusion is that an industry whose performance depends so heavily on policy support should not necessarily be considered an economic success” (Flatters, 2002:14; Flatters, 2005:10, 13).

- “The rapid growth of imports of passenger cars into South Africa is an ongoing concern” (Venter, 2004a:16, 17).

The MIDP has to a large extent achieved its stated objectives and in general its contribution to the domestic automotive industry has been regarded as positive. The programme was not intended to be a miracle solution but an interventionist programme to guide a small, ineffective industry's integration into the global automotive environment (Barnes & Morris, 1999:11).

#### **4.6 SUMMARY**

A number of significant achievements and structural changes have occurred in the South African automotive industry since the implementation of the MIDP in September 1995. The domestic automotive industry has performed well in relation to the objectives of the MIDP.

The domestic production of vehicle models has been rationalised significantly to achieve economies of scale benefits in the domestic and export markets. Subsequently, the complexity in the component sector has also been reduced. The surge in exports of completely built-up vehicles and a diverse range of components to demanding world markets since 1995 is indicative of the domestic industry's improved international competitive levels. Exports of completely built-up vehicles are projected to double over the medium term while the domestic market is projected to elevate the 2004 and 2005 domestic new vehicle sales record to the one million level by 2010. Significant investments in best practice assets and state-of-the-art equipment have taken place, mainly to accommodate export contracts of CBUs and automotive components. In line with the domestic market growth as well as the objectives of the MIDP, imports of both CBUs and automotive components have increased. The South African automotive industry remains a net user of foreign exchange resulting from the importation of products not manufactured in the relatively small domestic market. The strengthening of the rand, therefore, has impacted negatively on the trade balance of the domestic automotive industry since 2004. Imports, however, have improved vehicle affordability due to the reduction of

import duties on vehicles and automotive components as well as the appreciation of the rand against all major currencies from 2002 onwards.

As far as the South African automotive industry's financial performance is concerned, positive results above global averages have been achieved amidst unfavourable global conditions. Improved skills and labour productivity has contributed to the positive developments in the domestic automotive industry. Automotive industry employment levels have shown marginal increases since 1995 in line with the objective to sustain the levels at the commencement of the MIDP. The constructive way in which all role-players from government, industry and labour cooperate to maximise the contribution of the automotive sector to the South African economy has been regarded as a significant achievement (DTI, 2004:16).

Despite some detractors, as revealed by the comments from some industry spectators, the MIDP has to a large extent achieved its objectives and the general view on its contribution to the South African automotive industry is regarded as positive.

#### **4.7 EXTERNAL FACTORS IMPACTING ON THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY**

The MIDP's facilitation of the development of the South African automotive industry is not a closed experiment in a scientific laboratory. The MIDP may have strengths and weaknesses in terms of its various policy mechanisms but by its very nature the programme, through its outward orientation, lays the industry open to external or exogenous forces that are unpredictable and potentially both beneficial and damaging to the industry (Barnes & Morris, 1999:15). The following external factors, foremost in the minds of South African industry role-players, are global developments, World Trade Organisation (WTO) rules and regulations, trade arrangements, logistical costs, raw material prices, currency movements as well as Black Economic Empowerment (BEE) and HIV/Aids, which will now be discussed.

#### 4.7.1 GLOBAL DEVELOPMENTS

A significant global development impacting on developing countries is the production overcapacity. The net result of this overcapacity has been the increased competitiveness of the world's major OEMs, who are looking to cut costs whilst at the same time getting new products to the market sooner to capture market share. The competitiveness pressures that have resulted from the overcapacity have had a direct impact on the South African automotive industry and hence the success of the MIDP. Through its necessarily outward orientation the MIDP has exposed the domestic industry to increasingly intensive global pressures.

How these global trends play themselves out is of critical importance given the manner in which they directly impact on the South African automotive industry. These trends have a direct impact on the ability of the MIDP to meet its objectives for the industry. Global overcapacity and the continued investments by OEMs and component manufacturers in certain geographical localities mean that it is more difficult for the domestic industry to find viable export markets. Connectivity into global value chains becomes equally important with these being determined by equity relationships with multinational companies and the establishment of suitable licensing agreements with new technology owners.

The domestic automotive industry has proved rather resilient to a general downturn in the global automotive conditions and the restructuring that has resulted from the key strategic movements of global major players, keeping in mind South Africa's small global market share. However, due to the export orientation of the MIDP and the benefits derived from exports, the various mechanisms of the MIDP in terms of the domestic and international operating environment are interlinked, particularly in terms of market and political issues (Barnes & Morris, 1999:17). In the context of the stagnant domestic market this has resulted in an oversupply of import rebate duty credits, which has contributed to the difficulties being experienced by OEM-focused automotive suppliers. The policy resolution was thus to reduce the export benefits of the import-export complementation scheme as part of the MIDP mid-term review in 1999.

The importance of exogenous factors lies in the interface between the import-export complementation of the MIDP, domestic market performance and exporting volumes. Owing to stagnant vehicle demand in South Africa between 1995 and 2003, which cannot be attributed to the MIDP given lower real vehicle prices through the latter part of the 1990s, the effective rate of protection for the automotive component industry has been impacted on enormously.

Given a higher growth rate in the domestic market, the import rebate credits earned on exporting would have proved far less comprehensive in terms of covering the duty payments, hence a greater propensity to purchase domestically produced components. Higher volume production runs for automotive component manufacturers, thus giving them a greater incentive to invest in new capital equipment and improve their competitiveness, would have further encouraged this propensity. However, neither of these two scenarios has occurred. The local content levels in domestically assembled vehicles have remained relatively low, in the order of 55,6 percent for the top selling models in 2003 (DTI, 2004:33). This exogenous factor has consequently been a major contributing factor to the MIDP's relatively poor performance in respect of its output and employment. It may well also have operated to significantly and inadvertently shorten the global integration period for automotive component manufacturers in particular, thus exposing firms to massive levels of competitiveness over a short period of time as part of the rapid global integration (Barnes & Morris, 1999:15).

Amidst the global competitiveness pressures, the MIDP has provided long-term policy certainty and investor confidence. South Africa's international obligations with respect to the MIDP and the WTO rules and regulations will be discussed next.

#### 4.7.2 WORLD TRADE ORGANISATION (WTO)

South Africa is a signatory to the WTO. Member countries are under an obligation to ensure that their national legislation, regulations and procedures conform fully to the provisions of these agreements. Australia threatened to challenge the MIDP in 2004



at the WTO as not being compliant with members' rules of trade in linking incentives to export performance and local content.

The Australian complaint was targeted specifically at the stitched leather seat industry, the second biggest automotive component exported under the MIDP after catalytic converters in 2004. The South African government has ring-fenced stitched leather seats to isolate the problem and to keep it apart from the rest of the MIDP. As a result no export incentives under the MIDP on South African leather exports are allowed to Australia from 1 January 2006. The 2005/6 accelerated leather review as well as the general MIDP Review will take account of South Africa's international trade obligations as part of the recommendations for possible alternative support mechanisms (Venter, 2006:16). A potential or WTO challenge to the MIDP has the risk of destabilising the entire automotive industry should sudden changes to the programme be forced upon the industry as these will impact on long-term policy certainty and investor confidence. A further area of government involvement impacting on the domestic automotive industry and the MIDP is the area of trade agreements, which will be discussed next.

#### 4.7.3 TRADE ARRANGEMENTS

Intensifying competition for export markets, investment and technology is the hallmark of the current global economic environment and access to markets is the measure for global competitiveness. The process of integrating economies includes the gradual and reciprocal liberalisation of trade and strengthening of economic cooperation between countries. Elimination of tariffs enhances South Africa's potential to compete against the same products not accorded similar tariff benefits into the relevant countries. It is the stated objective of the DTI to increase trade with geographic locations that form part of the developing world, as significant growth is expected in those regions in the medium term. South Africa is currently engaged in a series of free or preferential trade negotiations with the EU, the USA, the South African Development Community (SADC), the European Free Trade Association (EFTA) and Mercusor while the possibility of preferential bilateral agreements with countries such as India, China and Nigeria are being examined (DTI, 2004:86-88).

The challenge is to accommodate the MIDP in these agreements without tampering with the integrity of the programme.

Cross-border business involves customs duties as just one of the barriers being encountered. However, a myriad of other compliance and protectionist instruments, such as specific tariffs, antidumping measures, and a plethora of nontariff barriers for products and company behaviour have risen as significant and often insurmountable barriers to trade, especially for developing country firms (Von Kirchbach & Mimouni, 2003:25-30). When measures are applied inconsistently with international agreements they can become insurmountable barriers. In addition, duty drawback and similar schemes, export incentives and international multinational transfer pricing and practices all combine to make the global automotive sector a complex one. In many countries, the automotive sector has iconic status but this is generally only possible behind high tariff and nontariff barriers. Almost every known nontariff barrier protects automobiles and their associated parts (Hanival, 2003:1-3). In addition, logistical costs, which will be discussed next, are a further burden on delivering products to the marketplace.

#### 4.7.4 LOGISTICAL COSTS

Now that South Africa is an international player in the production of motor vehicles and automotive components, sophisticated logistics systems and high standards along the supply chain are demanded.

Logistical costs in 2003 accounted for 14 to 16 percent of South African firms' operating costs and in order for the economy to maintain its competitiveness it is felt that these costs must come down to 9 to 10 percent (Williams, 2005:23). High oil prices increasingly impact on logistical costs while the cost of exporting a product to Europe, the South African automotive industry's main export destination, represents in the order of 10 percent of the value of the product. Logistical costs to and from domestic OEMs and component suppliers are much higher compared to plants closer to the major markets in the USA, Europe and Asia (Lourens, 2005a; Venter,

2005). In addition to logistical cost pressures, the domestic automotive industry also has to face high raw material input prices, which will be discussed next.

#### 4.7.5 RAW MATERIAL PRICES

The automotive industry represents one of the key industries for steel from Mittal Steel in South Africa, considered to be a third-tier supplier in the automotive value chain. Import Parity Pricing (IPP) has been identified as a major constraint on growth and the expansion of the downstream sectors such as metals and chemicals. In terms of the IPP pricing model, the domestic price is set at the international price with the addition of costs such as freight, insurance, harbour charges and the import duty. Domestic prices to downstream producers are in some cases 30 to 50 percent above international prices. Not only does the system inflate prices of input costs, but hinders growth in the value-added, labour-intensive downstream industries, which South Africa needs to develop to lessen a reliance on the export of raw materials. Despite an increase in input costs, many automotive component manufacturers have been forced to lower their prices in the face of heightened competition from imports. In addition to inviting cheaper imports, the strong rand has also reduced export competitiveness and the impact will be discussed next (Venter, 2004a:16, 17; Njobeni, 2005; Engineering News, 2005b; NAACAM, 2005:5, 6).

#### 4.7.6 CURRENCY MOVEMENTS

The weaker a country's currency is compared with the currencies of its major export markets, the more competitively priced that country's exports can be and vice versa. The principle, however, is a more complex one. A weakening of the rand against the US dollar means that costs incurred in rand become cheaper in dollar terms, but the international transport and imported input costs are still incurred in US dollars, which have not changed (Trade Secrets, 2004:273). In a weak currency environment investors have to make higher returns to compensate for potential currency losses (Lourens, 2003).

Owing to the small size of the South African automotive industry, currency deviations with trading partners will always impact on domestic operations. Table 4.12 reveals the currency movements of the rand against those of South Africa's main automotive trading partners. The sharp depreciation of the rand in the late 1990s boosted exports but led to a big increase in vehicle prices due to higher input costs, given the magnitude of imports from Germany and Japan comprising 50,5 percent of passenger cars and 85 percent of original equipment components (DTI, 2000:14, 15). This had a negative impact on the sector's trade balance. The rand reached a record low of R13,85 to the US dollar in December 2001, but started to appreciate against all currencies and in particular against the US dollar to the extent of a 130 percent appreciation from the latter half of 2002 until the end of 2004 (Downing, 2004:6). This led to a sharp decrease in inflation and substantial interest rate relief, which boosted domestic demand, but jeopardised the country's export competitiveness (DTI, 2004:50). The Bureau for Economic Research established in a manufacturing survey that the exchange rate for a company in the manufacturing sector in South Africa, to become competitive in world markets given existing production conditions, was R7,70 to the US\$ (Engineering News, 2004).

Table 4.12: Currency indices for the rand versus major trading partners (foreign currency: rand - annual averages)

Currency	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Japan (100 yen)</b>	3,88	3,95	3,81	4,24	5,39	6,43	7,08	8,39	6,51	5,96
<b>Index</b>	100	102	98	109	139	166	182	216	168	154
<b>Euro</b>	4,69	5,38	5,21	6,22	6,52	6,39	7,71	9,90	8,53	8,01
<b>Index</b>	100	115	111	133	139	136	164	211	182	171
<b>UK (pound)</b>	5,72	6,72	7,55	9,16	9,89	10,49	12,39	15,76	12,34	11,80
<b>Index</b>	100	117	132	160	173	183	217	276	216	206
<b>US (\$)</b>	3,63	4,30	4,61	5,53	6,11	6,93	8,60	10,52	7,56	6,44
<b>Index</b>	100	118	127	152	168	191	237	290	208	177

Source: South African Reserve Bank (SARB)

In addition to the cost pressures on global competitiveness, the domestic manufacturing sector also has to take account of certain social aspects such as Black Economic Empowerment and the HIV/Aids pandemic, which will be discussed next.

#### 4.7.7 BROAD BASED BLACK ECONOMIC EMPOWERMENT (BBBEE) AND HIV/AIDS

Investors into South Africa must be ready to address two key issues, namely Broad Based Black Economic Empowerment (BBBEE) and the HIV/AIDS pandemic. BBBEE seeks to give increased ownership and control over businesses to historically disadvantaged persons and to increase the procurement-spending going to black economic empowerment firms. The South African government is firmly committed to promoting BBBEE and investors need to have plans to include the training of black workers at all levels of the company and to work with other black economic empowerment firms. This is especially the case if a company has any plans to deal with the government. The BBBEE Codes of Good Practice (Phase II) has been published in the *Government Gazette* on 20 December 2005 for public comment by 31 March 2006.

The generic scorecard, or alternatively, the sector specific scorecard approach as well as certain concerns around preferential procurement, equity equivalent in respect of multinational companies and the impact on the cost of doing business in South Africa require further clarification by various industry sectors. The concerns could potentially impact on investor confidence should they not be resolved amicably.

All companies investing in South Africa should also have a carefully developed HIV/AIDS policy, given the high rates of infection. This should range from direct provision of healthcare and policies towards direct relatives, to training excessive staff numbers to account for subsequent deaths (EIU, 2004:182).

#### 4.7.8 SUMMARY

The South African automotive industry has been fully integrated into the global networks of multinational companies over a relatively short period of time. Owing to the country's increased outward orientation, a range of factors impact on the business operations of the domestic automotive sector and hence the performance of the MIDP. The combined forces of global developments, impacting on domestic

operations, as well as unpredictable and potentially disruptive external factors, directly and indirectly affect the mechanics of the MIDP. Political decisions such as the trade arrangement and BBBEE requirements, as well as the HIV/Aids pandemic and cost factors such as logistics, raw material input prices and currency movements' impact on domestic automotive industry role-players in respect of international competitiveness. Efforts by government and industry are ongoing to influence the impact of some of these factors such as raw material prices, logistical costs and BBBEE requirements in order to ensure increased international competitiveness and investor confidence, which in turn will enhance the performance of the MIDP.

#### **4.8 SUMMARY OF CHAPTER 4**

Since 1994 South Africa has had to play by the new business rules that followed the country's economic and political liberalisation. The MIDP was the only viable choice within policy to pursue as agreed by all automotive industry stakeholders at the time. The MIDP was intended to be an interventionist programme to guide a small, ineffective industry's integration into the global automotive environment.

The process of trade liberalisation is forcing many South African companies to encounter both intensified competition and new forms of competition. Growing import competition in the domestic market and competition from low-cost products sourced from a global pool are the order of the day. The MIDP facilitates the outward orientation of the domestic automotive industry through its various policy mechanisms. However, the MIDP cannot control the range of external factors impacting on the business operations of the South African automotive industry and its role-players. Despite some detractors, the programme has to a large extent achieved its objectives in terms of growth of the automotive sector in the South African economy, sustained the levels of employment and increased the sector's international competitiveness. In a relatively short period of time, the South African automotive industry has been fully integrated into the networks of parent companies and multinationals. The constructive way in which all the relevant role-players in

South Africa cooperate to achieve results has ensured that the automotive sector is increasingly regarded as a benchmark for the other priority sectors of the economy.

## **CHAPTER 5: THEORETICAL PRINCIPLES OF MARKETING STRATEGIES AND COMPETITIVENESS**

### **5.1 INTRODUCTION**

Today, virtually every major firm must compete in a global marketplace. Buyers can comprise ordinary consumers, domestic businesses in international markets, multinational corporations or foreign governments. Competition can be domestic firms or global firms. Although some consumer needs and wants may be converging across national markets and multilateral agreements seek to bring order to the international economic and legal environment, global marketers must still navigate varied cultures where unexpected rules apply (Gillespie, Jeannet & Hennessey, 2004:1). Based on secondary data, Chapter 2 described the global automotive environment, and Chapters 3 and 4 the South African automotive environment. Chapter 5 focuses on the part of the literature study containing the theoretical principles underlying marketing strategies and competitiveness and the relationship between theory and practice.

### **5.2 GLOBALISATION AND THE COMPETITIVE ADVANTAGE OF NATIONS**

The globalisation of production entails products being manufactured by many firms in different countries, each often specialising in a part of the production process. Geographic proximity or closeness to the relevant production area is not necessarily required in order to operate efficiently, and different stages of production are distributed throughout the world (KZN, 2002:1). The significance of the impact of globalisation on companies, industries and countries and, in this regard, the competitive advantage of nations, will be discussed in this section.

#### **5.2.1 GLOBALISATION**

Within three decades world trade has expanded from US\$200 billion to almost US\$7,6 trillion in 2003 (Czinkota & Ronkainen, 2004:15). Global linkages have made possible investment strategies and marketing alternatives that offer tremendous opportunities as well as threats. Entire industries have been threatened in their



survival as a result of international trade flows and have either adjusted to new market realities or left the market. At the same time global business changes have increased the opportunities available. Both external factors, which are factors outside the organisation, and internal factors, which are factors focusing on the performance appraisal of an organisation, will create the favourable conditions for development of strategy and resource allocation on a global basis. Firms can now reach more customers, sourcing policies are changing, new jobs are being created and consumers all over the world can find a greater variety of products at lower prices. The role played and the approach followed by different countries in the globalisation of production will depend on their absolute, comparative and competitive advantages, which will now be discussed.

#### 5.2.2 ABSOLUTE, COMPARATIVE AND COMPETITIVE ADVANTAGE

According to Gillespie et al. (2004:22, 23) absolute advantage is the theory by Adam Smith of selling what you are best at producing. Comparative advantage is the theory by David Ricardo stating that, even if someone else is better, it is still possible to be profitable what one is best at producing. Michael Porter argues that even though the theory of comparative advantage has appeal, it is limited by its traditional focus on land, labour, natural resources and capital. Porter (1990:74) argues that a nation's competitiveness depends on the capacity of its industry to innovate and upgrade. Firms in a competitive environment are forced to produce quality products efficiently. They benefit from having strong domestic rivals, aggressive home-based suppliers and demanding domestic customers.

Differences in national values, culture, economic structures, institutions and histories all contribute to competitive success. Porter argues that prevailing thinking on labour costs, interest rates, exchange rates, economies of scale and more government support, which are regarded as the most potent determinants of competitiveness by companies and governments, is flawed. The determinants fundamentally misunderstand the true sources of sustainable competitive advantage as they only have short-term appeal. Porter's competitive advantage of nations' theory is discussed in more detail in the next section.

### 5.2.3 COMPETITIVE ADVANTAGE OF NATIONS

Porter's expanded theory on "the competitive advantage of nations" (CAN) depends on the following four factors in his diamond model as explained in Figure 5.1 and implies whether a country will have a significant impact on the competitive advantage of an industry:

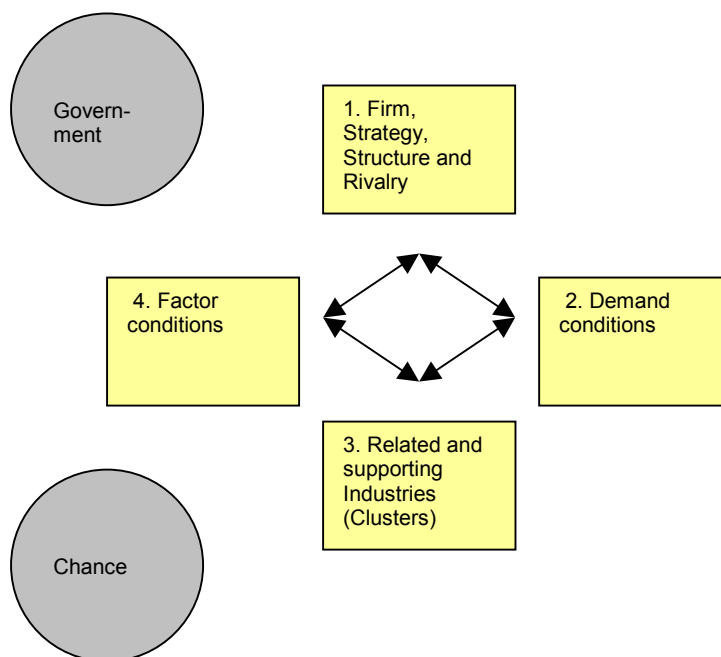


Figure 5.1: Automotive Diamond Model

Source: Porter, 1990; Davies & Ellis, 2000.

1. Firm strategy, structure and rivalry concern the strategies and structures of home-based firms, and the extent to which there is rivalry amongst them. Porter portrays domestic rivalry as the major spur to new technology and innovation and hence success in international competition.

2. Demand conditions in the home base affect a sector's ability to compete internationally through three mechanisms. In each of these instances, it is not the size of the home market that is important, but the extent to which it encourages firms

to innovate. Saturation of the domestic market may spur firms to go abroad, forcing them to compete in the world market.

- First, an industry will have an advantage in market segments, which are more important at home than elsewhere.
- Second, demanding buyers in the home base pressure companies into meeting high standards.
- Third, a nation's industries gain if buyers at home anticipate the needs of buyers in other countries, thereby giving it a lead in learning how to meet those needs.

3. Related and supporting industries will assist a nation's industries in the home base to compete better internationally if there are clusters of industries in the home-based economy that are linked to each other through vertical or horizontal relationships amongst supplying and buying sectors or common customers, distribution channels or technologies.

4. Factor conditions – an industry requires an appropriate supply of factors in its home base if it is to be successful. Basic factors include climate, raw materials and unskilled labour while advanced factors include infrastructure and skilled labour.

5: While the diamond is the central focus, allowance is made for two other factors, namely chance and government. Chance includes unpredictable technological discontinuities, wars and other chance events. Those are not part of the diamond itself, but they may alter the conditions within it. Similarly, according to Porter (1990:87), government has an indirect role to play as a catalyst and challenger, but only affects the corners of the diamond. Porter does not attribute a positive role to active industrial policy. He states that it often takes more than a decade for an industry to create a competitive advantage as the process entails the upgrading of human skills, investment in products and processes, building of clusters and penetration of foreign markets. Governments tend to favour policies that offer easily perceived short-term benefits, which might hamper innovation.

The heart of CAN may be found in the following five central propositions (Davies & Ellis, 2000:1190-1193):

- A nation must reach the innovation-driven stage of development if prosperity is to be attained and sustained.
- International success cannot be based on the comparative advantage brought about by an abundance of basic factors; instead it must be built on the upgrading of a nation's industries through innovation, product differentiation, branding and marketing.
- A nation's prosperity is determined by the performance of the firms for whom it is a home base.
- In order to achieve sustained prosperity those firms must operate within clusters or related industries, which have strong diamonds in the home nation.
- Outward foreign direct investment is a manifestation of an industry's competitive strength and the nation's prosperity, while inward investment is a sign of relative weakness.

Porter concludes that, for a nation to achieve a competitive advantage, the success of an industry requires a combination of all five of the central propositions and the five central propositions must be mutually supportive.

#### 5.2.4 ARGUMENTS AGAINST PORTER'S THEORY OF THE "COMPETITIVE ADVANTAGE OF NATIONS"

Davies and Ellis (2000:1193, 1194) conclude that Porter's admirers saw CAN as an integrating device between disciplines, a theory that might help to explain success in international trade and a framework for empirical work and policy prescription that could be applied to other countries. His detractors saw a set of theoretical commonplaces, a dubious methodology, and a list of environmental attributes and firm behaviours that might or might not help industries succeed in international competition.

Davies and Ellis (2000:1209) review CAN and conclude that CAN's conceptual foundations are undermined by three basic confusions.

- The first confusion is between competitiveness construed as productivity and competitiveness construed as the market share held by a subset of industries.
- The second confusion is between the nation construed as the people in one place and the nation construed as the firms for whom that place is the home base.
- The third confusion arises from the interpretation of competitive advantage as an equivalent concept to comparative advantage. A competitive advantage explains how firms in an industry compete with each other while a comparative advantage concerns which industries a country should have. The combined effect of the confusions was to create a gap between that which was to be explained and that which was actually examined.

With regard to methodology, CAN failed the basic test as it contains no set of "ex ante" hypotheses to be tested on an appropriate set of data. Central assertions are drawn from the data in some unspecified manner, which make it impossible to judge their validity. The sample consisted almost entirely of industries identified as successful, preventing direct comparison between industries exhibiting different levels of performance.

Davies and Ellis (2000:1209) argue that all five of CAN's major assertions have been refuted. A nation does not need to reach the innovation-driven stage in order to achieve sustained prosperity. A nation's prosperity does not depend on the activities of the firms for whom it is a home base. Industries that are internationally competitive do not generally have strong diamonds. Inward foreign direct investment is not a sign that an economy is weak in terms of its competitiveness/productivity and international success does not always need to be based on upgrading through innovation, product differentiation and branding.

In view of the arguments for and against Porter's CAN, this means that a single strategy may not be appropriate across all developing countries. According to Humphrey and Memedovic (2003:29) developing countries need to consider strategies within the context of trends in the global market. The scope for marketing and promoting an industry and the restructuring processes vary considerably according to the kind of industry as well as the development stage of an industry in its integration into the global economy. As far as South African is concerned, the country is relatively new in the global arena after its first decade of trade liberalisation. The literature study in Chapters 2, 3 and 4 analysed the impact of global developments on the South African automotive industry, as well as the relevant factors applicable to the domestic market, such as producing right-hand drive models, emerging market costs, first world infrastructure and abundance of raw materials. The MIDP was implemented during the period of rapid trade liberalisation together with government's structural shift towards an export-oriented economy. Significant positive developments have been experienced in the South African automotive industry in respect of improved international competitiveness relating to increased exports, increased investments, sector growth and integration into the global strategies of parent companies abroad. The aim of this study is to establish and measure the relevance and role of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. It is within the context of globalisation that theoretical principles underlying marketing strategies will be discussed in the next section.

## **5.3 MARKETING STRATEGIES**

### **5.3.1 INTRODUCTION**

The marketing concept holds that achieving organisational goals depends on determining the needs and wants of the target market and delivering the desired products or services more effectively and efficiently than competitors (Burns & Bush, 2000:20; Strydom, 2004:10). Marketing, by its very nature, is concerned with the interaction between the firm and the marketplace. Marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas,

goods and services to create exchanges that satisfy individual and organisational objectives. The marketing concept requires that customer satisfaction rather than profit maximisation should be the goal of an organisation. In other words, the organisation should be consumer oriented and should try to understand consumers' requirements and satisfy them quickly and efficiently in ways that are beneficial to both the consumer and the organisation (Aaker, Kumar & Day, 1995:2; Aaker, 2001:14).

The principles of the marketing concept, the scope of global marketing, the marketing process and marketing management will be discussed in more detail in this section.

### 5.3.2 THE MARKETING SCOPE

The marketing scope, according to Gillespie et al. (2004:4-7) may be described as follows:

- Marketing that is aimed at a single market, the firm's domestic market, is known as domestic marketing.
- Export marketing covers marketing activities that are involved when a firm sells its products outside of its domestic base of operation and when products are physically shipped from one country to another.
- A company that practises international marketing goes beyond exporting and becomes much more directly involved in the domestic marketing environment within a given country. Understanding different cultural, economic and political environments becomes necessary for success in international markets.
- The focus on multinational marketing came as a result of the development of the multinational corporation. These companies, characterised by extensive investments in assets abroad, operate in a number of foreign countries as though they were domestic companies.
- Given the diseconomies of scale that plague individualised marketing strategies, each tailored to a specific domestic environment, many

companies have begun to emphasise strategies for larger regions. These regional strategies encompass a number of markets called pan-regional marketing, such as the pan-European strategies for Europe, and have come about as a result of regional economic and political integration.

- A global marketing strategy involves the creation of a single strategy for a product, service or company for the entire global market. It encompasses many countries simultaneously and is aimed at leveraging the commonalities across many markets. Rather than tailoring a strategy perfectly to any individual market, a firm that pursues global marketing settles on a basic strategy that can be applied throughout the world market, all the while maintaining some flexibility to adapt to domestic market requirements where necessary. Such strategies are inspired by the fact that many markets appear increasingly similar in environmental and customer requirements. The challenges are to design marketing strategies that work well across multiple markets, while remaining alert to the possible adaptations that may be advisable on a market-to-market basis. Firms that pursue global strategies must also be adept at international marketing because designing one global strategy requires a sound understanding of the cultural, economic and political environment of many countries. Furthermore, few global marketing strategies can exist without some domestic tailoring, which is the hallmark of multinational marketing.

A variety of reasons exist why companies become involved in foreign markets. Responding to orders from abroad, a domestic competitive situation, reaching maturity in the domestic market, following customers moving abroad or pure economics, among others, are reasons listed. The South African automotive industry's motivation for exports is embedded in the import/export complementation scheme of the MIDP as discussed in Chapter 3. Owing to the relatively small domestic market, exports provide economies of scale benefits as well as enable exporters to rebate the import duties on CBUs and original equipment components under the MIDP.



The marketing process followed by firms will now be discussed.

### 5.3.3 THE MARKETING PROCESS

The actual marketing process consists of four stages, namely analysis, planning, implementation and control (Czinkota & Ronkainen, 2004:20).

- Analysis begins with collecting data on the eight Os as explained below. The data are used to determine company opportunities by screening a plethora of environmental opportunities. The company's opportunities must then be checked against the company's resources to judge their viability. The key criterion is competitive advantage.

Czinkota and Ronkainen (2004:17, 18) explain the eight Os as follows:

- Occupants are the customers that must be defined along numerous dimensions such as demographics (nationality, age), geography (country, region), psychographics (attitudes, interest), or product-related variables (usage rate, brand loyalty).
- Objects are what are being bought to satisfy a particular need.
- Occasions are moments or time periods when the product or service is bought.
- Objectives are the motivations behind the purchase.
- Outlets are the places where customers expect to be able to procure a product or to be exposed to messages about it.
- Organisation describes how the buying or acceptance of an idea takes place. Organisation expands the analysis beyond the individual consumer to the decision-making unit.
- Operations represent the behaviour of the organisation buying products and services. Increasingly, industrial organisations are concentrating their purchases with fewer suppliers and by making longer-term commitments.
- Opposition refers to the competition to be faced in the marketplace.

- Planning refers to the blueprint generated to react to and exploit the opportunities in the marketplace. The planning stages involve both long-term strategies and short-term tactics. A marketing plan developed for a particular market includes a situation analysis, objectives and goals to be met, strategies and tactics, as well as cost and profit estimates.
- Implementation is the actual carrying out of the planned activity. Plans must take into account unforeseeable changes within the company and environmental forces and allow for corresponding changes to occur in implementing the plans.
- Control mechanisms must be put into effect concurrently with the implementation as the marketplace is dynamic and requires the monitoring of environmental forces, competitors, channel participants and customer receptiveness.

These marketing basics do not vary, regardless of the type of market one is planning to enter or to continue operating in. They have been called the technical universals of marketing (ibid, 2004:20).

#### 5.3.4 MARKETING MANAGEMENT

Having analysed the characteristics of the target market(s), the mix of marketing variables that will best serve each target market are known as the four Ps, namely product, price, place and promotion (ibid, 2004:19). Strydom (2004:195) indicates that the traditional view of the marketing mix has been expanded to take into account the growing importance of service products and their characteristics in the marketing mix. Three further factors are added, namely people, processes and physical evidence. The seven factors will now be briefly discussed.

- Product policy is concerned with all elements that make up the good or service offered. Included are all possible tangible characteristics such as the product and packaging and intangible characteristics such as the branding and warranties.

- Pricing policy determines the cost of the product to the customer – a point somewhere between the floor created by the costs to the firm and the ceiling created by the strength of demand. An important consideration of pricing policy is pricing within the channel of distribution. Price is the only revenue-generating element of the marketing mix; all the others are costs.
- Place is part of the distribution policy and has two components, namely channel management and logistics management. Channel management is concerned with the entire process of setting up and operating the contractual organisation, consisting of various types of middlemen. Logistics management is focused on providing product availability at appropriate times and places in the marketing channel. Place is the most long term of all the marketing mix elements; it is the most difficult to change in the short term.
- Promotion tools are part of communications policy to interact with customers, middlemen and the public at large. Because the purpose of all communications is to persuade, this is the most visible and sensitive of the marketing mix elements.
- People include all people who play a part in the delivery of service and influence buyers' perceptions and include the staff, the customer and the front-line service personnel.
- Process includes the actual procedures and activity flows through which service is delivered. The organisation's operating system and the service delivery system are included in this process.
- Physical evidence is the environment in which the service is delivered, as well as the boundary at which the company and the customer interact. It also includes the tangible aspects of delivering the service or communicating the service.

The purpose of the marketing management design is to determine the best combination of the marketing mix with the aim to achieve success in the target market/s.

### 5.3.5 SUMMARY

Marketing is concerned with the interaction between firms and the marketplace aiming to satisfy customers' requirements. The scope of marketing can include the domestic market, a single foreign market, a region or the entire global market. The marketing process includes four stages, namely analysis, planning, implementation and control. These four marketing basics, also referred to as the technical universals of marketing, do not vary regardless of the type of market a firm is planning to enter or to continue operating in. When the characteristics of the target market/s have been analysed, marketing management design involves a combination of the marketing mix, including the product, price, place, promotion, people, process and physical evidence, which will best serve the target market/s.

## 5.4 STRATEGIC MARKETING MANAGEMENT

### 5.4.1 INTRODUCTION

Organising the marketing efforts of a company across a number of countries is a difficult process. As the scope of a company's international business changes, its organisational structure must be modified in accordance with the external and internal environments (Gillespie et al., 2004:443-446). In this regard strategic marketing management, which is proactive and future oriented, is necessary to assist firms. It consists of three principal elements, namely an external analysis, an internal analysis and a strategy identification and selection. According to Aaker (2001:11-19, 31, 32) strategic marketing management is a system designed to help management both precipitate and make strategic decisions, as well as create strategic visions. A strategic decision involves the creation, change or retention of a strategy and is usually costly in terms of resources and time required to reverse or change it. A strategic vision is a vision of a future strategy or set of strategies. A vision will provide direction and purpose for interim strategies and strategic activities. The role or objective of strategic marketing management is not only to precipitate and make strategic decisions but also to identify alternatives. The basis for a sustainable competitive advantage is that a strategy needs to involve assets and competencies or synergies based on unique combinations of businesses. Thus,

identifying which assets, competencies and synergies to develop or maintain becomes a key decision. Rather than simply accepting the environment as given, with the strategic role confined to adaptation and reaction, strategy should be proactive, affecting environmental change. Thus, governmental policies, customer needs and technological developments can be influenced – and even controlled – with creative, active strategies. In this regard the South African automotive industry in the context of the global automotive environment as well as the MIDP's role and relevance were discussed in Chapters 2 and 4. In the context of strategic marketing management, organisations need to be oriented externally toward the market's environment, competitors, the market and customers, which will be discussed in the next section.

#### 5.4.2 EXTERNAL ANALYSIS

The external analysis involves an examination of the relevant elements external to an organisation. One output of external analysis is an identification and understanding of opportunities and threats, both present and potential, facing the organisation. An opportunity is a trend or event that could lead to a significant upward change in sales and profit patterns. A threat is a trend or event that will result in a significant downward departure from current sales and profit patterns. Another output is the identification of strategic uncertainties regarding a business or its environment that have the potential to affect strategy (Aaker, 2001:20). The external analysis is divided into an environmental analysis, a competitor analysis, a market analysis and a customer analysis, which will now be discussed in more detail. The theoretical analysis relates back to Chapter 2 in respect of the behaviour of the global automotive industry, as well as Chapters 3 and 4 in respect of the behaviour of the South African automotive industry.

##### 5.4.2.1 Environmental analysis

Environmental analysis is the process of identifying and understanding emerging opportunities and threats created by environmental forces. It is important to limit environmental analysis to what is manageable and relevant. An environmental

analysis focuses mainly on political, economic, socio-cultural and technological trends, which will create opportunities or threats for an organisation (Aaker, 2001:23).

#### *5.4.2.1.1 Political trends*

Governments, through the addition or removal of legislative or regulatory constraints, can pose major strategic threats and/or opportunities (Aaker, 2001:99). Compliance with the political and legal environment is mandatory in order to do business. The importance and visibility of these policies have grown as international trade and investment flows have become more relevant to the wellbeing of most nations. Trade and investment policy can either take a multilateral or bilateral approach. Bilateral negotiations are carried out mainly between two nations while multilateral negotiations are carried out among a number of nations. Policymakers must be willing to trade short-term achievements for long-term goals (Czinkota & Ronkainen, 2004:51, 154; Gillespie et al., 2004:84).

Eliminating barriers between markets and erecting new ones will call for adjustments in past strategies to fully exploit the new situations (Czinkota & Ronkainen, 2004:127). Herein lays the major reason for protectionist legislation, which takes the form of tariffs, quotas or qualitative trade restrictions (Gillespie et al., 2004:32-34).

- Tariffs are taxes on goods moving across an economic or political boundary. The most common type is import tariffs. They have a dual economic effect. Firstly, they tend to raise the price of imported goods and thereby protect domestic industries from foreign competition. Secondly, they generate tax revenues for the governments imposing them.
- Quotas are physical limits on the amount of goods that can be imported into a country. Unlike tariffs, which restrict trade by directly increasing prices, quotas increase prices by directly restricting trade.
- Non-tariff barriers are the most problematic and least quantifiable trade restriction. They include a wide range of charges, requirements and restrictions such as government subsidies, health and safety regulations

and packaging and labelling regulations. Not all of these barriers are discriminatory and protectionist as they might serve a specific purpose.

In the order of 51 different taxes and fees in addition to the customs duty are payable in Brazil. Some are uniform nationally while others vary from state to state. Taxes apply incrementally and therefore have a cascading effect. The rates applicable on imports of passenger vehicles are progressive and escalate from small to bigger cars. The cumulative effect of these taxes and fees is a doubling of the basic duty on imports. Trade policy measures and regulations in Brazil and Argentina change regularly and are unpredictable. Imports of motor vehicles and some automotive components into Brazil are subject to special non-automatic licensing. Non-automatic licences are granted within 60 days but it has been reported that applications for licences often remain indefinitely pending. Most reports list the customs clearing system in Argentina and Brazil as difficult, cumbersome and causing long delays. The time taken for imports to clear customs can take between 14 and 32 days. Product labelling must provide the consumer with correct, clear, precise and easily readable information about the product's quality, quantity, composition, price, guarantee, shelf life, origin and risks to the consumer's health and safety. Imported products must bear this information in Portuguese (Brazil), and indicate the country of origin (Consult 101, 2005:264, 265).

#### *5.4.2.1.2 Host government actions*

Governments promulgate laws and take actions in a variety of ways to advance their agendas. The actions of many governments can indirectly or directly affect international markets as well as a firm's ability to access foreign markets and operate successfully. Governments are especially inclined to use direct or indirect subsidies to encourage firms that will be major exporters. Exporters bring multiple benefits by providing employment and increasing national revenue through export sales. Other actions may include ownership restrictions and operating conditions, such as local content requirements. WTO agreements outlaw direct export subsidies but usually do not prohibit indirect subsidies (Czinkota & Ronkainen, 2004:48, 49; Gillespie et al., 2004:91-93).

#### *5.4.2.1.3 World Trade Organisation (WTO)*

The WTO has its origins in the General Agreement on Tariffs and Trade (GATT), to which it became the successor organisation in January 1995 (Czinkota & Ronkainen, 2004:33). The WTO continues to pursue reductions in tariffs on manufactured goods as well as liberalisation of trade in agriculture and services. The major advantage that the WTO offers over the GATT involves the resolution of disputes. Countries that break the rules must pay compensation, mend their ways, or face trade sanctions. The WTO had 149 member countries in 2005 (Gillespie et al., 2004:35).

#### *5.4.2.2 Economic trends*

In addition to the political trends, economic trends also need to be analysed. The evaluation of some firm strategies will be affected by judgments made about the economy and its potential, particularly about inflation and general economic health as measured by its purchasing power, population size, unemployment and the gross domestic product (GDP) (Aaker, 2001:100, 101). Historic economic data is normally readily available but forecasts require a specific analysis. A forecast of the relative valuations of currencies can be relevant for industries with multinational competitors. Thus, an analysis of the balance of payments and other factors affecting currency valuations might be needed. In most countries, the automotive industry is extremely sensitive to changes in currency valuation.

##### *5.4.2.2.1 Exchange rates*

A ratio that measures the value of one currency in terms of another currency is called an exchange rate. When a currency rises in value against another currency, it appreciates, and when it falls, it depreciates. The strength of a domestic currency against the currency of the country's trading partners can have a negative effect on exporters but positive for importers who now pay less. Exchange rates are among the most closely watched and politically sensitive economic variables. Regardless of which way the exchange rate in a country moves, some groups will be positively affected and some negatively. Free-floating exchange rates, which include most major currencies, are determined by forces of supply and demand. Consumers,



inflation rates, investors or speculators and governments affect exchange rates in a variety of ways (Gillespie et al., 2004:27, 28).

#### *5.4.2.2.2 Balance of payments*

The balance of payments is an accounting record of transactions between the residents of one country and the residents of the rest of the world over a given period of time. The concept of a deficit occurs when the particular outflows or uses of funds exceeds the inflows or sources of funds while a surplus occurs when the inflows exceeds the outflows (Gillespie et al., 2004:24, 25). Exports are important in a macroeconomic sense in terms of balancing the trade account. Exports can affect currency values and the fiscal and monetary policies of governments, shape public perception of competitiveness, assist to achieve economies of scale and determine the level of imports a country can afford (Czinkota & Ronkainen, 2004:41, 42). Trade is affected by the socio-cultural trends, which will be discussed in the next section.

#### *5.4.2.3 Socio-cultural trends*

Socio-cultural trends can present both threats and opportunities. The function of marketing is to earn profits from the satisfaction of human wants and needs. In order to understand and influence consumers' wants and needs, one must understand the culture. Cultural understanding is also necessary when international marketers interact with foreign competitors, distributors, suppliers and government officials. Culture encompasses the entire heritage of a society transmitted orally, via literature, or in any other form. It includes all traditions, morals, habits, religion and language (Gillespie et al., 2004:48, 49).

Czinkota and Ronkainen (2004:59) define culture as an integrated system of learned behaviour patterns that are distinguishing characteristics of the members of any given society. It includes everything that a group thinks, says, does and makes – its customs, language, material artefacts and shared systems of attitudes and feelings. Demographic trends can be a powerful underlying force in the market and these can be predictable. Among the influential demographic variables affecting culture are age, income, education and geographic location (Aaker, 2001:103).

#### 5.4.2.4 Technological trends

A further environmental trend occurring outside the market or industry, which on the one hand has the potential to impact on strategies and present opportunities to those in a position to capitalise or, on the other, could pose significant threats are technological trends. According to Aaker (2001:97-99), guidelines in exploring new technologies include:

- Use technology to create an immediate, tangible benefit for the consumer.
- Make the technology easy to use.
- Execution is important in testing and refining new products.
- Recognise that customer response to technology varies.

The transition to a new technology should be managed, as the appearance of a new technology does not necessarily mean that businesses, based on prior technology, will suddenly become unhealthy.

One of the most important automotive technological trends is that the proportion of the automotive industry's research and development work undertaken by suppliers will increase from 40 percent to nearly 60 percent by 2010. This trend coincides with unprecedented pressures to cut costs while new models proliferate, become ever more complex and are brought to the market in record time by shortening of product development lead times. Over the past three decades the number of basic vehicle segments has increased from four to over 15 and the complexity has increased fourfold, mainly through the electronics content of the average car rising from under 10 percent in value to an anticipated 40 percent in value by 2010. The automotive industry's compounding technological complexity arises from model proliferation and increasing regulatory requirements in industrialised nations to mandate better fuel economy, and safety and environmental standards. New model development lead times have been reduced from about 36 months in the mid 1990s to 24 months in 2004.

The OEMs' failure to keep investment in R&D in step with increasing demands is in contrast to the longer-term planning that is a feature of Asian car companies such as Toyota, which is proving to be one of the very few profitable global OEMs with increased sales. Toyota's long-term vision is that R&D investment is a necessary focus as part of its strategy to become the world number one. Automotive R&D budgets have become a victim of the need to cut costs, without being able, in mature markets, to recover the expenditure required through either the selling price or by expanding volumes significantly. Adding to that, the price of an average vehicle in the Triad countries has remained virtually unchanged since 1993.

To remain competitive, OEMs and their suppliers must develop shared global R&D networks. Furthermore, they also need to commonise parts more effectively, including reusing those already proven and amortising their development costs over earlier models (Haynes, 2004d). The top two areas for savings from innovation in 2004 were in product materials and in assembly innovations while the focus has moved to outsourcing in 2005. New technologies and new models were the main focus areas for investments by OEMs and their suppliers (KPMG, 2005b:8, 10; KPMG, 2006:8, 10).

#### 5.4.2.5 Summary

Environmental analysis focuses on factors outside the scope of the market that have the potential to create opportunities for as well as threats to the firm. The main areas include political, economic, socio-cultural and technological trends. A proactive strategy and sufficient knowledge are required by firms to maximise opportunities and minimise risks in response to environmental forces.

#### 5.4.3 COMPETITOR ANALYSIS

A competitor analysis starts with the identification of competitors, current and potential (Aaker, 2001:21). Potential competitors are those firms that might engage in market expansion, product expansion, backward or forward integration, merger candidates and retaliation actions when threatened (ibid, 2001:61, 62).

Understanding competitors and the competitors from emerging markets will be discussed next.

#### 5.4.3.1 Understanding competitors

Analysing competitors along several dimensions such as their size, image, and potential strengths and weaknesses provide key strategic information for understanding them. In order to be successful in global markets, firms must not only understand their potential buyers but also learn to compete effectively against other firms from many different countries. According to Aaker (2001:21), to develop a strategy it is important to understand the following dimensions in order to be able to compete effectively against the competitor:

- Performance (How healthy is the firm?)
- Image and personality (How is the firm positioned and perceived?)
- Objectives (Does the firm aim for high growth?)
- Current and past strategies (What are the implications for future strategic moves?)
- Culture (What aspect is most important to the firm, its cost, its customers or other aspects?)
- Cost structure (Does the firm have a cost advantage?)
- Strengths and weaknesses (Is its brand name, distribution, strong or weak?)

International firms have both advantages and disadvantages when they encounter domestic competition in foreign markets. Multinational corporations may be larger, have better access to sources of finance and enjoy greater experience in areas such as product development and marketing. Domestic firms on the other hand may better understand domestic culture, domestic distributors and government issues. Some industries are becoming increasingly global. In these industries the same global competitors hold significant global market share and face each other on a worldwide basis. They watch each other's moves in various markets around the world in order to respond to, or even pre-empt, any actions that will give the competitor a market

advantage (Gillespie et al., 2004:146, 147). Competitors from emerging markets are increasing as part of globalisation and will now be discussed.

#### 5.4.3.2 Competitors from emerging markets

One of the implications of industrial activity becoming globally dispersed has been a shift in the sphere of competence of some developing countries. A consequence of this is the emergence of a fundamental redivision of the world depending on the ability of various country economies to integrate knowledge-intensive activities and to operate effectively within the new information parameters. Intangible activities/functions such as design, R&D, branding, marketing, logistics and financial services have become concentrated in the developed countries. The process of production and the tangible activities in transforming goods have increasingly become contracted to developing countries (Kaplinsky & Morris, 2000:101).

Globalisation has opened significant opportunities for developing countries and regions. Global competitiveness is enhanced by access to the large markets of the world as is the availability of cheap labour and the ability to gear up with the latest technology. The resourcing to countries such as China, India and Brazil will have a long-term impact on the automotive industry. The consequence, however, is that there will be many losers who have actively participated in the process of global integration (Perrie, 2004:36, 37). China, India and Brazil are aggressively developing their industrial capacities. They are first selling into their domestic markets, but as they achieve critical mass in their output, becoming low cost champions in mass goods markets globally, they will have the means to produce surplus products and export on a massive scale, potentially displacing global industrial capacity on a truly immense scale. Global OEMs and component suppliers will try to survive by cutting costs, innovating and specialising and in the process redouble their own competitive efforts in the global marketplace (Bruggemans, 2005).

More recently most developing countries have embraced market liberalisation. There are several reasons for this change in attitude toward competition in the emerging

world. Some of the pressure to liberalise markets is external such as joining the World Trade Organisation (WTO) and removing barriers to imports in order to comply with WTO regulations. Much of the pressure is internal in allowing more competition in national markets to force domestic companies to become more globally competitive. Multinational corporations in particular, with their superior technology, more extensive financial resources and global market know-how are expected to assist export expansion (Gillespie et al., 2004:150, 153-155).

#### 5.4.3.3 Summary

A firm's strategy depends on an understanding of its customers along several dimensions, such as their performance, objectives, culture, cost structure as well as strengths and weaknesses. The global environment is dynamic and market liberalisation by the emerging markets is challenging the established regions of the USA, Europe and Japan. Although the intangible activities such as the design, R&D and financial resources remain in the developed countries, the tangible production activities are increasingly contracted to the lower cost developing countries.

#### 5.4.4 MARKET ANALYSIS

According to Aaker (2001:22, 23) market analysis has two primary objectives. The first is to determine the attractiveness of the market or submarkets in terms of whether firms will earn attractive profits or potentially lose money. The second is to understand the dynamics of the market so that threats and opportunities can be detected and strategies adapted. A key success factor is any competitive asset or competence that is needed to succeed in the marketplace, whether it is a sustainable competitive advantage or merely a point of parity with the company's competitors. The key determinants of industrial success are the ability of a firm or an industry to

- understand its market requirements
- reconfigure its internal organisation in line with market requirements
- reconfigure its relationships with other firms in order to better meet market requirements.

A key challenge facing the global automotive industry in the coming years and decades is to ensure sustained individual mobility worldwide, but the world's oil stocks will decline, so the need is for more fuel-efficient systems or alternative fuel or power sources. There is also the need to reduce gaseous and particulate emissions from motor vehicles for health and environmental reasons and the standards are getting stricter (Campbell, 2004b:21).

The attractiveness of the market, dynamics of the market, global distribution channels, global market entry strategies, and mergers and acquisitions will now be discussed.

#### 5.4.4.1 The attractiveness of a market or submarket

The attractiveness of a market or submarket is determined by its attractiveness to current and potential participants. Market attractiveness, the market's profit potential as measured by the long-term return on investment achieved by its participants, will provide an important input into the product-market investment decision. However, participating in an attractive market will not guarantee success for all competitors (Aaker, 2001:76).

China's automotive industry has some distinct advantages as it is able to widen the cost differential substantially and position the country as a serious contender for world supply dominance due to its large domestic market, low wages and economies of scale benefits, among others. In a similar way the Brazilian and Indian automotive markets are also emerging. More alarmingly for the replacement market is the rapid development of a components industry that supports this growth in vehicle production, providing manufacturers with economies of scale. Key issues emerging from China, India and Brazil are that product quality can no longer be regarded as inferior. In many cases quality levels are in line with first world manufacturing. Economies of scale offered by a rampant OEM sector and a rapidly growing aftermarket provide lower prices than other developing countries. The long-term impact is the increased resourcing to countries such as China, India and Brazil,

which will impact negatively on developed and developing countries in terms of the loss of automotive employment, loss of automotive investments and loss of automotive manufacturing opportunities (Perrie, 2004:36, 37).

#### 5.4.4.2 Dynamics of the market

The need in understanding the dynamics of the market is to identify emerging key success factors, trends, threats, opportunities and strategic uncertainties that can guide information gathering and analysis. The nature and content of an analysis of a market and its relevant product markets will depend on context, but will mainly, according to Aaker (2001:76-89), include the following dimensions:

- Actual and potential market size – The basic starting point for analysing the market or submarket is the total sales level. In addition to the current size, it is often useful to consider the potential market, which could be influenced by new use, new users or more frequent usage.
- Market growth – Identifying driving forces, forecasting growth, detecting maturity and decline and pursuing growth submarkets.
- Market profitability – The attractiveness of an industry or market as measured by the long-term return on investment of the average firm depends largely on the five factors that influence profitability, namely existing competitors, potential competitors, substitute products, customer bargaining power and supplier bargaining power.
- Cost structure – Determine where value is added to the product in the value chain/production stage in order to leverage an advantage as a potential lowest-cost competitor in a high value-added stage.
- Distribution systems – Access to effective and efficient distribution channels is often a key success factor.
- Market trends – Focuses on change and trends to identify what is important. This will affect the profitability of strategies.
- Key success factors – Two types of skills and competencies needed to compete are strategic necessities and strategic strengths. Strategic necessities do not necessarily provide an advantage, but their absence



will create a substantial weakness. Strategic strengths are those assets or competencies superior to those of competitors. It is important not only to identify key success factors but also to project and identify emerging key success factors.

An analysis of the dynamics of the market, based on the dimensions above, aims to assist firms to determine effective entry strategies into foreign markets.

#### 5.4.4.3 Global distribution channels

To be successful in the global marketplace, a company needs market acceptance among buyers and market access via distribution channels. There are major differences among countries with regard to distribution. Domestic habits and cultures, legal restrictions, and infrastructure can all affect the success of distribution in a new country. The logistics system, including the physical distribution of manufactured products, is an important part of international distribution. This involves planning, implementing and controlling the physical flow of materials and finished products from points of origin to points of use.

On a global scale, the task becomes more complex because so many external variables have an impact on the flow of materials or products. As geographic distances to foreign markets grow, competitive advantages are often derived from a more effective structuring of the logistics system either to save time or costs or to increase a firm's reliability. The emergence of logistics as a means of achieving a competitive advantage is leading companies to focus increased attention on this vital area (Gillespie et al., 2004:364). The relevance of international logistics and supply chain management is emerging as one of major importance because international distribution comprises between 10 and 30 percent of the total landed cost of an international order (Czinkota & Ronkainen, 2004:510, 533).

#### 5.4.4.4 Global market entry strategies

There are more than 200 countries and territories. Criteria for selecting a target country/ies include the country/ies' market size and growth, the political conditions,

the competition and the market similarity. Presence in lead markets is important. In the context of the automotive industry lead markets will include the Triad of North America, Europe and Japan. Lead markets can be termed major research sites as well as home markets of major global competitors in an industry. It is essential for globally competing firms to monitor lead markets in their industries or, better yet, to build up some relevant market presence in those markets. Must-win markets are those that are defined as crucial to global market leadership, markets that can determine the global winners among all competitors and markets that companies can ill afford to avoid or neglect (Gillespie et al., 2004:206, 208). In the context of the automotive industry must-win markets will include emerging markets such as China.

Two principles that often drive the need for larger market groupings are critical mass and economies of scale. Critical mass embodies the idea that a certain minimum amount of effort is needed before any impact will be achieved. Economies of scale is a term used in production situations and means that greater levels of production result in lower costs per unit, which increases profitability (Gillespie et al., 2004:216, 217). Foreign production is an entry strategy that includes licensing, franchising or domestic manufacturing. OEMs have made extensive use of assembly operations in numerous countries (Czinkota & Ronkainen, 2004:237, 240; Gillespie et al., 2004:232-237).

Exporting to a foreign market is another entry strategy if the country does not offer a large enough market to justify domestic production. Czinkota and Ronkainen (2004:277, 278) identify three general price-setting ways in exporting to a foreign market, namely a standard worldwide price, dual pricing, as well as export prices and market-differentiated prices.

- The standard worldwide price may be the same price regardless of the buyer or may be based on average unit costs of fixed, variable and export-related costs.
- In dual pricing, domestic and export prices are differentiated.

- Export prices can follow a cost-driven or market-driven approach depending on the strategy for penetrating the target market. Market-differentiated pricing calls for export pricing according to the dynamic conditions of the marketplace.

In key respects Renault could be setting the benchmark for manufacturing vehicles appropriate for emerging markets, which can be sold globally at prices that will increase vehicle use significantly. The Logan is based on a low cost strategy, which, according to Aaker (2001:190), is based on a no-frills product, product design, operations and economies of scale and will be sold in 30 countries and assembled on four continents. Branding in the different target market territories is not yet clear as Renault will need to do a careful juggling act to avoid damaging its core brand image if the consumer associates its higher priced model ranges with the new budget vehicles bearing the Logan name. Dacia, acquired by Renault in 1999 from Romania, should work well in Central EU, Turkey, the Middle East and North Africa and will distance the Logan from the more expensive Renault vehicles. In other markets the Renault badge could be used to enhance acceptance without damaging the brand. Renault is very seriously targeting 80 percent of the world's population that has no hope of ever purchasing a new or good used vehicle (Haynes, 2004b).

#### 5.4.4.5 Mergers and acquisitions

The need to enter markets more quickly has made the acquisition route extremely attractive. By purchasing an established business, the firm eliminates the need to build Greenfield or new manufacturing and distribution capabilities. An acquisition is also an attractive strategy when a market is already dominated by established brands and saturated with competitors. New entrants would find such a market difficult to break into. Acquisitions present certain challenges as attractive firms may be available only at inflated prices or it may be difficult to make them work (Gillespie et al., 2004:246, 247)

#### 5.4.4.6 Summary

The two primary objectives of a market analysis are to determine the attractiveness of the market or submarket in terms of its profit potential and to determine the dynamics of the market in terms of its threats and opportunities. The dynamics of the market will determine the global market entry strategies. A presence in lead and/or must-win markets is important to grow market share. Exports provide an opportunity to penetrate markets and the general price-setting strategies will determine the success. Another entry strategy is foreign production. Mergers and acquisitions provide a quick entrance into foreign markets, but present certain challenges as well.

#### 5.4.5 CUSTOMER ANALYSIS

According to Gillespie et al. (2004:120-127), all buyers go through much the same process in selecting a product or service for purchase. Even though the process may be similar from country to country, the final purchase decisions will vary because of the differences in economic and cultural environments. Consumers around the world have many similar needs but the economic, political and social structure of the country in which they live affects the ability to fulfil their needs. To understand a consumer market the following three aspects must be recognised:

- The consumer's ability to buy (purchasing power)
- Consumer needs (lower-level vs. higher-level needs)
- Consumer behaviour (culture, social class)

KPMG (2005b:11, 12; 2006:10, 11) identifies the hybrid vehicle and low-cost car categories as the most likely to increase in market share globally over the next five years due to high fuel prices and the luxury car category declining as a result of restrained disposable income levels. Consumers in the USA, where the petrol price is much lower than in Europe, have largely ignored modern diesel propulsion for cars, but such engines are popular for pickup trucks (Campbell, 2004a). In contrast, 44 percent of all new cars sold in Europe in 2003 were diesel-powered (Campbell, 2004b:21). In terms of consumer purchasing criteria most car buyers rate quality the top criterion followed by fuel efficiency and safety. The high oil prices since 2004

have resulted in fuel efficiency becoming an increasingly important criterion and high petroleum prices will have a significant impact on the types of vehicles people buy over the next five years (KPMG, 2005b:14; KPMG, 2006:12). Customer expectations tend to increase faster than the ability of OEMs to respond to them, which is known as the customer paradox. Customers increasingly have more information at their disposal, influencing their purchasing decisions. OEMs focusing on both loyalty and collaboration are 70 percent more profitable than OEMs focusing on neither and 17 percent more profitable than OEMs focusing solely on loyalty (Gabrys, 2002:4, 5).

Customer segmentation, product offerings to satisfy the different customers in different markets as well as developing a global product will now be discussed.

#### 5.4.5.1 Customer segmentation

Segment identification defines alternative product markets and thus structures the strategic investment decision in determining the levels assigned to each market. Segmentation is often the key to developing a sustainable competitive advantage based on differentiation, low cost or a focus strategy (Czinkota and Ronkainen, 2004:405, 406).

- Differentiation, whether industry-wide or focused on a single element, takes advantage of real or perceived uniqueness on elements such as design or after-sales service.
- In pursuing cost leadership, an identical product or service is offered at a lower cost than the competition.
- A focus strategy is defined by its emphasis on a single industry segment within which the orientation may be toward either low cost or differentiation.

Any one of these strategies can be pursued on a global or regional basis, or a mix and match strategy as a function of market or product dimensions. A segment needs to be large enough to support a unique business strategy. The selection of the most useful segment-defining variables is rarely obvious. Segmenting by general

characteristics unrelated to the product, such as geographic segments, product-related via product usage or by competitor via loyalty, can also provide a well-defined strategy (Aaker, 2001:42-47).

#### 5.4.5.2 Product offerings to customers

One of the principal questions in global marketing is whether a firm's products can be sold in their present form or whether they need to be adapted to foreign market requirements. Products do not always occupy the same position on the product life cycle curve in different countries. When a product faces life cycle maturity or decline in one market, it may still be marketed successfully in others (Gillespie et al., 2004:290, 291). Companies need to be flexible in product and service offerings in global markets.

According to Czinkota and Ronkainen (2004:249) a firm has four basic alternatives in approaching international markets:

- Selling the product as is
- Modifying products for different countries
- Designing new products for foreign markets
- Incorporating all the differences into one product design as a global product.

Nissan develops lead-country models that can, with minor changes, be made suitable for domestic sales in the majority of countries. For the remaining situations, the company also provides a range of additional models that can be adapted to the needs of domestic segments. Using this approach, Nissan has been able to reduce the number of basic models significantly. This approach also means that the new product can be introduced concurrently into all the firm's markets (Czinkota & Ronkainen, 2004:441).

Standardising products across markets has certain advantages. Nonetheless, in many cases products need to be adapted for different national markets. Adaptations

can be discretionary, to enhance competitiveness, or mandatory. Mandatory adaptations include legal, economic, climatic, infrastructure, performance standards, quality standards and cultural preferences (Czinkota & Ronkainen, 2004:252).

Czinkota and Ronkainen (2004:252) summarise the overall advantages and drawbacks of standardisation versus adaptation in Table 5.1.

Table 5.1: Standardisation versus adaptation

Factors encouraging standardisation	Factors encouraging adaptation
Economies of scale in production	Differing use conditions
Economies in product R&D	Government and regulatory influences
Economies in marketing	Differing consumer behaviour patterns
Shrinking of the world marketplace/economic integration	Domestic competition
Global competition	True to the marketing concept

Source: Czinkota & Ronkainen, 2004:252

#### 5.4.5.3 Developing a global product

Firms increasingly experience pressure for cost reduction in order to remain competitive. Yet there are relatively few opportunities for producing completely standardised products. As a result many firms now employ a new strategy, global product development. In global products, a portion of the final design is standardised. However, the design retains some flexibility so that the end product can be tailored to the needs of the individual markets. This represents a move to standardise as much as possible those areas involving common components or parts.

One of the most significant changes in automotive product development strategy in the 1990s was modularity. The process involves the development of standard modules that can be easily connected to other standard modules to increase the variety of products. The modularised approach has become especially important in

the automotive industry where both the USA and European manufacturers are increasingly creating world components to combat growing Japanese competitiveness. Ford introduced one of the first world cars during 1981. The Ford Escort was simultaneously assembled in the USA, the UK and Germany from parts produced in 10 countries. Ford was estimated to have saved engineering and development costs amounting to hundreds of millions of dollars, because the design standardised a large number of components. Still, the USA and European Escorts were two distinctly different cars. Ford's global car, the Mondeo was launched in 1993 in Europe and 1994 in the USA. Ford expected to gain significant economies of scale. Although sales in Europe were strong, these models turned out to be too expensive for their segments in the USA market. Ford has modified its strategy and instead of trying to build like-models in multiple markets, the company has moved toward building and launching different versions of cars on exactly the same platform, thus allowing a greater variety of models while still saving on critical components.

Ironically, just as Ford was seeking common designs for markets, some Japanese car companies were moving in the opposite direction. Honda added to its design and development while Toyota launched its popular Camry three inches wider than its Japanese version to be better able to challenge the USA sedans of Ford and General Motors. Toyota also developed a new large pickup truck that was unsuitable for Japan's narrower roads.

Cost pressures force companies to standardise while market pressures require more customisation of products. Conceptually these companies gain from increasing the standardised components in their products while maintaining the ability to customise the product at the end for each market segment (Gillespie et al., 2004:300-302). Toyota leads the industry in convincing its owners to buy another vehicle from Toyota. The company keeps 60,6 percent of its owners according to Toyota's 2004 Customer Retention study. The overall industry average was 48,4 percent (Filipovski, 2004).



#### 5.4.5.4 Summary

Customers' purchasing motivations and needs should be taken into consideration as part of the external analysis. Customers are divided into different segments, each with different purchasing motivations. Customer segmentation can be based on a differentiation, low cost or focus strategy or alternatively based on general characteristics. The different purchasing motivations of each segment needs to be analysed to ensure that firms apply the appropriate assets and competencies to provide and satisfy the relevant customer product offerings. Standardisation or adaptation of products for different target markets is an important consideration for motivating consumers to purchase a firm's products. Global product development is another approach by firms to reduce costs in standardising as much as possible of the common components or parts with some flexibility to tailor the product to the needs of the individual markets.

#### 5.4.6 SUMMARY

External analysis focuses on elements external to an organisation and can be divided into a environmental, a competitor, a market and a customer analysis. Important outputs of external analysis are the identification of opportunities and threats, both present and potential, as well as the identification of strategic uncertainties regarding a business or its environment, which could potentially affect the firm's strategy. Knowledge is a key asset for firms to operate in the global environment. Intelligent and successful strategies could be shaped by firms to respond to external contingent factors with the aim to capitalise on opportunities and to avoid threats.

### 5.5 INTERNAL ANALYSIS

Aaker (2001:24-26) sees the role of internal analysis as a performance appraisal as well as the determinants of strategic options, which aims to provide a detailed understanding strategically of firms. Financial measures and non-financial performance measures provide an indication of the business health of a firm. Determinants of strategic options are characteristics of the business that will

influence strategic options and include areas such as past and current strategy, strategic problems, organisational capabilities and constraints, financial resources and constraints, as well as strengths and weaknesses. The internal analysis will now be discussed in more detail below.

#### 5.5.1 FINANCIAL PERFORMANCE APPRAISAL

Sales and profitability analysis provides an evaluation of past strategies and an indication of the current market viability of a product line. According to Aaker (2001:111-114) the performance appraisal or assessment begins by examining the financial performance of a business measured by its sales and profitability. Indications of unsatisfactory or deteriorating performance might stimulate strategy change.

- Sales and market share are sensitive measures of how customers regard a product or service. Sales levels can be strategically important while increased market share can provide the potential to gain sustainable competitive advantages in the form of economies of scale. Sales as a measure can, however, be affected by short-term actions such as promotions. It is therefore necessary to distinguish between tactical and fundamental changes.
- Profits are important indicators of business performance. They provide the basis for the internally or externally generated capital needed to pursue growth strategies, to replace obsolete plants and equipment, and to absorb market risk. Shareholder value has become a very influential concept over the past two decades in determining good performance. Shareholder value holds that the flow of profits emanating from an investment should exceed the cost of capital. Routes to achieve shareholder value, such as downsizing and outsourcing, could be risky if they undercut other stakeholders such as suppliers, customers and employees, each whom represent assets that can form the basis for long-term success.

### 5.5.2 NON-FINANCIAL PERFORMANCE APPRAISAL

Performance appraisal should go beyond financial measures, as the temptation is to focus on short-term profitability measures and not always long-term prospects. The most important asset of many firms is the loyalty of the customer base. Other non-financial performance measures include product quality, brand loyalty, relative cost of the product, new product activity and manager/employee capability and performance to implement strategies (Aaker, 2001:115-119).

The South African automotive industry has made significant progress in relation to the key performance indicator characteristics of the global automotive sector. The indicators include cost control, quality, flexibility, capacity to change and innovation capacity and are based on industry practice as well as in the measurement of lean production and world class manufacturing (Barnes, Kaplinsky & Morris, 2003:10, 11). Domestic firms, irrespective of ownership, create a global confidence in the South African automotive industry. Quality is the best-assured way of attaining customer recognition, loyalty and commitment. In addition, it is also South Africa's best defence against international competition and the best way to ensure sustained growth (KZN, 2003:3).

### 5.5.3 DETERMINANTS OF STRATEGIC OPTIONS

Another approach to internal analysis is to consider what characteristics of a business limit or drive strategic choices. Aaker (2001:119-121) identifies the following five areas:

- *Past and current strategy.* A strategy can evolve into something very different from what was assumed and understanding the bases of past performance is important to pursue new options.
- *Strategic problems.* A strategic problem is a problem with strategic implications and differs from a weakness or a liability, which is the absence of an asset or competence. A business copes over time with a weakness or liability by adjusting strategies; strategic problems, in

contrast, need to be addressed aggressively and corrected even if the fix is difficult and expensive.

- *Organisational capabilities or constraints.* The structure, systems, people and culture of organisations can affect the cost and even the feasibility of some strategies.
- *Financial resources or restraints.* A financial analysis will determine sources and uses of funds to invest and expand.
- *Organisational strengths and weaknesses.* Strengths and weaknesses are based on assets and competencies and become the bases of sustainable competitive advantages.

The goal is to develop a strategy that exploits business strengths and competitor weaknesses and neutralises business weaknesses and competitor strengths (Aaker, 2001:122-127). The resource allocation decision will follow from this goal.

#### 5.5.4 SUMMARY

Internal analysis focuses on the performance appraisal of a firm and determinants of strategic options. The performance appraisal includes a financial and a non-financial appraisal and provides an understanding of the health of a firm. The financial performance of a business is measured by its sales and profitability. The non-financial performance of a business is measured by factors beyond profitability, and includes quality, brand loyalty, costs and new product activity. The determinants of strategic options will determine the characteristics of a business, which limit or drive strategic choices. Five determinants identified are past and current strategies, strategic problems, organisational capabilities or restraints, financial resources or restraints and organisational strengths and weaknesses. The goal is to allocate resources in such a way that it will capitalise on the firm's strengths and exploit its competitor's weaknesses.

## 5.6 STRATEGY IDENTIFICATION AND SELECTION

The purpose of external and internal analysis as discussed in Sections 5.4.2 and 5.5 is twofold. It helps generate strategic alternatives and it provides criteria for selecting from among them. Aaker (2001:28) highlights three ways to identify strategic alternatives.

- The first is selecting the product markets in which the firm will operate and deciding how much investment should be allocated to each.
- The second is developing the functional area strategies.
- The third is determining the base of sustainable competitive advantages in those product markets.

### 5.6.1 PRODUCT-MARKET INVESTMENT STRATEGIES

Strategic decisions involve products – which product lines to continue, which to add, and which to eliminate. Businesses, including services, need to select markets in which they will have a competitive advantage. The focus should be dynamic as far as growth is concerned. The following four product-market growth directions are identified by Aaker (2001:28-31) in Table 5.2:

Table 5.2: Product-market growth directions

	Present products	New products
Present markets	1 Market penetration	2 Product expansion
New markets	3 Market expansion	4 Diversification

Source: Aaker, 2001:31

1. Penetrate the existing product market by attracting customers from competitors.
2. Expand products in the current market.
3. Apply the same products in new markets.
4. Diversify into new product markets.

For each product market four investment options are possible. The firm could enter to grow, invest to hold the existing position, milk the business by avoiding any investment, or exit.

#### 5.6.2 FUNCTIONAL AREA STRATEGIES

Aaker (2001:31) indicates that the development of a business strategy involves the specification of the strategies in functional areas such as sales, brand management, R&D, manufacturing and finance. It can be difficult to coordinate various functional area strategies so that they do not work at cross-purposes. The role of strategic objectives is to help in that task. The different functional routes to achieve sustainable competitive advantages include:

- Differentiation – based on a host of dimensions including design, product quality, product features, innovation and brand name. Most of these emanate from a focus on quality and/or strong brand.
- Low-cost – based on dimensions such as a no-frills product, scale economies and automated production processes.
- Focus – usually employs either differentiation or low cost, but adds a focus on a narrow part of either the product line or the market.
- Pre-emptive – implementation of a strategy new to a business area that generates a competence or asset which followers are unable to duplicate or counter.
- Synergy – share facilities to reduce costs and improve effectiveness.

In the context of the automotive industry all of the functional routes are achieved in a variety of ways, such as via the introduction of a new technology or a lower cost product to achieve a sustainable competitive advantage, which will be discussed in the next section.

### 5.6.3 BASES OF A SUSTAINABLE COMPETITIVE ADVANTAGE

To be effective over time, a strategy needs to involve assets and competencies or synergies based on unique combinations of businesses. Thus, identifying which assets, competencies and synergies to develop or maintain becomes a key decision. Strategic positioning specifies how the business is to be perceived relative to its competitors and marketed by its customers and employers/partners. It represents the essence of a business strategy and the bases for a sustainable competitive advantage (Aaker, et al. (2001:11-19).

### 5.6.4 SUMMARY

The external and internal analyses assist firms to identify and select strategic alternatives based on relevant criteria in three ways. The first is to select the best product market/s to operate in and the appropriate investment allocation for that market/s. The second is the specification of strategies in functional areas such as sales, brand management, manufacturing and finance. The third is to determine the basis for a competitive advantage in that market, which is to strategically position the firm relative to its competitors based on assets, competencies and synergies.

## 5.7 GLOBAL MARKETING STRATEGIES

Many firms find it necessary to develop global marketing strategies in order to compete effectively. The need to become more competitive in a global economy will force many changes on the typical company. Firms will have to compete in global markets to defend their own domestic market and to keep up with global competitors based in other countries. A global strategy, after selection and successful implementation, can result in a strategic advantage or the neutralisation of a competitor's advantage (Aaker, 2001:266, 267).

### 5.7.1 REASONS FOR EXPANDING GLOBALLY

The liberalisation of trade and investment and the worldwide phasing out of barriers to trade and investment enhance global expansion. Furthermore, information technology, telecommunications and the Internet have made worldwide information

on prices, products and profits available globally and instantaneously. With markets more transparent, buyers, sellers and investors can access better opportunities, can lower costs and can ensure that resources are allocated to their most efficient use (Gillespie et al., 2004:9, 41).

Czinkota and Ronkainen (2004:226) summarise the following proactive and reactive motivations for firms to expand internationally in Table 5.3. Usually a mixture of factors results in firms taking steps in a given direction.

Table 5.3: Why firms go international

Proactive motivations	Reactive motivations
Profit advantage	Competitive pressures
Unique products	Overproduction
Technological advantage	Declining domestic sales
Exclusive information	Excess capacity
Managerial urge	Saturated domestic market
Tax benefit	Proximity to customers and ports
Economies of scale	

Source: Czinkota & Ronkainen, 2004:226

According to Gillespie et al. (2004:198-201), a firm's expansion from the domestic into foreign markets can have several motives, as summarised below.

- Opportunistic expansion is when firms first respond to orders and then adopt an approach to pursue customers later. Most large, internationally active companies began their internationalisation in this opportunistic manner.
- Pursuing potential abroad is when firms maximise their domestic market and then deliberately reach out for more potential abroad.
- Following customers abroad is when firms, whose business is concentrated on a few large customers, follow the customer who moves abroad.



- Exploiting different market growth rates is when firms expand into faster growing countries to take advantage of growth opportunities.
- Globalising for defensive reasons is when firms react by entering the competitors' home market in return when invaded by foreign firms.
- Born global is when firms jump into global markets without going through the typical stages of developing their domestic markets and tentatively entering international markets, usually by exporting, and then gradually establishing marketing and production operations.

In the context of the automotive industry the markets in the triad of North America, Europe and Japan are maturing, as discussed in Chapter 2. Resources and investments are therefore increasingly allocated to developing countries in the search for increased market share and higher profitability. Foreign direct investment will be discussed in more detail the next section.

#### 5.7.2 EXPANDING BY MEANS OF FOREIGN DIRECT INVESTMENT

Firms expand internationally for a wide variety of reasons. Market considerations and the corporate desire for growth are major causes for the increase in foreign direct investment. Through their investment, multinational corporations bring economic vitality and jobs to their host countries and often pay higher wages than the average domestically oriented firms. At the same time trade follows investments. Even large domestic markets present limitations to growth. Today's competitive demands require most multinational firms to operate simultaneously in the triad of North America, Europe and Japan and in most other markets of the world as well. Czinkota and Ronkainen (2004:422-427) identify the following determinants of foreign direct investment:

- Marketing factors, which include the objective to increase sales and which can be achieved quickly through the acquisition of foreign firms. Through such expansion, companies gain ownership advantages consisting of political know-how and influence. Other marketing factors include circumvention of current barriers to trade and operating abroad as a

domestic firm, unaffected by duties, tariffs or other import restrictions as well as attempting to obtain a low-cost resource base.

- Derived demand, which is the second major reason for the increase in foreign direct investment, where demand abroad is the result of the move abroad by established customers.
- The third major reason for foreign direct investment is government incentives, which are mainly divided into three types, namely fiscal, financial and non-financial. Incentives are designed primarily to attract more industry and create more jobs. Fiscal incentives are specific tax measures designed to serve as an attraction to the foreign investor. Financial incentives offer special funding for the investor by providing loans or wage subsidies. Non-financial incentives can consist of import quotas, local content requirements and investments in infrastructure facilities.

Investors generally tend to adopt a two-stage process when they evaluate countries as investment locations. The first stage is to screen countries based on fundamental determinants such as macroeconomic stability. Only those countries that pass these criteria go on to the second stage of evaluation where the tax rates, grants and other incentives may become important. For some export-oriented investors the tax incentive can be a major factor in their investment location decision. Most countries employ a wide variety of incentives to realise their investment objectives. Foreign direct investment brings capital, and facilitates the transfer of technology, organisational and managerial practices and skills as well as access to major markets. Competition is therefore fierce as more and more countries are striving to create a favourable and enabling climate to attract foreign direct investment as a policy priority. Developed countries more frequently employ financial incentives such as grants, subsidised loans or loan guarantees. It is generally recognised that financial incentives have a direct drain on government budgets and for that reason they are not generally offered by developing countries. Instead, fiscal incentives are used by developing countries, as they do not require the upfront use of government

funds. However, countries rarely provide incentives without specific conditions attached to them (UNCTAD, 2000; Hanival, 2003:1-3).

### 5.7.3 THE MIDP'S PROMOTIONAL ROLE FOR THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY

The marketing function includes decisions made on the marketing mix, as discussed in Section 5.3.4. The marketing mix includes the product itself, the way it is distributed, the price, the marketing communication or promotion, people, process and physical evidence. All these elements are combined and directed at the viable target markets in an ongoing attempt to achieve the objectives of the business, including maximising profitability and ensuring survival and further growth. In a global context a few OEMs dominate the global automotive value chain and operate mainly from the triad of North America, Europe and Japan. The South African automotive industry, as an emerging or developing country, has been integrated in the global strategies of parent companies. The domestic automotive industry's marketing strategies and international competitiveness, which revolve around its policy regime in the form of the MIDP, form part of the marketing strategies and global competitiveness of the parent companies. The aim of this study is to establish and measure the relevance and role of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. The empirical research based on the responses and perceptions of direct automotive exporters from South Africa and key stakeholders will be analysed in Chapter 7.

In the context of the South African automotive industry, the distinctive feature of industrial policy affecting the sector is the effective array of selective policies that were adopted. The key conclusion is that intelligently designed selective policies can be effective in developing countries. The critical component of the MIDP was the introduction of an export-import complementation scheme, which requires that for firms to gain a competitive access into the small domestic market, they would need to export, either directly or indirectly through their value chain. This was achieved by an administrative regime which was not over-burdensome for users, and which provided little scope for corruption. It provided a relatively blunt series of incentives

rather than the elaborate, intricate and often contradictory programmes used in other parts of the world and which frequently had a series of adverse unintended consequences. Moreover, by reducing the incentives over time, the MIDP represents a moving frontier, undermining the solidification of rents or economic waste, which has often bedevilled selective industrial policy. Initiatives such as the Productive Asset Allowance (PAA), implemented in 2000, provide incentives for capital goods imports, which are targeted at export markets and which favour economies of scale (Barnes et al., 2003:17-20).

When the MDIP was introduced, South Africa was in the fortunate position of being able to offer an effective and competitive solution to the shortage that existed worldwide on higher priced vehicles. Conversely, there was and is still a global overcapacity of the lower priced vehicles and therefore intense competition in this sector. It is generally recognised that South Africa's automotive policy by way of the MIDP influenced BMW to include its South African subsidiary in its global expansion plans and to make South Africa a production base, initially for its right-hand drive 3-series models followed by left-hand drive models later on. This not only drew in key component suppliers but also led to competitive reactions from the other German OEMs as well as the Japanese and finally the USA OEMs, which followed suit (Robertson, 2004:10). In South Africa the internal contingencies not only focus on macroeconomic policy and stability – notably a competitive exchange rate, a reducing inflation rate and effective property laws impacting on a sound base for industrial activity – but also the coalition of stakeholder interests, which designed and helped run the policy as part of the joint automotive government-business-labour forum, the Motor Industry Development Council.

Chapter 4 described the positive developments experienced in the South African automotive industry since the inception of the MIDP in September 1995 in terms of exports, investments, international competitiveness and the sector's growth. Success is built on success and in this regard, a successful platform to showcase and promote the MIDP and the South African automotive industry's world-class capabilities is participation with National Pavilions at major world events, as well as

inward and outward trade missions and seminars. In National Pavilions companies are grouped together on a stand under a South African branding. In the 2004/5 and 2005/6 financial years the South African automotive industry participated with National Pavilions at Automechanika, Frankfurt in Germany, EquipAuto, Paris in France and SEMA, Las Vegas in the USA. Financial assistance, under Trade and Investment South Africa, a division of the DTI, Export Marketing and Investment Assistance Scheme (EMIA), enables industry role-players to participate in global events and missions in a cost-effective way. The Minister of Trade and Industry's participation in certain events contributed to the positive results achieved by participating companies (DTI, 2004:43). In the next section global promotional strategies will be discussed.

#### 5.7.4 GLOBAL PROMOTIONAL STRATEGIES

Technology is in place for global communication efforts, but difficult challenges remain in the form of socio-cultural, economic, ethnical, regulatory and demographic differences in the various countries and regions (Czinkota & Ronkainen, 2004:538). The first step in developing a communications strategy is assessing what company or product characteristics and benefits should be communicated to the export markets. This requires constant monitoring of the various environments and target audience characteristics.

Exhibitions are regarded as an excellent medium for advertising, sales, marketing and brand exposure. For the visitor, shows are a convenient, cost-effective way to gather the information for making sound purchasing decisions. For exhibitors, exhibitions are an important opportunity to develop sales leads and meet decision makers (DTI, 2004:43; Business Day, 2004b).

However, promotion in a global context is particularly challenging due to the diversity from country to country. Some firms do business in a certain way and do not rethink their promotion decisions when they internationalise. However, many companies find themselves in countries or situations that require an adjustment or a substantial change in their promotional mix to gain the intended benefits. The promotional mix

consists of advertising, personal selling, direct marketing, trade missions, exhibitions and trade fairs, public relations/publicity, sales promotion and sponsorships. The two objectives for the international communications campaign, namely increasing sales and communicating about the brand/product, have to be clear and precise. The choice of the promotional mix tools in a cost-effective manner leads to either a pull or push emphasis in marketing communications. A pull strategy is characterised by a relatively greater dependence on mass communication tools, including sales promotion and advertising, directed at the final buyer or end user of a product or service. A push strategy focuses on the use of personal selling (Gillespie et al., 2004:382; Czinkota & Ronkainen, 2004:314). Since most exporters face monetary constraints, promotional efforts should preferably be concentrated on key markets (Czinkota & Ronkainen, 2004:312, 313).

Consumers are very subjective and the automotive industry attempts to influence their customers in every possible way. The difference between a brand and a product is that a product is something that is made in a factory and a brand is something that is bought by a customer. That is reflected in automotive advertising around the world, with increasing emphasis on brand-building imagery and lifestyle association and less and less on individual product attributes and engineering features. Car purchasing decisions vary by country, age and gender and advertising messages must be tailored closely to target audiences to avoid wasting money. While price, reliability and comfort are the top three factors across Europe, they tend to get far less attention in South Africa. The phenomenon of the South African market is that premium cars, domestically assembled, sell well. In 2002, one in three new cars sold in South Africa was priced above the R200 000 level. BMW SA's market share of 8,6 percent in 2002 was not only the highest market share of any BMW company worldwide, but has also established it as the fastest growing BMW plant in the world. The luxury car market is substantially bigger in South Africa than it is in other countries and this factor has contributed to the OEMs profitability. Brand, image and style are perceived to be more important in South Africa (Haynes, 2003d; Haynes, 2003g; DTI, 2004:11-13).

#### 5.7.5 SUMMARY

A successful global marketing strategy is imperative for firms to become more competitive in the global environment. Expansion globally is motivated by proactive or reactive reasons. Foreign direct investment provides huge benefits for host countries. In this regard the determinants for foreign direct investment in the South African automotive industry were triggered by the country's marketing factors as well as government policy in the form of the MIDP. Global promotion strategies, in communicating the products and successes achieved, are important for ensuring that consumers in key markets are informed in every possible way.

#### 5.7.6 SUMMARY OF CHAPTER 5

Chapter 5 focused on the theoretical principles underlying marketing strategies and competitiveness. Globalisation has resulted in opportunities as well as threats for firms, industries and countries. Marketing is described as the interaction between firms and the marketplace, either in the domestic country, in single foreign markets, regions or the entire global market. The marketing process and marketing management are imperative for reaching customers globally in an effective way.

Strategic marketing management assists management with strategic decisions as far as the external analysis, internal analysis as well as the identification and selection of an appropriate strategy to maximise success and minimise risks is concerned. The external analysis focuses on an environmental, a competitor, a market and a customer analysis. The internal analysis focuses on the performance appraisal of a firm as well as the determinants of strategic options in order to understand the health of a firm and the characteristics of the business, which limit or drive strategic choices. The external and internal analysis assist firms to identify and select strategic alternatives based on relevant criteria. The most suitable strategy is then identified and selected to provide the firm with a sustainable competitive advantage in positioning it relative to its competitors. However, the global environment is dynamic and firms, industries and countries need a successful global marketing strategy and effective communication to promote their respective capabilities.

In the case of the South African automotive industry, the MIDP was implemented as a policy regime with specific objectives for the domestic automotive industry. Over the past decade the domestic automotive industry has been integrated in the global strategies of parent companies abroad. The South African automotive industry's marketing strategies and international competitiveness therefore form part of the marketing strategies and global competitiveness of the parent companies abroad. It is in this context that the MIDP's role as a promotional tool for the domestic automotive industry and the specific companies operating in the South African automotive industry will be analysed in Chapter 7.



## **CHAPTER 6: RESEARCH DESIGN AND METHODOLOGY**

### **6.1 INTRODUCTION**

Marketing research is defined by Tustin, Lighthelm, Martins and Van Wyk (2005:7, 8) as the systematic and objective collection, analysis and interpretation of information for decision-making and marketing problems of all kinds by recognised, scientific methods. One key element essential in science is the accumulation of knowledge and advancement of understanding through time. Aaker et al. (1995:4) states that the role of marketing research is as an aid to decision making while it also emphasises the specification and interpretation of needed information. Chapter 6 focuses on the research methodology used to investigate the primary objective of the study, namely to analyse the role and relevance of the Motor Industry Development Programme (MIDP) as a promotional tool for the South African automotive industry in the global automotive environment. The details of the marketing research process followed for the purpose of this study are discussed below.

### **6.2 THE MARKETING RESEARCH PROCESS**

According to Tustin et al. (2005:75, 76) the research process provides a systematic, planned approach to a research project and ensures that all aspects of the research are consistent with one another. He defines the research process into a conceptualisation phase and an operational phase involving the following 13 steps:

Conceptualisation phase steps:

- 1) Identify the marketing research problem or opportunity
- 2) Define the marketing research problem/opportunity
- 3) Establish the research objectives
- 4) Determine the research design

Operational phase steps:

- 5) Identify the information types and sources
- 6) Develop a sample plan
- 7) Design the research instrument
- 8) Collect and edit the data
- 9) Code data
- 10) Data capturing, cleaning and storing
- 11) Data analysis
- 12) Presentation and research findings
- 13) Follow-up

Steps 1, 2 and 3, which are indicated as part of the conceptualisation phase above, were executed in Chapter 1. The primary research objective in Chapter 1 stated that the aim of the research would be to establish and measure the relevance and value of the MIDP as a promotional tool in the global automotive environment by capturing the responses and perceptions of direct automotive industry exporters and automotive industry stakeholders for

- the South African automotive industry in general, and
- the companies forming part of the empirical survey.

Although the research process might be similar, there are fundamental differences in the character of business markets and consumer markets. Tustin et al. (2005:17) illustrates the major differences between the two groups in Table 6.1 as follows:

Table 6.1: Differences between business and consumer markets

Marketing mix	Business	Consumer
<b>Product (service)</b>	Technically complex, custom-made, service very important	Service reasonably important, standardised
<b>Price</b>	Competitive bidding, fixed prices on standard items and negotiations on complex products	Fixed prices
<b>Promotions</b>	Main emphasis on personal selling	Main emphasis on advertising
<b>Distribution</b>	Shorter, more direct channels	Various intermediaries
<b>Market structure</b>	Geographically concentrated, few buyers, a few large competitors	Widely dispersed, masses of consumers, one or two large competitors
<b>Relationship with consumer</b>	Longer term, but more complex	Shorter term
<b>Decision-making process</b>	Various members of enterprise involved	Individuals or family decide

Source: Tustin et al., 2005:17

The automotive industry exhibits all of the characteristics mentioned in Table 6.1, and can be classified as both a business market and a consumer market.

The research design, representing step 4 of the conceptualisation phase and steps 5 to 13 of the operational phase will be discussed in more detail in the following sections.

#### 6.2.1 RESEARCH DESIGN

Malhotra (2004:74), Cooper and Schindler (2001:75) and Aaker et al. (1995:20) define the research design as the framework or blueprint for conducting a marketing research project. It specifies the details or the procedures necessary for obtaining the information needed to structure and/or solve marketing research problems. According to Malhotra (2004:74), Cooper and Schindler (2001: 61) and Tustin et al. (2005:83) the research design typically involves the following components or tasks:

- Design the exploratory, descriptive, and/or causal phases of research.
- Design the data collection.
- Develop a sample plan.

- Construct and pretest a questionnaire.
- Specify the measurement and scaling procedures.

Each of the components in the research design mentioned will now be discussed.

## 6.2.2 DESIGN THE EXPLORATORY AND/OR CONCLUSIVE PHASES OF THE RESEARCH.

In designing a research study a significant decision is the choice of the research design, as it determines how the information will be obtained. Tustin et al. (2005:83) identify three research design types, namely exploratory research, descriptive research and causal research, while Malhotra (2004:75) classifies this into exploratory and conclusive, the latter of which may be either descriptive or causal research designs.

### 6.2.2.1 Exploratory research design

Exploratory research is characterised by flexibility and versatility with respect to the methods used, as formal research protocols and procedures are not employed. It rarely involves structured questionnaires, large samples or probability sampling plans (Malhotra, 2004:77). This type of research is used when searching for insights into the general nature of the problem, the possible decision alternatives and relevant variables that need to be considered.

Literature reviews and individual or group unstructured interviews are typical exploratory approaches. Exploratory research is useful for establishing priorities among research questions and for learning about practical problems in carrying out the research (Tustin et al., 2005:85). The literature study in Chapters 2 to 5 reflects the exploratory phase of the study.

### 6.2.2.2 Conclusive research design

Conclusive research is research designed to assist the decision maker in determining, evaluating and selecting the best course of action to take in a given

situation (Malhotra, 2004:75). Conclusive research is more formal and structured than exploratory research and can be classified into descriptive and causal research.

- Descriptive research, in contrast to exploratory research, is a type of conclusive research that has its major objective the description of something, usually market characteristics or functions. Descriptive research is marked by a clear statement of the problem and specific hypotheses or alternatively an unproven statement and detailed information is needed (Malhotra, 2004:78, 79). Descriptive research studies are constructed to answer who, what, when, where and how questions. In descriptive research it is important to know or understand the underlying relationships of the problem area (Tustin et al., 2005:86). Descriptive research was used in the empirical phase of this study to investigate the role and the relevance of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment.
- Causal research is a type of conclusive research with the major objective of obtaining evidence regarding cause-and-effect (causal) relationships. Like descriptive research, casual research requires a planned and structured design. The main method of causal research is experimentation (Malhotra, 2005:85).

A combination of exploratory research via the literature study, and conclusive research via the empirical survey, has been used in this study to complement each other. The data collection design will be discussed in more detail in the next section.

### **6.3 DATA COLLECTION DESIGN**

The types and sources of information can be divided into secondary and primary data, which will now be discussed.

### 6.3.1 SECONDARY DATA

Malhotra (2004:37) defines secondary data as data collected for some purpose other than the problem at hand. It is easily accessible, relatively inexpensive and quickly obtained. Secondary data can be divided into internal and external data. Internal secondary data are generated by an organisation in the course of its business activity, while external data are existing data obtained from sources outside the organisation. Three types of external secondary data are distinguished, namely syndicated data (data standardised on behalf of a syndicate of clients by a marketing research organisation), pooled data (standardised data that a number of interested organisations of equal status voluntarily submit to an independent, impartial organisation for processing and redistribution to the participating parties) and data from other sources. Malhotra (2004:103) indicates that secondary data offer several advantages as it assists in

- identifying the problem
- defining the problem better
- developing an approach to the problem
- formulating an appropriate research design by identifying the key variables
- answering certain research questions and testing some hypotheses
- assisting to interpret the primary data more insightfully.

The internal and external secondary data collected in Chapters 1 to 5 provides the background to the study. The aim was to capture the key characteristics of the global automotive industry as well as the impact and implications of the major global trends and developments and associated risks for developing countries. In understanding the global dynamics, the evolution of the South African automotive industry in terms of its policy development, the rationale behind the implementation of the MIDP, the operations of the MIDP, the achievements under the MIDP in terms of its objectives as well as the extensions of the programme until 2007 and 2012 are outlined. The literature study furthermore included a theoretical study on marketing strategies and

competitiveness as well as other related issues in order for practice and theory to meet.

### 6.3.2 PRIMARY DATA

Malhotra (2004:37) defines primary data as data originated by the researcher specifically to address the research problem. Primary data may be qualitative or quantitative in nature.

- Quantitative research generally involves the collection of primary data from a number of individuals with the intention of projecting results onto a wider population. The aim is to generalise about a specific population, based on the results of a representative sample of that population. The research findings may then be subjected to mathematical or statistical manipulation to produce broadly representative data of the total population and forecasts of future events under different conditions (Tustin et al., 2005:89).
- Qualitative research generates data that are frequently difficult to quantify. This research approach is often expressed as personal value judgments from which it is difficult to draw any collective general conclusions. Qualitative research seeks insights through a less structured, more flexible approach (ibid, 2005:90).

For purposes of this study, secondary syndicated data, pooled data and data from other sources as well as primary quantitative and qualitative data via an empirical survey were used.

## 6.4 DEVELOPING A SAMPLING PLAN

The survey was an important component of this study, and was specifically tailored to tap into the experiences of the direct automotive exporters as well as to obtain inputs from an academic, experts from government and those key industry role-players representing the different constituents and automotive subsectors in South Africa.

Tull and Hawkins (1993:537-553) and Tustin et al. (2005:339-380) both classify the sampling process into seven steps while Malhotra (2004:315-319) combines it into the following five steps, which will be discussed in more detail in the following sections:

- Define the target population.
- Determine the sampling frame.
- Select a sampling technique.
- Determine the sample size.
- Execute the sampling process.

#### 6.4.1 TARGET POPULATION

According to Malhotra (2004:314) the objective of most marketing research projects is to obtain information about the characteristics of a population. A population is the aggregate of all the elements that share a common set of characteristics and that comprise the universe for the purpose of the marketing research problem. Information about population characteristics may be obtained by taking a census or a sample. A census involves a complete enumeration of the elements of a population and is both time consuming and costly. A sample, on the other hand, is a subgroup of the population selected for participation in the study. The basic idea of sampling is that by selecting some of the elements in a population, conclusions may be drawn about the entire population (Cooper & Schindler, 2001:163, 164). Compelling reasons for sampling include lower costs, greater accuracy of results, greater speed of data collection and greater availability of population elements. The validity of the sample, however, depends on two considerations, namely accuracy and precision.

The target or survey population is defined in terms of elements, sampling units, extent and time (Tull & Hawkins, 1993:537). Tustin et al. (2005:340) define the target population as a group of individuals who participate in a marketing research initiative. Through sampling processes, populations are generally designed to reflect an underlying audience, market or market segment.



For the purposes of this study the target population consists of the direct automotive exporters from South Africa benefiting from the MIDP, directly or indirectly, as well as key industry role-players involved in the MIDP or representing constituents in the different subsectors in the South African automotive industry. The sampling units include the eight OEMs and twelve key automotive industry role-players, as well as 37 companies that were financially assisted by the Department of Trade and Industry's (DTI) Export Marketing and Investment Assistance Scheme (EMIA) to participate in organised automotive National Pavilions, organised outward trade missions as a group as well as on an individual basis during the 2004/5 and the two previous financial years. The three groupings may be defined as follows:

**The motor vehicle assemblers (OEMs)** consist of the eight assemblers in South Africa, namely BMW SA (Pty) Ltd, DaimlerChrysler SA (Pty) Ltd, Fiat Auto SA (Pty) Ltd, Ford Motor Company of Southern Africa (incorporating Mazda, Land Rover and Volvo), General Motors SA (Pty) Ltd, Nissan SA (Pty) Ltd, Toyota SA Motors (Pty) Ltd and Volkswagen of SA (Pty) Ltd. With the exception of BMW SA (Pty) Ltd, all the OEMs are involved in commercial vehicle assembly activity as well.

**The component manufacturers** consist of 37 companies that participated in DTI-funded automotive organised and individual missions and/or exhibitions abroad during the 2004/5 and two previous financial years. The 37 companies include 23 companies manufacturing products eligible under the MIDP, and which were therefore registered under the MIDP, and 14 companies manufacturing products not eligible under the MIDP, and which were therefore not registered under the MIDP. The non-MIDP registered component manufacturing companies are involved in the manufacture of automotive accessories and trailers. These companies do not benefit directly from the MIDP and the aim was to establish the indirect benefit obtained by participating in missions and exhibitions along with MIDP eligible companies. The MIDP companies included the largest component manufacturing company in South Africa, multinational companies, a woman-owned company and black economic empowerment (BEE) companies. The companies' sizes, employment levels and

turnovers vary from small to medium and large, while the companies manufacture a diverse range of automotive components for original equipment as well as aftermarket purposes.

The EMIA guidelines and inputs from industry assisted in determining relevant company breakdown sizes in respect of employment and turnover levels for the purposes of this study. The companies reflect the geographical spread of the automotive industry in the country, which is mainly concentrated in Gauteng, the Eastern Cape and KwaZulu-Natal.

**The key industry role-players** consist of 12 respondents and include the heads of the automotive industry associations namely the National Association of Automobile Manufacturers of South Africa (NAAMSA), the National Automotive Component and Allied Manufacturers (NAACAM), the South African Tyre Manufacturers' Conference (SATMC), the Catalytic Converter Interest Group (CCIG), the Automotive Industry Export Council (AIEC), the Automotive Industry Development Centre (AIDC), South African International Business Linkages (SAIBL), the South African Automotive Benchmarking Clubs, the Aluminium Federation of South Africa (Alusaf) as well as two government officials and an academic, who is an MIDP specialist.

#### 6.4.2 SAMPLING FRAME

The sampling frame is closely related to the population and is the list of elements from which the sample is actually drawn (Cooper & Schindler, 2001:170). There are in total 480 companies manufacturing passenger cars, commercial vehicles and identifiable automotive components for these vehicles in the South African automotive industry benefiting directly and indirectly from the MIDP (Bentley West, 2005:36). The sample size consists of a group of 70 of which 57 responded with completed questionnaires. However, automotive exports are channelled via a limited number of companies, most notably the eight OEMs as a mechanism to generate Import Rebate Credit Certificates (IRCCs) used to rebate import duties on completely built-up vehicles and original equipment automotive components. The exporting link for the majority of automotive component manufacturers in South Africa is the South

African-based OEMs and their parent companies in relation with first tier multinational suppliers (DTI, 2003a:26). The automotive component exports that take place outside the scope of the OEMs include automotive component manufacturers focusing on aftermarket parts and accessories. It is mainly those companies that apply for financial assistance from the DTI to participate in events abroad to pursue export opportunities and gain exposure. However, some of the multinational companies have also participated as they have scope, to a certain degree, to supply selected products for original equipment or aftermarket purposes to world markets, outside the agreements with the domestic OEMs or their parent companies. The associations and the Automotive Industry Export Council (AIEC) represent close to 100 percent of MIDP eligible automotive product manufacturing companies. The AIEC's database of companies exceeds 400. Combined with the other associations, despite some overlapping of companies belonging to the AIEC and the other associations, the AIEC and the associations represent the majority of the 480 companies operating in the South African automotive industry. Government represents the national interests of the industry.

#### 6.4.3 SAMPLING TECHNIQUE

Sampling techniques are broadly classified by Malhotra (2005:320) as non-probability and probability sampling. Non-probability sampling relies on the personal judgment of the researcher rather than chance to select samples. Probability sampling is a procedure in which each element of the population has a fixed probabilistic chance of being selected for the sample. This requires not only a precise definition of the target population, but also a general specification of the sampling frame.

Tull and Hawkins (1993:543) define the sampling method in the way the sample units are to be selected and classify five choices:

- Probability versus non-probability
- Single unit versus cluster of units
- Unstratified versus stratified

- Equal unit probability versus unequal unit probability
- Single stage versus multistage

In single-unit sampling each sampling unit is selected separately, while in cluster sampling the units are selected in groups (Tull & Hawkins, 1993:548). Cluster sampling is when the population is divided into subgroups, each of which represents the entire population (Burns & Bush, 2000:398).

A stratum in a population is a segment of that population having one or more common characteristics. The more homogeneous each stratum is with respect to the variable of interest, the smaller the sample required (Tull & Hawkins, 1993:549). Strengths of this sampling technique are that it includes all important subpopulations or strata and its precision. Weaknesses are that (Malhotra, 2005:331):

- it is difficult to select relevant stratification variables
- it is not feasible to stratify on many variables
- it is expensive.

As far as equal unit probability versus unequal unit probability sampling is concerned it is only when one has no reason to believe that the variation is different among the strata that one would take a proportional sample and thus give an equal chance of representation to each sampling unit (Tull & Hawkins, 1993:550).

For the purposes of this study each respondent had an equal chance to be selected with the sampling units consisting of the OEMs, the stakeholders and the component manufacturing companies, which were selected separately. The sampling units consisted of unequal units but each had common characteristics and was sampled only once. A probability-stratified sampling with unequal units based on a single stage sampling was therefore used

#### 6.4.4 SAMPLING SIZE

The determination of the sample size is a rather complex issue involving both statistical and practical considerations. The statistical considerations include:

- the degree of variability in the population
- the degree of precision associated with the population estimates based on the population
- the degree of confidence associated with any population estimates
- the extent to which the analysis will involve the use of subsamples for cross-clarification and/or the use of statistical techniques that require a minimum sample size to produce meaningful results.

The choice of possible samples is drastically reduced if a certain sample size is prespecified, that is, the number of elements/units in the sample is determined beforehand. The strata or segments of the population used as described below all have common characteristics and are homogenous with respect to their respective variables of interest.

The sampling units or subgroups participating in this study included:

- The eight OEMs, which all completed the survey.
- Twelve key role-players, which all completed the survey
- 50 companies, irrespective of whether registered or not under the MIDP, which participated in DTI-funded missions and exhibitions abroad, of which 37 completed the survey. According to the Export Marketing Investment Assistance (EMIA) Scheme section at Trade and Investment South Africa (TISA), 36 companies participated in the two National Pavilions at Automechanika in Frankfurt, Germany and at SEMA Las Vegas, in the USA during the 2004/5 financial year. Eight of the companies participated in both events leaving 28 companies targeted, from which 25 completed survey responses were received. All seven of the companies that participated in the DTI-funded automotive outward-selling missions during the 2004/5 financial year submitted completed surveys. A further 10 companies that participated in DTI-funded events in previous years as well as five companies that participated on an individual

basis in events were targeted. Five out of the 15 responded with completed surveys.

The EMIA section invites and encourages new companies to participate in annual events, although, based on feedback from participants it is recognised that companies need to participate more than once at any specific event to generate business interest.

In total 57 completed responses out of the 70 targeted companies were received, representing a response rate of 81,4 percent. Frequent telephonic follow-up actions resulted in a higher completion rate.

#### **6.4.5 EXECUTE THE SAMPLING PROCESS**

The self-administered survey data were captured between November 2004 and May 2005. The surveys together with the covering letter were handed out to component company respondents during the trade missions and exhibitions abroad or mailed to those companies who had participated during previous years. Respondents were requested to complete the surveys during the time of the missions and exhibitions or alternatively in their own time after the events. As far as the twelve key industry stakeholders and the eight OEMs were concerned, surveys were handed out or mailed together with the covering letter. The completion of the self-administered surveys on average took 20 minutes to 30 minutes to complete.

### **6.5 CONSTRUCT AND PRE-TEST THE QUESTIONNAIRE**

The main components of any questionnaire are questions and answers (Tustin et al., 2005:388). According to Tustin et al. (2005:415) surveys are designed to achieve four related goals, namely:

- to maximise the relevance and accuracy of the data collected
- to secure participation and cooperation of target respondents
- to facilitate the collection and analysis of data
- to support analysis goals

The questionnaire used in this study appears in Appendix A. Careful consideration was given to the question content, wording, sequence and instructions to the respondent to obtain meaningful results. The questionnaire structure and content for collecting the data to achieve the objectives of the study were constructed with the assistance of the Bureau for Market Research at UNISA. The covering letter provided respondents with information about the questionnaire and the potential benefit to their individual companies as well as to the South African automotive industry in general. The background information mainly aimed to assist the non-MIDP registered companies in gaining a better understanding of the aim of the study. An assurance of confidentiality in respect of company-specific information requested was also provided in writing.

#### 6.5.1 QUESTION SEQUENCE

By arranging the questions logically the researcher enhances the standard of the responses, assists the respondent and induces a harmonious flow of thought in the questionnaire (Tustin et al., 2005:391). Often the content of one question assumes other questions have been asked or answered. Cooper and Schindler (2001:355, 356) indicate that the psychological order of the questions is also important as the question sequence can encourage or discourage commitment and promote or hinder the responses. They suggest that questions should be arranged to minimise shifting in subject matter and frame of reference. The design of survey questions is influenced by the need to relate each question to the others in the survey. The basic principle used to guide sequence decisions therefore is that the nature and needs of the respondent must determine the sequence of questions to gain and maintain the respondent's cooperation.

The funnel approach is the procedure or technique of moving from general to more specific or wide-to-narrow questions (Burns & Bush, 2000:363; Cooper & Schindler, 2001:355; Tustin et al., 2005:411). The questionnaire in this study followed the funnel approach starting with basic questions and then moving to the more sensitive

company specific demographic and classification questions towards the end, the latter to classify the respondents into various groups for the purposes of analysis.

#### 6.5.2 QUESTION FORMAT

Malhotra (2004:289) and Cooper and Schindler (2000:334) classify two question formats, namely structured (closed-ended or fixed-alternative questions) and unstructured (open-ended questions). Tustin et al. (2005:393) also distinguish a third question format, namely semi-structured questions.

- Unstructured questions are open-ended questions that respondents answer in their own words. They are also referred to as free-response or free-answer questions and can provide the researcher with rich insights. Unstructured questions have a much less biasing influence on responses than structured questions. Disadvantages are that the coding of responses are costly and time consuming and depend on the articulacy of the respondent (Malhotra, 2004:289; Tustin et al., 2005:393).
- Semi-structured questions are mostly used in business-to-business marketing research where there is a need to accommodate widely differing responses from companies. They are also used when responses cannot be anticipated. Follow-up questions on the topic will result from the responses. The use of semi-structured questions is largely restricted to off-line and online in-depth interviews as well as focus group discussions (Tustin et al., 2005:393, 394).
- Structured questions specify the set of response alternatives and the response format. Questionnaires with structured questions and structured and/or unstructured responses are frequently used in marketing research and are all pre-formulated. For structured pre-formulated questions, responses can either be structured (pre-formulated) or unstructured (post-formulated). Structured responses to structured questions are predetermined and are also known as closed-ended responses. However,



structured questions could also elicit unstructured or open-ended responses. These responses allow for an answer in the respondent's own words. An example is where an alternative labelled "Other (please specify)" is added to a multiple-choice question. Closed-ended responses are distinguished into dichotomous, multiple-choice or scaled-responses.

- A dichotomous response is the simplest form of a closed-ended response, which allows only two possible responses such as Yes/No. Dichotomous questions are the easiest type of question to analyse and code, but the response can be influenced by the wording of the question (Malhotra, 2004:291; Tustin et al., 2005:397). The questionnaire in this study contains two dichotomous questions, namely questions 1 and 3 in the attached questionnaire.
- A multiple-choice or multichotomous question is a fixed-alternative response but it offers more than two fixed-alternative responses. Respondents are requested to provide one alternative that correctly expresses their opinion or, in some instances, to indicate all the alternatives that apply. The response alternatives should include the set of all possible choices. The general guideline is to list all the alternatives that may be of importance and include an alternative labelled "Other (please specify)". The response alternatives should be mutually exclusive. Advantages of multiple-choice questions are that they are easy to administer, coding and processing of data require less time and costs and respondent cooperation is improved if the majority of questions are structured. Considerable effort is however required to design effective multiple-choice questions to determine the appropriate response alternatives and there is also the potential for order bias, which is a respondent's tendency to check an alternative merely because it occupies a certain position (Malhotra, 2004:290, 291). The questionnaire in the study contains five multiple-choice questions. These are questions 2, 4, 5, 6 and 7 in the attached questionnaire.

A scaled question is designed to measure the subjective properties of an object. Measurement means assigning numbers or other symbols to characteristics of objects according to certain pre-specified rules. What is measured is not the object but some characteristic of it (Malhotra, 2004:236). The term “scaling” refers to procedures for attempting to determine quantitative measures for subjective and sometimes abstract concepts. It is defined as a procedure for the assignment of numbers or other symbols to a property of objects to impart some of the characteristics of numbers to the properties in question. A scale is therefore a measurement tool. A primary advantage of scaled-responses is that scaling permits the measurement of the intensity of respondents’ answers to multiple-choice questions (Tustin et al., 2005:400, 401).

There are various *types of scales*, each of which possesses different characteristics. The characteristics of a scale determine the scale’s level of measurement. There are four characteristics of scales, namely description (agree and disagree), order (greater than, less than and equal to), distance (three-car family, two-car family, one-car family) and origin (unique beginning or true zero point) (Burns & Bush, 2000:310, 311). There are four *primary scales of measurement*, namely nominal (numbers), ordinal (rank order), interval (performance) and ratio (possesses all the properties of the other three primary scales including an absolute zero point) (Malhotra, 2004:236-241). The *scaling techniques* can be classified into comparative and non-comparative scales.

- Comparative scales involve the direct comparison of stimulus objects. Comparative scale data must be interpreted in relative terms and have only ordinal or rank order properties. In rank order scaling respondents are presented with several objects simultaneously and asked to rank them according to some criterion.
- In non-comparative scales, also referred to as metric scales, each object is scaled independently of the others in the stimulus set. The resulting data are generally assumed to be interval or ratio scaled. Non-comparative

scaling is the most widely used scaling technique in marketing research and can be classified into continuous rating or itemised rating scales. The itemised rating scales can be further classified as Likert, semantic differential or Staple scales. (Malhotra, 2004:242). The semantic differential is a seven-point rating scale with endpoints associated with bipolar/opposite labels that have semantic meaning and translates a person's qualitative judgements into quantitative estimates (Burns & Bush, 2000:321). The semantic differential is sufficiently reliable and valid for decision making and prediction in marketing and behavioural science. It is also statistically applicable to more than one group of subjects when applied to corporate image research. This makes it possible to measure and compare images held by respondents with diverse backgrounds. A disadvantage is a lack of standardisation. Researchers, however, have found that a seven-point scale is the most satisfactory (Malhotra, 2004:259; Tustin et al., 2005:406). In the questionnaire for this study four questions were scaled questions. These were questions 5, 6, 9 and 11 in the attached questionnaire.

The format of the questions used in the questionnaire for this study is summarised in Table 6.2 below.

Table 6.2: Format of questions in the questionnaire

Type of question	Questions in questionnaire
Unstructured questions (open-ended)	Questions 10,12, 19 and 20  Questions 5,6 and 7 include an unstructured response labelled "other (please specify)"
Structured questions:	
Dichotomous questions	Questions 1 and 3
Multiple-choice questions	Questions 2, 4, 5, 6 and 7
Scaled questions	Questions 5, 6, 9 and 11

### 6.5.3 QUESTIONNAIRE INSTRUCTIONS

Instructions to the respondents attempt to ensure that all respondents are treated equally, thus avoiding building error into results. Two principles form the foundation for good instructions, namely clarity and courtesy. In a self-administered questionnaire, instructions must be contained within the questionnaire (Cooper & Schindler, 2001:357). The questionnaire used in this study contained instructions within the questionnaire itself.

### 6.5.4 PHYSICAL CHARACTERISTICS OF THE QUESTIONNAIRE

The appearance and layout of the questionnaire are of particular concern. The questionnaire should not create the impression of being overly long, but its layout should allow sufficient space for recording the information (Tustin et al., 2005:410, 411). The questionnaire for this study was divided into different parts to make it more structured and to simplify the analysis of information. The layout provided sufficient space for easy reading and for providing the responses. All the questions were precoded. The following sections can be identified in the questionnaire:

Part 1. Questions 1 to 4 deal with general information on the business operations of the respondent's company.

Part 2. Questions 5 to 8 deal with the respondent's quantitative views on the promotional relevance and role of the MIDP in respect of the South African automotive industry in general and the specific company in particular.

Part 3. Questions 9 to 12 deal with the respondent's quantitative and qualitative views in ranking 15 factors in respect of the South African automotive industry's business operations in general and the specific company's business operations in particular.

Part 4. Questions 13 to 18 deal with the demographic details of the respondent's company.

Part 5. Questions 19 and 20 deal with the respondent's qualitative views on the relevance and role of the MIDP as a promotional tool for the South African automotive industry in general and the company in particular.

Part 6. Question 21 deals with the contact details of the respondent.

The questionnaire concluded with a note of appreciation to the respondent for participating and contact details for the return of the questionnaires.

#### 6.5.5 PRE-TESTING OF SURVEY

Extensive pre-testing was not required because the questionnaire was based on inputs from the BMR and the questions in line with the objectives of the study. However, the survey was still pre-tested by 10 respondents from the target population with the aim to establish the time taken to complete the survey, the ability to understand the survey layout, the wording, the sequence of questions and instructions as well as the level of interest in the study.

### 6.6 RELIABILITY AND VALIDITY OF THE RESEARCH FOR THIS STUDY

Reliability refers to the extent to which a scale produces consistent results if repeated measurements are made on the characteristic. Validity may be defined as the extent to which differences in observed scale scores reflect true differences among objects on the characteristic being measured, rather than systematic or random errors (Malhotra, 2004:267, 269).

Measurement is a number that reflects some characteristics of an object. A measurement is not a true value of the characteristic of interest but rather an observation of it. A measurement error is the variation in the information sought by the researcher and the information generated by the measurement process employed. A systematic error affects the measurement in a constant way and represents stable factors that affect the observed score in the same way each time the measurement is made. A random error is a measurement that arises from

random changes or differences in respondents or measurement situations (Malhotra, 2004:266, 267).

Properly conducted sample surveys yield useful estimates but not exact values. Errors may arise from sampling errors and non-sampling errors. The nature and scope of these general error types are discussed below.

#### 6.6.1 GENERAL ERROR TYPES

Errors occur when the sample selected is not perfectly representative of the population. Errors fall into three basic categories, namely errors of definition, estimation and explanation (Tustin et al., 2005:375-379).

- Errors of definition occur when the precise definition of the problem is not defined and associated variables are then not determined correctly.
- Errors of estimation include sampling errors, selection errors, non-response errors and sample frame errors.
  - Sampling errors consist of administrative errors and random errors. Administrative errors relate to problems with the administration or execution of the sample, while random errors are caused by chance and cannot be avoided, but only minimised by increasing the sample size.
  - Selection errors occur when deciding on the way in which sample elements will be selected.
  - Non-response errors occur when sample elements are unavailable or unwilling to participate in the survey.
  - Sample frame elements occur when duplicate or foreign elements occur in the sample frame or when all the elements have not been included.
- Errors of explanation occur when a researcher makes an inappropriate inference about a cause-effect relationship. Measurement errors also

occur as errors of explanation and include respondent errors, questionnaire design errors and coding and data capturing errors.

#### 6.6.2 CENTRAL EDITING

The questionnaire data were captured and processed by the Bureau for Market Research (BMR), Unisa from July 2005 to December 2005 with additional data processing techniques included during May 2006. The completed questionnaires of this study were carefully edited by BMR personnel under the supervision of a senior staff member so as to ensure the completeness and reliability of the data. Errors were referred back to the researcher for follow-up actions and correction.

#### 6.6.3 CODING

Items were pre-coded in the questionnaire. Pre-coded items were captured directly from the questionnaire.

#### 6.6.4 TABULATION

Tabulation was done using Statistical Package for Social Sciences (SSPS) and Excel computer programs. Various statistical analyses were conducted on the data in order to facilitate a discussion of the research results. Cross-tabulations were also used to determine the effect of certain dependent variables on certain independent variables.

#### 6.6.5 VALIDATION

The reliability of the empirical survey findings can be measured by comparisons with secondary sources as discussed in Chapters 2, 3 and 4. Extensive comparisons were thus made with published data and trends captured over the past 10 years since the implementation of the MIDP in September 1995.

The aim of the study was to obtain the responses and perceptions of direct automotive exporters and key industry stakeholders. There are in the order of 480 automotive component companies in South Africa, including the eight OEMs (Bentley West, 2005:36). However, the vast majority of exports take place through

the eight OEMs as a mechanism to generate IRCCs in order to rebate the import duties on CBUs and original equipment components. In the Minutes of the Monitoring Committee of the Motor Industry Development Council (MIDC) of 20 October 2005, the International Trade Administration Commission (ITAC), responsible for the processing of the IRCCs, reported that the distribution of IRCCs for 2005 comprised 84 percent to the OEMs, 14 percent to the Independent Importers and 2 percent to the automotive component manufacturers, which was in line with the 2004 distribution.

The typical exporting link for automotive component companies in the major component categories involves the OEMs' parent companies demanding a certain portion of their global procurement from a first tier supplier located in South Africa for export, with all IRCCs benefits ceded to the OEMs' South African operations. Alternatively, the first tier automotive component companies in South Africa sell products on an ex-works basis to the South African-based OEMs or Independent Importers, who then take responsibility for exporting the product, thus keeping the IRCC benefit, but they are liable for the transport and logistics of landing the product in the foreign market (DTI, 2003a:26).

The component companies exporting directly comprise 2 percent based on the distribution of IRCCs in 2005. The component categories exported by first and lower tier automotive component companies comprise a diverse range of components, subcomponents and aftermarket or replacement parts not linked to the OEMs as described above.

The key stakeholders forming part of the empirical survey represent all the constituents in the manufacturing of CBUs and the majority of the Independent Importers, automotive components, government officials representing the national interest of the automotive industry and an academic.



## 6.7 DATA ANALYSIS

The purpose of data analysis is to interpret and draw conclusions from the mass of collected data (Tustin et al., 2005:102). A descriptive analysis and hypothesis testing were used. Tables and graphs will be used to represent the findings in the survey. The index method, which is an indirect method, was used in Part 2 to uncover the most important value/impact of the MIDP as a promotional tool for the South African automotive industry in general since 1995, when it was implemented. For the index method the importance of each value activity is measured in terms of indices. Weighting was applied to calculate the indices on the basis of the ratings of the various value activities. The weighted total of each constraint was calculated by multiplying the incidence of each activity by the respective weights. The activity with the highest weighted total was equated with 100 and the indices for the other  $n^{\text{th}}$  activities were calculated in accordance with the above. The following formula was used to facilitate the calculation process (Tustin et al., 2005:487-490, 496):

$$\frac{a}{b} \times 100$$

where      $b$  = the weighted total of the activity under consideration and  
            $a$  = the weighted total of the most important activity.

In part 3 and 4 the Spearman's rank-order correlation was used extensively in the data analysis to provide the strength of the associations made by the 12 stakeholders, 37 automotive component companies and the eight OEMs. According to Tustin et al. (2005:637, 638), if the researcher is dealing with a situation in which both variables are ordinal, the strength of the association can be investigated, and also its direction. Spearman's rank-order correlation coefficient is an appropriate measure of association in this case. It ranges from -1 to +1, with those values close to zero indicating little or no association between the variables concerned. Moreover, its sampling distribution under the null hypothesis is known and therefore the researcher can test for significance.

Based on the literature review, Spearman's rank-order correlation was used in the

empirical research analysis to test the following propositions:

- Proposition 1: There is a general agreement among the stakeholders, the component companies and the OEMs regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general*.
- Proposition 2: There is a general agreement between the component companies and the OEMs regarding the importance of the factors that impact on the business operations of *the specific company in particular*.
- Proposition 3: There is a general agreement between the selected groups regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general* based on the ownership and employment level criteria.
- Proposition 4: There is a general agreement between the selected groups regarding the importance of the factors that impact on the business operations of *the specific company in particular* based on the ownership and employment level criteria.
- Proposition 5: There is a general agreement between the selected groups regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general* based on the sales segments criterion.
- Proposition 6: There is a general agreement between the selected groups regarding the importance of the factors that impact on the business operations of *the specific company in particular* based on the sales segments criterion.
- Proposition 7: There is a general agreement between the selected groups regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general* based on the turnover of the company per annum criterion.
- Proposition 8: There is a general agreement between the selected groups regarding the importance of the factors that impact on the business operations of *the specific company in particular* based on the turnover of the company per annum criterion.

- Proposition 9: There is a general agreement between the selected groups regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general* based on the exports as a percentage of turnover criterion.
- Proposition 10: There is a general agreement between the selected groups regarding the importance of the factors that impact on the business operations of *the specific company in particular* based on the exports as a percentage of turnover criterion.

A detailed analysis and discussions of all the data collected in the survey will follow in Chapter 7.

## **6.8 SUMMARY OF CHAPTER 6**

Chapter 6 covered the research methodology used for purposes of this study to investigate the relevance and role of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. The steps in the marketing research process outlined in the chapter included the conceptualisation phase and the operational phase. The research design was defined based on the research problem and objectives forming part of the conceptualisation phase, as discussed in Chapter 1. The operational phase covered the steps to obtain the research information via the exploratory phase, using secondary data, and the conclusive phase, via an empirical survey to obtain primary data. The details of different steps from constructing to pre-testing the questionnaire were discussed in respect of collecting the relevant data from the respondents for the purposes of this study. The questionnaires were duly completed by the target population and the last two steps of the research process, namely analysing the data, and the conclusions and recommendations, will be discussed in Chapters 7 and 8.

## **CHAPTER 7 ANALYSIS OF SURVEY FINDINGS**

### **7.1 INTRODUCTION**

The research methodology used to investigate the role and relevance of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment was discussed in Chapter 6. As indicated in Chapter 1, the research was carried out with the aim to establish and measure the relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment by capturing the responses and perceptions of direct automotive industry exporters and key automotive industry stakeholders for

- the South African automotive industry in general, and
- the companies forming part of the empirical survey.

The secondary objectives of the study are:

- To assist government and industry, by way of frequent reviews of the MIDP, in their approach to deal with the global automotive opportunities and challenges within World Trade Organisation (WTO) guidelines in amending and improving the MIDP as a promotional tool for the South African automotive industry in the global automotive environment.
- To add informational value to government and industry offensive and defensive strategies and planning in respect of current and future investment and export patterns in adapting the MIDP to be better equipped to seize global opportunities and minimise risks.
- To add value to related key economic sectors, via their synergies with the automotive value chain, as raw materials such as metals, plastics, rubber, chemicals and leather, among others, also benefit from increased exports and investments in the automotive sector.

The aim of the research was also to understand the future potential of the MIDP as a promotional tool for the South African automotive industry in the global automotive

environment considering the phasing down of the MIDP benefits in a dynamic global automotive environment. Furthermore, a number of factors impact on the business operations of the South African automotive industry in general and the specific company in particular. The analysis based on the demographic criteria of the OEMs and the automotive component manufacturers aims to establish whether the different factors impact differently on the selected groups.

The data were collected by means of a structured questionnaire completed by 57 respondents. The respondents consist of the twelve key automotive industry stakeholders, 37 automotive component manufacturing companies and the eight OEMs. The respondents represent the export side of the South African automotive industry and the aim was to tap into the direct experiences of individuals dealing, or who have dealt with, foreign counterparts.

In this chapter, the next step of the marketing research process, namely the analysis of the research results, is presented. The research results will now be analysed according to the sequence in terms of which the questionnaire was structured.

## **7.2 PART 1 OF THE QUESTIONNAIRE**

Part 1 of the questionnaire, covering questions 1 to 4, dealt with the respondents' general business operations.

Table 7.1 reveals the breakdown of the 57 respondents. The respondents, as detailed in Appendix C, can be divided into the eight OEMs or 14 percent of the respondents, the 12 key industry stakeholders or 21,1 percent of the respondents, and the 37 automotive component manufacturing companies or 64,9 percent of the respondents

Table 7.1: Breakdown of respondents of the study

Respondents	N	%
Stakeholders	12	21,1
Component companies	37	64,9
OEMs	8	14,0
<b>Total</b>	<b>57</b>	<b>100,0</b>

For ease of reference, the eight motor vehicle assemblers will be referred to as the OEMs, the automotive component manufacturing companies will be referred to as the component companies and the key industry stakeholders will be referred to as the stakeholders. The stakeholders' views represent the interests of their constituents, forming part of their associations or councils, government's views on the national interests of the South African automotive industry as well as individual views by an academic. The stakeholders do not represent individual companies and were therefore not requested to respond to company-specific or demographic-related questions but only to those questions relating to the South African automotive industry's business operations in general.

**Question 1** was used to determine whether the respondent's company was registered under the MIDP or not. Table 7.2 reveals that 23 or 62,2 percent of the 37 component companies were registered under the MIDP while 14 or 37,8 percent were not. The component companies not registered under the MIDP do not manufacture products eligible under the MIDP. The aim with the non-MIDP registered component companies was to obtain the views and perceptions of the companies potentially only benefiting indirectly from the MIDP. All eight of the OEMs were registered under the MIDP. In total 31 or 68,9 percent of the respondents involved in manufacturing operations were registered under the MIDP and 14 or 31,1 percent were not registered under the MIDP.

Table 7.2: Companies registered under the MIDP

Registered or not	Components		OEMs		Total	
	N	%	N	%	N	%
Registered	23	62,2	8	100,0	31	68,9
Not registered	14	37,8			14	31,1
<b>Total</b>	<b>37</b>	<b>100,0</b>	<b>8</b>	<b>100,0</b>	<b>45</b>	<b>100,0</b>

**Question 2** dealt with whether the MIDP impacts on the business operations of the respondent's company directly, indirectly or not at all. Table 7.3 reveals that 14 of the 37 component companies benefit directly from the MIDP via Import Rebate Credit Certificates (IRCCs). The 14 component companies exporting products directly are those not exporting automotive components via the OEMs. Of the 23 component companies not benefiting directly from the MIDP via IRCC claims, 14 are not registered under the MIDP as revealed in question 1. Eight of those 14 component companies not registered under the MIDP revealed that the MIDP has no direct or indirect impact on their business operations. Of the 37 component companies 22 or 59 percent benefit indirectly via increased volumes, 17 or 45,9 percent via increased orders by OEMs and 12 or 32,4 percent via increased interest in their specific company's business operations. The indirect benefits via other areas as revealed in Table 7.3 by the component companies include the lowering of import duties, higher level of new entrants, more competition, a wider choice of products for consumers and South Africa's increased ability as a source of quality and competitive automotive components.

Table 7.3 further reveals that all eight or 100 percent of the OEMs benefit directly via the Import Rebate Credit Certificate (IRCC) claims. The OEMs utilise the IRCCs under the MIDP's import/export complementation scheme directly to rebate the import duties on completely built-up vehicles (CBUs) and completely knocked down kits (CKD) (original equipment components), the latter to assemble vehicles in South Africa. Seven or 87,5 percent of the OEMs benefit indirectly via increased volumes, two or 25 percent benefit indirectly via increased orders by OEMs for the automotive components they produce at their plants, two or 25 percent benefit indirectly via

increased interest in their business operations and one or 12,5 percent benefits indirectly via increased global competitiveness.

Table 7.3: Direct, indirect or no benefits under the MIDP

Benefits	Components		OEMs		Total	
	N	%	N	N	N	%
Directly via IRCC claims	14	37,8	8	100,0	22	48,9
Indirectly via increased orders by OEMs	17	45,9	2	25,0	19	42,2
Indirectly via increased volumes	22	59,5	7	87,5	29	64,4
Indirectly via increased interest	12	32,4	2	25,0	14	31,1
Indirectly via other areas	6	16,2	1	12,5	7	15,6
No impact on your business operations	8	21,6			8	17,8

\*Multiple responses – numbers will not add up as the same company could benefit directly and indirectly in more than one way

The responses to question 2 reveal that the main benefits from the MIDP for the OEMs are direct via IRCC claims as well as indirectly via increased volumes, while for the component companies the benefit is mainly indirectly via increased volumes and increased orders by the OEMs.

**Question 3** dealt with the respondents' views on whether the South African automotive industry is capable of coping with global competition without the MIDP.

Table 7.4 reveals that 100 percent of the 37 component companies, 100 percent of the 12 stakeholders and 100 percent of the eight OEMs indicated that in their view the domestic automotive industry will not be able to cope with global competition without the support provided to the automotive industry encapsulated in the MIDP.

Table 7.4: South African automotive industry's capability to cope with global competition without the MIDP

	Stakeholders		Components		OEMs		Total	
	N	%	N	%	N	%	N	%
Yes								
No	12	100.0	37	100.0	8	100.0	57	100.0
Total	12	100,0	37	100,0	8	100,0	57	100,0



It is clear from the responses in Table 7.4 that the current support provided to the South African automotive industry under the MIDP, directly and indirectly, is imperative for all the respondents to cope with global competition. It should be noted that even the non-MIDP registered component companies indicating in question 2 that the MIDP has no impact on their business operations share the view that the domestic automotive industry will not be able to cope with global competition without the MIDP.

**Question 4** dealt with the respondent's participation in organised automotive events abroad and/or individual participation in automotive events abroad. The Department of Trade and Industry (DTI), via its Export Marketing and Investment Scheme (EMIA), assists companies financially to participate in organised and individual automotive exhibitions and missions abroad. The financial assistance remains the same, irrespective of whether companies participate in an organised event or on an individual basis. South African automotive National Pavilions at EquipAuto in Paris, France, at Automechanika in Frankfurt, Germany and at SEMA in Las Vegas, USA, over recent years has entailed 20 to 25 automotive component manufacturers exhibiting as a group on a stand under a South African branding. The advantage of an organised event, such as a National Pavilion, is that the DTI, and not the company, is responsible for upfront payment to participate as well as all the arrangements and logistics related to the event. An organised automotive trade mission involves a group of three or more automotive component manufacturing companies, normally organised by the Automotive Industry Export Council as the project leader, having at least two prearranged meetings a day in order to qualify for financial assistance under the EMIA scheme.

Table 7.5 reveals that 54 respondents participated in organised or individual automotive events abroad. Nine of the stakeholders, 37 component companies and eight OEMs have participated in organised automotive National Pavilions, organised automotive missions or on an individual basis abroad.

Table 7.5: Respondents' participation in automotive events abroad

Participated in	Stakeholders		Components		OEMs		Total	
	N	%	N	%	N	%	N	%
Any organised automotive pavilion	9	100,0	28	75,7	3	37,5	40	74,1
Any organised automotive mission	6	66,7	15	40,5	3	37,5	24	44,4
Any automotive event individually	7	77,8	18	48,6	6	75,0	31	57,4
Number of respondents	9		37		8			54

\* Multiple responses

Table 7.5 reveals that nine stakeholders participated in organised automotive Pavilions, seven on an individual basis and six in automotive missions abroad. The Automotive Industry Export Council (AIEC) and automotive industry association representatives have participated in the automotive National Pavilions with information stands and in automotive seminars coinciding with some Pavilions, in which industry stakeholders were invited to participate. The AIEC and industry representatives on several occasions acted as mission leaders in organised automotive missions. On request of the DTI and/or industry, the AIEC also participated in new events or visited countries not visited before to investigate potential opportunities.

Of the 37 component companies, 28 or 75,7 percent have participated in the organised automotive National Pavilions, 15 or 40,5 percent in organised automotive missions and 18 or 48,6 percent in individual events abroad. More component companies participated in organised automotive Pavilions where companies are grouped together under a South African branding and visited by clients, compared to automotive missions where business clients are visited on appointment, or individual participation where companies participate on their own.

Six or 75 percent of the eight OEMs participated in automotive events on an individual basis abroad and three or 37,5 percent in National Pavilions and organised automotive missions, respectively. The OEMs have been invited by the DTI on occasion to participate in seminars coinciding with organised automotive National Pavilions or organised trade missions. Several OEMs have also participated in DTI-

funded Pavilions with selected automotive suppliers to showcase the capabilities of their suppliers and to generate potential business for the component companies.

The responses to question 3 in Table 7.5 reveal that the respondents are dealing with or have been exposed to foreign counterparts and are therefore in a position to share their views and perceptions in this study.

### **7.3 SUMMARY**

Part 1 reveals that the eight OEMs are all registered under the MIDP and all benefit directly from it via Import Rebate Credit Certificates (IRCCs) obtained from exports, which are used to rebate import duties on completely built-up vehicles and original equipment automotive components, the latter to assemble vehicles in South Africa. The OEMs also benefit indirectly from the MIDP and mainly via increased volumes.

Of the 37 component companies, 23 are registered under the MIDP of which 14 benefit directly via IRCCs. Although 14 of the 37 component companies are not registered under the MIDP, six of those together with nine MIDP registered component companies, benefit indirectly from the MIDP, mainly via increased volumes and increased orders by the OEMs. Eight component companies revealed that they do not receive any direct or indirect benefit from the MIDP. All 57 of the respondents, including those component companies not registered under the MIDP or not experiencing any impact from the MIDP on their business operations, revealed that the South African automotive industry will not be able to cope with global competition without the MIDP.

All the OEMs, all the component companies and nine of the twelve stakeholders have participated in organised and/or individual automotive trade events and missions abroad and are therefore in a position to share their perceptions and views based on first hand experience as far as the aim of this study is concerned.

## 7.4 PART 2 OF THE QUESTIONNAIRE

Part 2 of the questionnaire covers questions 5 to 8, and dealt with the respondents' quantitative views on the value of the MIDP as a promotional tool for the South African automotive industry in general and for the specific company in particular in the global automotive environment.

**Question 5** requested respondents to rate the value of the MIDP in promoting the South African automotive industry in general in the global automotive environment since 1995 when it was implemented. Respondents' views were requested based on a multiple-choice scaled response.

Table 7.6 reveals that:

- For seven or 58,3 percent of the 12 stakeholders the MIDP has a high value of 7 and for two or 16,7 percent a value of 6 on the 7-point scale to generate business. For six stakeholders or 50 percent the MIDP has a high value of 7 and for two or 16,7 percent a value of 6 on the 7-point scale to attract investments. For four stakeholders or 33,3 percent the MIDP has a high value of 7 and for eight stakeholders or 66,6 percent a value of 6 on the 7-point scale to trigger interest in South Africa.
- For 15 or 40,5 percent of the component companies the MIDP has a high value of 7 and for 11 or 29,7 percent a value of 6 to generate business. For 10 component companies or 30,3 percent the MIDP has a high value of 7 and for 11 or 33,3 percent a value of 6 to attract investments, while for 10 component companies or 30,3 percent the MIDP has a high value of 7 and for 15 or 45,5 percent a value of 6 to trigger interest into South Africa. The two component companies who indicated that the MIDP has a low value in triggering interest in South Africa are not registered under the MIDP and their products are not dependent on MIDP support.
- For five or 62,5 percent of the OEMs the MIDP has a high value of 7 and for two or 25 percent a value of 6 to generate business. For four OEMs or 50 percent the MIDP has a high value of 7 and for three or 37,5 percent a

value of 6 to attract investments, while for two OEMs or 25 percent the MIDP has a high value of 7 and for three or 37,5 percent a value of 6 to trigger interest in South Africa. The medium values by the OEMs to generate business, attract investments and trigger interest into South Africa is an indication of their CBU export success where the likes of the German-based OEMs are more advanced than others.

- Three stakeholders, two component companies and one OEM indicated under the “Other (please specify)” label a high value of 7 towards aspects such as lowering of import duties, higher level of new entrants, more competition, a wider choice of products for consumers and South Africa’s increased ability as a source of quality and competitive automotive components and vehicles as well as increased international competitiveness.

Table 7.6: The value of the MIDP in promoting the South African automotive industry in general

	Stakeholders															
	Low value/low impact								High value/high impact							
	1		2		3		4		5		6		7		Total	
Value of MIDP to	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Generate business									3	25,0	2	16,7	7	58,3	12	100
Attract investments							1	8,3	3	25,0	2	16,7	6	50,0	12	100
Trigger interest in SA											8	66,7	4	33,3	12	100
Other									1	33,3			2	66,7	3	100
	Component companies															
	Low value/low impact								High value/high impact							
	1		2		3		4		5		6		7		Total	
Value of MIDP to	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Generate business							4	10,8	7	18,9	11	29,7	15	40,5	37	100
Attract investments							3	9,1	9	27,3	11	33,3	10	30,3	33	100
Trigger interest in SA	1	3,0	1	3,0			2	6,1	4	12,1	15	45,5	10	30,3	33	100
Other													2	100	2	100
	OEMs															
	Low value/low impact								High value/high impact							
	1		2		3		4		5		6		7		Total	
Value of MIDP to	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Generate business							1	12,5			2	25,0	5	62,5	8	100
Attract investments									1	12,5	3	37,5	4	50,0	8	100
Trigger interest in SA									3	37,5	3	37,5	2	25,0	8	100
Other													1	100	1	100

The responses by the stakeholders, component companies and the OEMs in Table 7.5 reveal that the MIDP generally has a very high value/high impact on the 7-point scale in promoting the South African automotive industry in general to generate business, attract investments and trigger interest in South Africa.

In figure 7.1 the index method, which is an indirect method, was used to uncover the most important value/impact of the MIDP as a promotional tool for the South African automotive industry in general since 1995 when it was implemented. For the index method the importance of each value activity is measured in terms of indices. Weighting was applied to calculate the indices on the basis of the ratings of the various value activities. The weighted total of each constraint was calculated by multiplying the incidence of each activity by the respective weights. The activity with the highest weighted total was equated with 100 and the indices for the other n<sup>th</sup> activities were calculated in accordance with the above. The following formula was used to facilitate the calculation process (Tustin et al., 2005:487-490, 496):

$$\frac{a}{b} \times 100$$

where b = the weighted total of the activity under consideration and  
a = the weighted total of the most important activity.

The value of the MIDP, in respect of its ability to generate business, attract investments, trigger interest in South Africa as well as a label for “Other (please specify)”, was requested to be ranked on a 7-point scale. Respondents were instructed to rate the three main value activities as well as the “other” label. A rating of seven indicated the most important value activity used to promote the South African automotive industry in general. Consequently, a rating of one was allocated a weight of one, a rating of two weighed two, a rating of three weighed three, and so on.

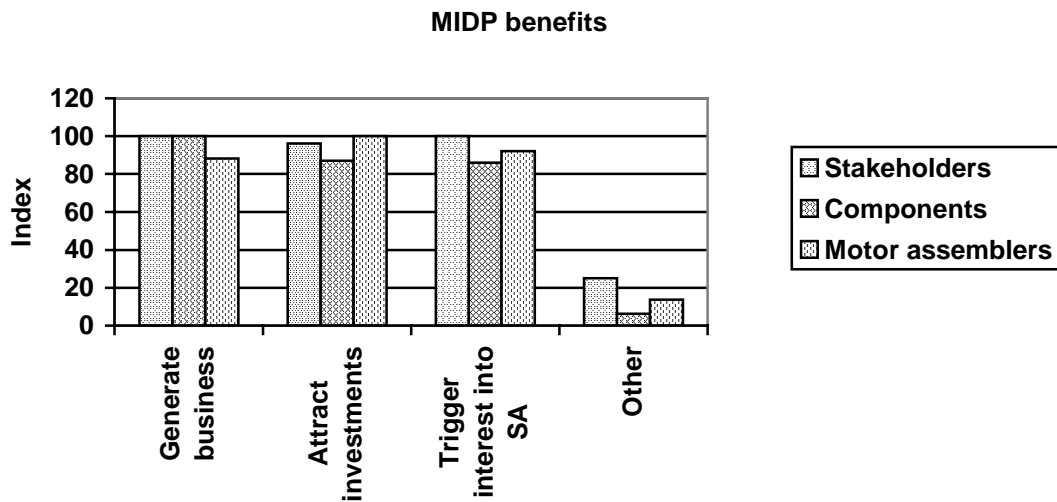


Figure 7.1: The most important value of the MIDP in promoting the South African automotive industry in general in the global automotive environment (Index= 100)

Figure 7.1 reveals that, for the stakeholders, the most important value of the MIDP in promoting the South African automotive industry in general in the global automotive environment since it was implemented in 1995 was to generate business and trigger interest in South Africa. For the component companies it was to generate business and for the OEMs it was to attract investments. From an alternative point of view, the value of the MIDP to promote the South African automotive industry in general in the global automotive environment in order to generate business was more important for the stakeholders and for the component companies than for the OEMs. To attract investments was more important for the OEMs than for the stakeholders who again rated it higher than the component companies. To trigger interest in South Africa was more important for the stakeholders than for the OEMs, who rated it higher than the component companies.

**Question 6** dealt with descriptive statistics and requested respondents to rate the value of the MIDP to promote their specific company in particular in the global automotive environment since 1995 when it was implemented.



The respondents' views were requested based on a multiple-choice scaled response. The stakeholders' views were not requested in Question 6 as they do not represent individual companies.

Table 7.7 reveals that:

- For 12 or 34,2 percent of component companies the MIDP has a high value of 7 and for nine or 25,7 percent a value of 6 to generate business for their companies. For eight component companies or 25,8 percent the MIDP has a high value of 7 and for three or 9,7 percent a value of 6 to attract investments into their companies, while for nine component companies or 29 percent the MIDP has a high value of 7 and for eight or 25,8 percent a value of 6 to trigger interest into South Africa. The component companies indicating a low value for the MIDP to generate business, attract investment and/or to trigger interest as far as their specific company in particular is concerned reflect the views of those not registered under the MIDP and therefore not dependent on MIDP support in this regard.
- For five or 62,5 percent of OEMs the MIDP has a high value of 7 and for two or 25 percent a value of 6 to generate business. For four OEMs or 50 percent the MIDP has a high value of 7 and for two or 25 percent a value of 6 to attract investments while for two OEMs or 25 percent the MIDP has a high value of 7 and for three or 37,5 percent a value of 6 to trigger interest in their specific company in particular. The medium values of the MIDP to generate business and trigger interest in South Africa by one OEM reflect the level of CBU export success achieved.

Table 7.7: The value of the MIDP in promoting the specific company in particular in the global automotive environment since it was implemented in 1995

	Component companies															
	Low value/low impact								High value/high impact							
	1		2		3		4		5		6		7		Total	
Value of MIDP to	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Generate business	1	2,9	2	5,7			2	5,7	9	25,7	9	25,7	12	34,3	35	100
Attract investments	3	9,7	3	9,7			7	22,6	7	22,6	3	9,7	8	25,8	31	100
Trigger interest in SA	2	6,5	1	3,2			6	19,4	5	16,1	8	25,8	9	29,0	31	100
Other									1	50,0			1	50,0	2	100
	OEMs															
	Low value/low impact								High value/high impact							
	1		2		3		4		5		6		7		Total	
Value of MIDP to	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Generate business							1	12,5			2	25,0	5	62,5	8	100
Attract investments									2	25,0	2	25,0	4	50,0	8	100
Trigger interest in SA							1	12,5	2	25,0	3	37,5	2	25,0	8	100
Other													1	100	1	100

Table 7.7 reveals that two component companies and one OEM indicated under the “Other (please specify)” label a high value of 7 for the specific company in particular towards aspects such as lowering of import duties, a wider choice of products for consumers, South Africa’s increased ability as a source of quality and competitive automotive components and vehicles as well as increased international competitiveness.

The responses by the component companies and the OEMs in Table 7.7 reveal that the MIDP generally has a very high value/high impact in promoting the specific company in particular to generate business, attract investments and trigger interest in South Africa. The component companies revealing a low value/impact of the MIDP in promoting the specific company in particular to generate business, attract investments and to trigger interest are those not registered under the MIDP and therefore not dependent on MIDP support.

For figure 7.2 the index method, similar to the index method as explained for purposes of Figure 1, was used to uncover the most important value/impact of the MIDP as a promotional tool for the specific company in particular forming part of the survey. The value of the MIDP in respect of its ability to generate business, to attract investments, to trigger interest in South Africa as well as a label for “Other (please specify)” was requested to be ranked on a 7-point scale.

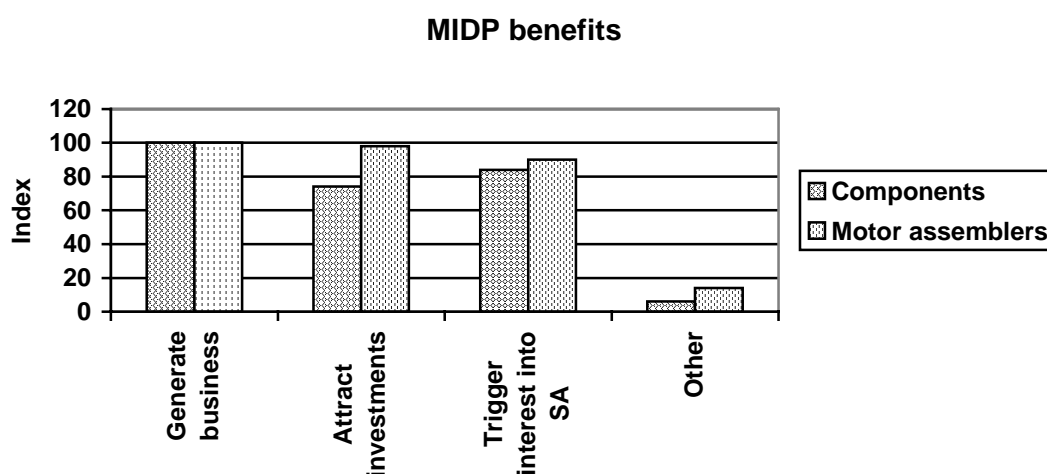


Figure 7.2: The most important value of the MIDP in promoting the company in particular in the global automotive environment since 1995 when the MIDP was implemented (Index = 100)

As far as the most important value of the MIDP to promote the *South African automotive industry in general* in the global automotive environment since 1995 when the MIDP was implemented is concerned, Figure 7.1 revealed that for the component companies it was to generate business and for the OEMs it was to attract investments. Figure 7.2 reveals that for the component companies and for the OEMs, the most important value of the MIDP in promoting the *specific company in particular* in the global automotive environment was to generate business. As far as the value of the MIDP in attracting investments is concerned, it was more important for the OEMs than for the component companies while the value of the MIDP in triggering interest in South Africa was also more important for the OEMs than for the component companies.

While questions 5 and 6 dealt with the respondents' views on the historic and current value of the MIDP as a promotional tool for the South African automotive industry in general and for the specific company in particular in the global automotive environment, question 7 focuses on the future role of the MIDP.

**Question 7** dealt with the respondents' views on the role of the MIDP with its extension until 2012.

Table 7.8 reveals that:

- For nine or 75 percent of the stakeholders, the MIDP's role in generating business will increase while for three its role in this respect will remain similar. For eight stakeholders or 66,7 percent the MIDP's role in attracting investments will increase, for three it will remain similar and for one it will decrease while for nine stakeholders or 75 percent the MIDP's role in triggering interest in South Africa will play an increasing role and for three it will remain similar. For three stakeholders the MIDP's role in improving the industry's international competitiveness, as identified under the "other" heading, will increase. The stakeholders views on the MIDP's role as remaining similar in all three aspects or even decreasing as far as attracting investments is concerned are based on the gradual reduction of benefits under the MIDP until 2012.
- For 27 or 77,1 percent of the component companies the MIDP's role in generating business will increase, for 57,6 percent its role in attracting investments will increase and for 62,5 percent its role in triggering interest in South Africa will increase. The component companies revealing that for all three aspects the MIDP's role will remain similar or will decrease as far as its role in attracting investments and triggering interest in South Africa is concerned are the non-MIDP registered companies not dependent on MIDP support directly or indirectly.

- For four or 50 percent of the OEMs the MIDP's role will increase in generating business, for three or 37,5 percent it will remain similar and one or 12,5 percent its role will decrease. For five OEMs or 62,5 percent the MIDP's role will increase in attracting investments and for three or 37,5 percent it will remain similar while for four OEMs or 50 percent its role will increase in triggering interest in South Africa and for four or 50 percent it will remain similar. The views of the OEMs on the MIDP's role in remaining similar for all three aspects or decreasing in respect of generating business are based on the gradual reduction of benefits under the MIDP until 2012. In anticipation of the outcome of the MIDP Review, which was still in progress during the course of this study, the views were based on the status quo.

The responses by the stakeholders, component companies and the OEMs reveal that, despite the gradual reduction of benefits under the MIDP since 2003, there is a level of confidence that the MIDP's role in generating business, attracting investments and triggering interest in South Africa will increase until 2012 in its current format. The exceptions are the component companies not registered under the MIDP as well as the stakeholders and one OEM, who based their views on the MIDP's role as decreasing with regard to the three aspects, on the gradual reduction of benefits under the MIDP until 2012.

Table 7.8: Views on the role of the MIDP with its extension until 2012

	Stakeholders							
Views	Increase		Remain similar		Decrease		Total	
	N	%	N	%	N	%	N	%
Generate business	9	75,0	3	25,0			12	100,0
Attract investments	8	66,7	3	25,0	1	8,3	12	100,0
Trigger interest in SA	9	75,0	3	25,0			12	100,0
Other	3	100,0					3	100,0

	Component companies							
Views	Increase		Remain similar		Decrease		Total	
	N	%	N	%	N	%	N	%
Generate business	27	77,1	8	22,9			35	100,0
Attract investments	19	57,6	13	39,4	1	3,0	33	100,0
Trigger interest in SA	20	62,5	11	34,4	1	3,1	32	100,0
Other								

	OEMs							
Views	Increase		Remain similar		Decrease		Total	
	N	%	N	%	N	%	N	%
Generate business	4	50,0	3	37,5	1	12,5	8	100,0
Attract investments	5	62,5	3	37,5			8	100,0
Trigger interest in SA	4	50,0	4	50,0			8	100,0
Other								

**Question 8** dealt with the respondents' views on the dependence on support for the automotive industry post 2012 when the MIDP is due to expire.

Table 7.9 reveals that for the South African automotive industry in general:

- Five stakeholders or 41,7 percent indicated a high value of 7 and six stakeholders or 50 percent a value of 6 on dependence on support for the automotive industry post 2012 when the MIDP is due to expire.
- 17 component companies or 48,6 percent indicated a high value of 7 and five component companies or 14,3 percent a value of 6 for dependence

on support for the automotive industry post 2012 when the MIDP is due to expire. The one component company indicating a low value of 1 and the two component companies indicating a low value of 2 for dependence on support for the South African automotive industry post 2012 when the MIDP is due to expire are non-MIDP registered companies not experiencing any impact of the MIDP on their business operations at present and are therefore not expecting to depend on support post 2012. The two component companies indicating a value of 4 and the eight component companies indicating a value of 5 for dependence on support for the South African automotive industry post 2012 when the MIDP is due to expire form part of the component companies benefiting indirectly from the MIDP and are expecting to continue receiving some level of support post 2012.

- Five or 62,5 percent of the OEMs indicated a high value of 7 and one or 12,5 percent a value of 6 for dependence on support for the automotive industry post 2012 when the MIDP is due to expire. The one OEM indicating a value of 4 and the one OEM indicating a value of 5 for dependence on support post 2012 when the MIDP is due to expire are at present two of the main vehicle exporters and are confident of achieving increased international competitiveness and therefore a lesser dependence on support post 2012.

Table 7.9 reveals that the stakeholders, component companies and OEMs expressed strong views on the continued dependence on support for the South African automotive industry in general post 2012 when the MIDP is due to expire.

Table 7.9: Views on the dependence on support for the South African automotive industry in general post 2012 when the MIDP is due to expire

	South African automotive industry in general															
	Low value/low impact								High value/high impact							
	1		2		3		4		5		6		7		Total	
Role-players	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Stakeholders									1	8,3	6	50,0	5	41,7	12	100
Components	1	2,9	2	5,7			2	5,7	8	22,9	5	14,3	17	48,6	35	100
OEMs							1	12,5	1	12,5	1	12,5	5	62,5	8	100
	Specific company in particular															
	Low value/low impact								High value/high impact							
	1		2		3		4		5		6		7		Total	
Role-players	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Components	4	11,1	2	5,6	2	5,6	5	13,9	9	25,0	4	11,1	10	27,8	36	100
OEMs			1	12,5			1	12,5	1	12,5			5	62,5	8	100

Table 7.9 reveals the following for the specific company in particular:

- 10 or 27,8 percent of the component companies indicated a high value of 7 and 4 or 11,1 percent a high value of 6 for dependence on support for the automotive industry post 2012. The medium value of dependence on support of 4 and 5 reflects the views of the component companies benefiting indirectly from the MIDP at present and who expect similar levels of support post 2012 when the MIDP is due to expire. The values of 1 to 3 for dependence on support post 2012 indicated by the component companies reflect the views of those not registered under the MIDP. The non-MIDP registered companies are not depending on MIDP support at present and their future dependence on support post 2012 will therefore be lower compared to those MIDP registered component companies who depend on support at present.
- Five or 62,5 percent of the OEMs indicated a high value of 7 for dependence on support for the automotive industry post 2012. The OEMs are all engaged in major expansion programmes, which will assist them in obtaining economies of scale benefits and becoming more internationally



competitive. In view of the export programme expansions, two OEMs revealed a medium value of dependence on support post 2012 when the MIDP is due to expire. The one OEM indicating a low value of support for its specific company in particular post 2012 is a major vehicle exporter and its views reflect its confidence that increased economies of scale benefits and improved international competitiveness over time would result on a relatively lower dependence on support post 2012.

Table 7.9 reveals that the component companies and the OEMs expressed strong views on a continued and high level of dependence on support post 2012 when the MIDP is due to expire. The exceptions were the non-registered MIDP component companies not currently depending on MIDP support and therefore not expecting to depend on support post 2012, as well as one OEM reflecting its confidence in improved economies of scale benefits via its CBU export programme.

## **7.5 SUMMARY**

The most important value of the MIDP, for the stakeholders, in promoting the *South African automotive industry in general* in the global automotive environment since it was implemented in 1995 was to generate business and trigger interest in South Africa. For the component companies it was to generate business and for the OEMs it was to attract investments. The most important value of the MIDP, for the component companies, in promoting the *specific company in particular* in the global automotive environment since 1995 when the MIDP was implemented was to generate business, and for the OEMs it was to attract investments.

Despite the gradual reduction in benefits under the MIDP up to 2012, the stakeholders, component companies and OEMs strongly believed that the MIDP's role in generating business, attracting investments and triggering interest in South Africa until 2012 will increase. The stakeholders, component companies and OEMs expressed strong views on the continued dependence on support for the *South African automotive industry in general* post 2012, when the MIDP is due to expire. The component companies and OEMs also revealed a high value of continued

dependence on support for the *specific company in particular* post 2012. The low level of support dependence post 2012 in both of the above scenarios could be attributed to the non-MIDP registered component companies that do not receive support under the MIDP at present and therefore are not expecting to depend on support post 2012, as well as increased international competitiveness via improved economies of scale benefits by one OEM.

## **7.6 PART 3 OF THE QUESTIONNAIRE**

Part 3 of the questionnaire covers questions 9 to 12 and dealt with the respondents' quantitative and qualitative views on the importance of 15 different factors impacting on the business operations of *the South African automotive industry in general* as well as on the business operations of *the specific company in particular*. A rank-order scale was used where the top ranked factor was represented by number 1 and the least ranked factor was represented by number 15.

The mean value rating is used and represents that value obtained by summing all elements in a set and dividing by the number of elements. It is used to estimate the mean or average when the data have been collected. The mean is a robust measure and does not change markedly as data values are added or deleted. It is said to be a non-resistant measure as it can be affected by extremes and can also take on fractional values even when the variables involved are discrete or take a value that does not reflect any of the individual values of the variable in the question. The mean, however, makes full use of all the data available in that its calculation is based on all the individual data values (Tustin et al., 2005:538-540; Malhotra, 2004:430, 431).

Questions 9 to 12 will now be discussed.

**Question 9** dealt with the respondents' views in rating the factors with the highest to the lowest value/impact impacting on the business operations of the South African automotive industry in general.

Table 7.10 reveals that as far as the importance of the different factors impacting on the business operations of the South African automotive industry in general is concerned, the stakeholders, the component companies and the OEMs all ranked the following four factors as being of highest importance in their five top ranked factors:

1. South African government incentives to attract investments
2. Appreciation of the rand against foreign currencies in respect of exports
3. WTO rules and regulations and potential impact on the MIDP
4. Raw material prices

The stakeholders, component companies and OEMs identified similar factors as the most important factors impacting of the business operations of the South African automotive industry in general. Foremost in the minds of the respondents were the dominant factors impacting on the business operations of the domestic market over recent years. The need for investment incentives comparable to those of competitor countries, the strong appreciation of the rand since 2002 impacting on exports, the potential WTO challenge from Australia on South African automotive leather exports to Australia under the MIDP arising in 2004, raw material import parity pricing resulting in higher input costs as well as market access via free trade agreements being negotiated with developed and developing countries, as discussed in Chapter 4, were the dominant factors highlighted.

Table 7.10: Importance of different factors impacting on the South African automotive industry's business operations in general (mean rating value)

	Stakeholders	Component companies	OEMs	All groups
	(n=12)	(n=37)	(n=8)	(n=57)
<b>Q9b: South African government incentives to attract investments</b>	12,3	11,2	12,4	11,6
<b>Q9e: Appreciation of the rand against foreign currencies in respect of exports</b>	12,3	10,9	10,5	11,1
<b>Q9a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP</b>	10,0	10,3	9,6	10,1
<b>Q9n: Raw material prices</b>	9,8	10,0	9,6	9,9
<b>Q9d: Market access to foreign markets</b>	10,2	9,6	10,3	9,8
<b>Q9c: Free trade agreements in generating business opportunities</b>	7,6	9,7	9,0	9,2
<b>Q9f: Appreciation of the rand against foreign currencies in respect of investments</b>	8,0	8,4	9,3	8,5
<b>Q9h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector</b>	9,2	8,0	8,5	8,3
<b>Q9j: Distance to main automotive markets</b>	9,2	7,4	10,4	8,2
<b>Q9g: The comparative advantages of South Africa in generating business and attracting investment in the automotive sector</b>	8,8	7,8	8,0	8,0
<b>Q9o: Formal automotive structures as a forum to discuss automotive policy</b>	8,0	5,1	8,5	6,2
<b>Q9k: Participation in National Pavilions to promote the SA automotive industry</b>	3,8	7,0	2,8	5,7
<b>Q9i: The comparative advantages of the South African automotive industry in generating business and attracting investments for other related sectors</b>	6,8	5,2	4,4	5,4
<b>Q9l: Participation in outward selling missions to promote the South African automotive industry</b>	2,8	5,5	3,0	4,6
<b>Q9m: Participation in seminars in foreign countries to promote the South African automotive industry</b>	1,9	4,2	3,9	3,7

Proposition 1: There is a general agreement among the stakeholders, the component companies and the OEMs regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general*.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.11 to determine the correlations between the average ranks obtained for each of the three respondent groups across the 15 factors mentioned. The null hypothesis tested in Spearman's rank correlation is that the correlation is equal to zero, against the alternative hypothesis that the correlation coefficient is unequal to zero. If the null hypothesis is not rejected, it implies that there is no or very little agreement among the respondent groups regarding their perceptions of the importance of the factors listed. If the correlation coefficient is significantly different to zero, it can be concluded that there is a significant agreement between the perceptions in the respondent groups regarding the importance of the factors given. In Table 7.11 N represents the sample size, which is the 15 factors. The two-tailed significance is a test of the null hypothesis where the alternative hypothesis is not expressed directionally. A test statistic is a measure of how close the sample has come to the null hypothesis (Malhotra, 2004:435).

Table 7.11 reveals that the correlation coefficient between the stakeholders and the component companies, the correlation coefficient between the stakeholders and the OEMs and the correlation coefficient between the OEMs and the component companies are highly significant ( $\alpha=0,01$ ). The analysis for proposition 1 is therefore confirmed that there is general agreement regarding the factors that impact on the business operations of the South African automotive industry in general.

Table 7.11: Correlations of the different factors impacting on the business operations of the South African automotive industry in general

			Stakeholders	Component Companies	OEMs
Spearman's rho	Stakeholders	Correlation coefficient	1,000		
		Sig. (2-tailed)			
		N	15		
	Component companies	Correlation coefficient	,824(***)	1,000	
		Sig. (2-tailed)	,000		
		N	15	15	
	OEMs	Correlation coefficient	,897(***)	,782(***)	1,000
		Sig. (2-tailed)	,000	,001	
		N	15	15	15

\*\*\* Correlation is significant at the 0,01 level (2-tailed)

\*\* Correlation is significant at the 0,05 level (2-tailed)

\* Correlation is significant the he 0,10 level (2-tailed)

Table 7.11 reveals that there are highly significant correlations between the different factors impacting on the business operations of the South African automotive industry in general ( $\alpha=0,01$ ) and therefore it can be concluded that the stakeholders, the component companies and the OEMs view the importance of the factors in a similar order.

**Question 10** dealt with the respondents' qualitative views in respect of their rating of the factors with the highest to the lowest value/impact impacting on the South African automotive industry's business operations in general in question 9.

The detailed views of the stakeholders, component companies and OEMs in respect of their rating of the factors impacting on the South African automotive industry's business operations in general are attached as Appendix D. The main views of the respondents are summarised below.

The main views by the stakeholders confirm their ranking in Table 7.10 and are summarised below.

- Three stakeholders rated the need for government incentives to attract investments into the South African automotive industry and the linkages to international networks and technologies as being of high importance.
- Three stakeholders expressed the view that the factors impacting on the international competitiveness of the South African automotive industry in general are all highly important.
- One stakeholder rated the impact of the strong rand and impacting on the industry's export competitiveness and competition from lower priced imported products as a highly important factor.
- One stakeholder rated market access enabling export penetration into foreign markets as a highly important factor. Another stakeholder questioned the logic behind free and preferential trade agreements, as they would allow for tariff preferences into South Africa as well eroding the protection afforded to the domestic automotive industry.
- One stakeholder rated the potential impact of the WTO rules and regulations on the MIDP as a highly important factor as the South African automotive industry is dependent on the MIDP to maintain its growth momentum.
- One stakeholder raised the importance of formal structures in the domestic automotive industry to ensure constructive cooperation and results as a highly important factor.

The main views by the component companies confirm their ranking in Table 7.10 and are summarised below:

- Eleven component companies highlighted raw material prices as a highly important factor as impacting on being cost competitive in the global automotive environment.

- Seven component companies rated the appreciation of the rand and exchange rate volatility as a highly important factor impacting on exports and the business operations in South Africa in general.
- Seven component companies raised the availability of market intelligence and exposure of the domestic automotive industry via National Pavilions as highly important factors.
- Six component companies raised government support in the form of incentives to attract multinational companies to South Africa in contributing to the growth and sustainability of the domestic automotive industry as highly important factors.
- Five component companies rated market access and free trade agreements as highly important factors in penetrating foreign markets via reduced tariffs. However, three component companies expressed the view that free trade agreements compromise the sustainability of the domestic automotive market in allowing preferences to direct competitors.
- Three component companies rated logistical costs due to distance to markets as a highly important factor in respect of the cost of doing business in South Africa.

The main views by the OEMs confirm their ranking in Table 7.10 and are summarised below:

- Seven OEMs highlighted the importance of government incentives as a highly important factor in convincing parent companies of South Africa's attractiveness as an investment destination compared with fierce competition from low cost manufacturing countries.
- Four OEMs expressed the view that the existence of the South African automotive industry was questionable without the MIDP or government incentives.
- Three OEMs rated the strong rand and raw material prices, two dominant factors over recent years impacting on profitability and international competitiveness, as highly important factors.



- Two OEMs revealed that the MIDP and WTO requirements are extremely important to the industry as the MIDP has a direct impact on the cost of domestically produced and imported vehicles.
- Two OEMs raised market access and free trade agreements as highly important factors in respect of their export programmes to penetrate markets.

The main views of the stakeholders, component companies and the OEMs are very similar and mainly reflect the dominant factors foremost in the minds of the respondents impacting on the business operations of the South African automotive industry in general.

**Question 11** dealt with the respondents' views on the importance of 15 different factors impacting on the business operations of the specific company in particular. A rank order scale similar to question 9 was used where the top ranked factor represented number 1 and the least ranked factor represented number 15.

Table 7.12 reveals that as far as the importance of the different factors impacting on the business operations of the specific company in particular is concerned, the component companies and the OEMs both ranked the following four factors as of the highest importance in their five top ranked factors:

1. Market access to foreign markets
2. Appreciation of the rand against foreign currencies in respect of exports
3. Raw material prices
4. South African government incentives to attract investments

Both the component companies and the OEMs ranked similar factors as the most important factors impacting on the business operations of the specific company in particular. The factors reflect the export orientation of the specific companies in particular and focused on the dominant factors foremost in the minds of respondents over recent years. The need for investment incentives comparable to those of competitor countries, the strong appreciation of the rand since 2003 impacting on

exports, raw material import parity pricing resulting in higher input costs as well as market access to penetrate foreign markets were the dominant factors highlighted in Chapter 4. Although important, the WTO rules and regulations and potential impact on the MIDP was not ranked as highly important in impacting on the business operations of the specific company in particular as was the case in Table 7.10 in impacting on the business operations of the South African automotive industry in general.

For the specific company in particular, already involved in export programmes or pursuing exports, the cost factors impacting on international competitiveness were ranked to be of higher importance than the potential risk in the form of reduced government support. The gradual reduction in benefits under the MIDP since 2003 has created an environment in which the component companies and the OEMs should increasingly become internationally competitive. In addition, the component companies and the OEMs are aware of the fact that the potential threat of a WTO challenge relating to automotive leather exports to Australia has been addressed adequately as part of the 2005/6 MIDP Review.

Table 7.12: Importance of the difference factors impacting on the business operations of the specific company in particular (mean value rating)

	Component companies (n=35)	OEMs (n=8)	Total
<b>Q11d: Market access to foreign markets</b>	10,8	11,1	11,0
<b>Q11e: Appreciation of the rand against foreign currencies in respect of exports</b>	10,4	11,4	10,9
<b>Q11n: Raw material prices</b>	10,3	10,4	10,4
<b>Q11b: South African government incentives to attract investments</b>	9,4	10,9	10,2
<b>Q11c: Free trade agreements in generating business opportunities</b>	9,8	9,3	9,6
<b>Q11j: Distance to main automotive markets</b>	7,6	10,4	9,0
<b>Q11a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP</b>	8,2	9,6	8,9
<b>Q11f: Appreciation of the rand against foreign currencies in respect of investments</b>	7,2	9,6	8,4
<b>Q11g: The comparative advantages of the South African to generate business and attract investment in the automotive sector</b>	7,8	7,8	7,8
<b>Q11h: The comparative advantages of the South African automotive industry to generate business and attract investments in the automotive sector</b>	8,1	7,3	7,7
<b>Q11k: Participation in National Pavilions to promote the South African automotive industry</b>	9,1	4,1	6,6
<b>Q11o: Formal automotive structures as a forum to discuss automotive policy</b>	4,6	7,0	5,8
<b>Q11l: Participation in outward selling missions to promote the South African automotive industry</b>	6,8	2,8	4,8
<b>Q11i: The comparative advantages of the South African automotive industry to generate business and attract investments for other related sectors</b>	4,6	4,8	4,7
<b>Q11m: Participation in seminars in foreign countries to promote the South African automotive industry</b>	5,5	3,6	4,6

Proposition 2: There is a general agreement between the component companies and the OEMs regarding the importance of the factors that impact on the business operations of *the specific company in particular*.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.13 to determine the correlations between the average ranks obtained for the component companies and the OEMs across the 15 factors mentioned. The correlation coefficient between the component companies and the OEMs is highly significant ( $\alpha=0,01$ ) and confirms the analysis for proposition 2 that there is general agreement regarding the factors that impact on the business operations of the specific company in particular.

Table 7.13: Correlations of the different factors impacting on the business operations of the specific company in particular

			Components	OEMs
Spearman's rho	Component companies	Correlation Coefficient	1,000	
		Sig. (2-tailed)		
		N	15	
	OEMs	Correlation Coefficient	,720(***)	1,000
		Sig. (2-tailed)	,002	
		N	15	15

\*\*\* Correlation is significant at the 0,01 level (2-tailed)

\*\* Correlation is significant at the 0,05 level (2-tailed)

\* Correlation is significant the he 0,10 level (2-tailed)

Table 7.13 reveals that there are highly significant correlations between the different factors impacting on the business operations of the specific company in particular ( $\alpha=0,01$ ) and therefore it can be concluded that the component companies and the OEMs view the importance of the factors in a similar order.

**Question 12** dealt with the respondents' qualitative views in rating the factors with the highest to the lowest value/impact on their specific companies' business operations in particular.

The detailed views of the component companies and the OEMs in respect of their rating of the factors impacting on the business operations of the specific company in particular are attached as Appendix E. The main views of the respondents are summarised below.

The main views by the component companies confirm their ranking in Table 7.12 and are summarised below:

- Eleven component companies highlighted raw material prices as a highly important factor relating to cost competitive pressures in the global automotive environment.
- Nine component companies rated the appreciation of the rand and exchange rate volatility as a highly important factor impacting on exports and increased import competition into South Africa.
- Eight component companies, of which four non-MIDP registered companies, raised the availability of market intelligence and the opportunity of gaining export exposure via National Pavilions, as highly important factors.
- Six component companies raised government support in the form of incentives to attract multinational companies to South Africa to contribute to the growth and sustainability of the domestic automotive industry as highly important factors.
- Six component companies rated market access and free trade agreements as highly important factors in penetrating foreign markets via reduced tariffs. However, three component companies expressed the view that free trade agreements compromise the sustainability of the domestic automotive market in allowing preferences to direct competitors.
- Three component companies rated logistical costs relating to distance to main export markets as a highly important factor in respect of the cost of doing business in South Africa.

The main views by the OEMs confirm their ranking in Table 7.12 and are summarised below:

- Five OEMs highlighted the dependence on the MIDP and government incentives in respect of the sustainability of their business operations as a highly important factor.
- Three OEMs highlighted the importance of market access and free trade agreements in accessing markets as far as export programmes are concerned as highly important factors.
- Two OEMs raised the potential impact of the WTO rules and regulations on the MIDP and the impact on longer-term policy certainty as a highly important factor.
- One OEM highlighted cost factors impacting on profitability, including the distance to main markets, the strong rand, the small domestic market as well as raw material prices as highly important factors.

The main views by the component companies and the OEMs are very similar and mainly reflect the dominant factors foremost in the minds of the respondents impacting on the business operations of the specific company in particular.

## **7.7 SUMMARY**

Part 3 of the questionnaire dealt with the respondents' quantitative and qualitative views on 15 different factors impacting on the business operations of the *South African automotive industry in general* and on the business operations of *the specific company in particular*. In a dynamic environment and being fully integrated into the global automotive industry, different factors impact simultaneously on the business operations of the domestic industry in general and the specific company in particular. The stakeholders, the component companies and the OEMs expressed similar views in respect of the most important factors impacting on the business operations of the South African automotive industry in general. The highest ranked factors of importance include the need for adequate government investment incentives to attract investments, the potential WTO rules and regulations impact on the MIDP as

well as cost factors impacting on international competitiveness including the strong rand over recent years and raw material prices.

Spearman's rank correlations revealed highly significant correlations between the different factors impacting on the business operations of the South African automotive industry in general ( $\alpha = 0,01$ ) and therefore it can be concluded that the stakeholders, the component companies and the OEMs view the importance of the factors very similarly. The qualitative views of the stakeholders, component companies and OEMs confirmed the quantitative views in their ranking of the factors impacting on the business operations of the South African automotive industry in general.

As far as the most important factors impacting on the business operations of the *specific company in particular* is concerned, the component companies and OEMs expressed similar views in respect of the most important factors. The highest ranked factors confirmed the export-orientation of the specific companies in particular and included market access to penetrate foreign markets, cost factors impacting on international competitiveness, including the strong rand over recent years and raw material prices, as well as the need for adequate government investment incentives to attract investments into South Africa. Spearman's rank correlations revealed that there are highly significant correlations between the different factors impacting on the specific company in particular ( $\alpha = 0,01$ ) and therefore it can be concluded that the component companies and the OEMs view the importance of the factors very similarly. The qualitative views of the component companies and the OEMs confirmed the quantitative views in their ranking of the factors impacting on the business operations of the specific company in particular

## **7.8 PART 4 OF THE QUESTIONNAIRE**

Part 4 of the questionnaire covers questions 13 to 18, which describe the demographic details of the respondents.

**Question 13** dealt with the ownership of the respondent's company and **Question 14** with the employment level of the respondent's company.

Since foreign ownership may be overlapped with the number of employees, the following subgroupings will be used for the next analysis, derived from Table 7.14.

Group 1: Component companies, with less than 100 employees, and 20 percent or less foreign ownership (n=19)

Group 2: Component companies, with more than 100 employees, and no foreign ownership (n=10)

Group 3: Component companies, with more than 100 employees, and 100 percent foreign ownership (n=8)

Group 4: OEMs, with more than 100 employees, and 75-100 percent foreign ownership (n=8)

Table 7.14: Respondents' employee grouping: percentage foreign owned – cross tabulation

		% Foreign owned				Total
		0	20	75	100	
Employee grouping	Component companies, <100 employees	18	1	0	0	19
	Component companies, 100 + employees	10	0	0	8	18
	OEMs, 100+ employees	0	0	1	7	8
Total		28	1	1	15	45

Table 7.14 reveals that seven or 87,5 percent of the OEMs are foreign owned with one OEM having a 75 percent foreign-owned equity stake. Eight or 21,6 percent of the component companies are 100 percent foreign owned or multinational companies, 28 component companies or 75,7 percent are 100 percent South African



owned with one component company having a 20 percent foreign-owned equity stake. The multinational component companies forming part of the survey and the OEMs represent the foreign-owned companies. Foreign ownership relates to the decision-making power, which lies with the parent companies abroad.

The employment level categories selected for purposes of meaningful interpretations were based on industry inputs as well as the definitions used by the DTI's EMIA scheme and the National Small Business Act No. 102 of 1996. Small, medium and micro enterprises (SMMEs) employ up to 100 persons and large companies in excess of 100 persons, respectively. Table 7.14 reveals that the employment levels in the component companies were evenly divided into 19 small to medium size companies employing less than 100 employees per company and 18 large size companies employing more than 100 employees per company. The survey data revealed an average employment level for the 37 component companies of 322 persons per company and an average employment level for the eight OEMs of 3769 persons per company.

Table 7.15 is a cross-correlation with question 9 relating to the importance of the 15 factors impacting on the business operations of the *South African automotive industry in general* based on ownership and employment levels. For the four groups identified, the following three factors in the top five of high importance are similar:

- South African government incentives to attract investments
- Appreciation of the rand against foreign currencies in respect of exports
- World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP

Table 7.15: Importance of the different factors impacting on the business operations of the South African automotive industry in general based on ownership and employment (mean value rating)

	Component companies			OEMs	Total
	<100 employees	100 + employees no foreign owners	100 + employees foreign owners	100+ employees	
	(Group 1)	(Group 2)	(Group 3)	(Group 4)	
	(n=19)	(n=10)	(n=8)	(n=8)	
Q9b: South African government incentives to attract investments	11,1	10,9	11,9	12,4	11,4
Q9e: Appreciation of the rand against foreign currencies in respect of exports	10,9	10,8	11,1	10,5	10,8
Q9a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP	9,2	10,8	12,1	9,6	10,2
Q9n: Raw material prices	7,7	12,8	12,1	9,6	10,0
Q9d: Market access to foreign markets	10,3	9,2	8,6	10,3	9,7
Q9c: Free trade agreements in generating business opportunities	10,6	10,2	6,9	9,0	9,6
Q9f: Appreciation of the rand against foreign currencies in respect of investments	8,5	7,5	9,5	9,3	8,6
Q9h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector	7,6	7,3	9,8	8,5	8,1
Q9j: Distance to main automotive markets	6,5	7,9	8,8	10,4	7,9

<b>Q9g: The comparative advantages of South Africa in generating business and attracting investment in the automotive sector</b>	7,3	7,8	8,9	8,0	7,8
<b>Q9k: Participation in National Pavilions to promote the South African automotive industry</b>	8,5	6,5	4,0	2,8	6,2
<b>Q9o: Formal automotive structures as a forum to discuss automotive policy</b>	4,9	6,1	4,5	8,5	5,7
<b>Q9i: The comparative advantages of South Africa automotive industry in generating business and attracting investments for other related sectors</b>	5,3	5,0	5,1	4,4	5,0
<b>Q9l: Participation in outward selling missions to promote the South African automotive industry</b>	6,7	4,2	4,1	3,0	5,0
<b>Q9m: Participation in seminars in foreign countries to promote the South African automotive industry</b>	5,5	3,0	2,6	3,9	4,2

Group 1 comprises 19 *component companies employing less than 100 persons with no foreign ownership* of which 18 are 100 percent South African owned companies and one has a 20 percent foreign equity stake. The 10 non-MIDP registered component companies represent the profile of the independent exporter without the global linkages provided by the OEMs, while four of the nine MIDP registered small and medium sized component companies benefit directly from the MIDP and five indirectly. The factors of high importance for the small to medium sized companies focus on government incentives to attract investments to expand and upgrade the domestic business operations in order to accommodate exports as well as on increased export expansion via market access and free trade agreements in generating business opportunities in foreign markets. The impact of the strong rand is also of high importance in view of the export focus.

Group 2 comprises the 10 *component companies employing more than 100 persons with no foreign ownership* which represent the large, 100 percent South African owned companies already involved in export programmes via the linkages generated by the OEMs, or on an independent basis. The four non-MIDP registered component companies represent the profile of the independent exporter without the global linkages provided by the OEMs, while four of the six MIDP registered component companies benefit directly from the MIDP and two indirectly. The factors of high importance focus mainly on cost factors impacting on domestic and international competitiveness, such as raw material prices and the strong rand, as well as government incentives to attract investments and the continued dependence on the MIDP. The domestic competitiveness relates to the OEM business as the OEMs can import automotive component at duty free levels via the IRCCs. Cost factors relate to international competitiveness in respect of exports for the MIDP and non-MIDP registered component companies, while the potential risk of a WTO impact on the MIDP specifically relates to the MIDP registered companies. Government incentives to attract investments, as a factor of high importance, focus on expansion and upgrading of facilities to accommodate export business.

Group 3 comprises the eight *component companies employing more than 100 persons with 100 percent foreign ownership* which represents the large, 100 percent foreign owned or multinational companies already involved in export programmes via the linkages generated by the OEMs. The profile of the multinational companies represents those companies involved in a follow-sourcing strategy in following their main customers, the OEMs. The factors of high importance focus mainly on the continued dependence on the MIDP, cost factors impacting on international competitiveness, such as raw material prices and the strong rand, as well as on government support and South Africa's comparative advantages in attracting investments into the country as an investment destination of choice. The multinational component companies all benefit directly under the MIDP and sustained future business operations in South Africa depend on the combination of the high importance factors.

Group 4 comprises the eight *OEMs*, of which seven are 100 percent foreign owned and one 75 percent foreign owned, of which *all employ more than 100 persons* and of which all are involved in major export programmes. The focus is mainly on government incentives to trigger interest and motivate future investment decisions in respect of the sustainability of new generation model production in South Africa. Other factors of high importance focus on market access for export expansion of the increasingly left-hand drive models also assembled by several OEMs, and on cost factors including logistical costs, raw material prices and the strong rand impacting on international price competitiveness and profit margins.

Table 7.16: Correlations between the different factors impacting on the business operations of the South African automotive industry in general based on ownership and employment

		Component companies			OEMs
Spearman's rho		<100 employees	100 + employees no foreign owners	100 + employees foreign owners	100+ employees
		(Group 1)	(Group 2)	(Group 3)	(Group 4)
Component companies with <100 employees, no foreign ownership	Correlation Coefficient	1,000			
	Sig. (2-tailed)	.			
	N	15			
Component companies with 100 + employees, no foreign ownership	Correlation Coefficient	,746(***)	1,000		
	Sig. (2-tailed)	.001	.		
	N	15	15		
Component companies with 100 + employees, foreign ownership	Correlation Coefficient	,535(**)	,840(***)	1,000	
	Sig. (2-tailed)	,040	,000	.	
	N	15	15	15	
OEMs with 100 + employees, 75-100% foreign ownership	Correlation Coefficient	,589(**)	,826(***)	,741(***)	1,000
	Sig. (2-tailed)	,021	,000	,002	.
	N	15	15	15	15

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

\* Correlation is significant at the 0.10 level (2-tailed).

Proposition 3: There is a general agreement between the four groups regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general* based on the ownership and employment level criteria.

In order to test the above proposition, Spearman's rank correlation was used in Table 7.16 to determine the correlations between the average ranks obtained for the component companies and the OEMs across the 15 factors mentioned based on the ownership and employment level criteria. The correlation coefficients between groups 1 and 2, groups 2 and 3, groups 2 and 4 as well as groups 3 and 4 are highly significant ( $\alpha=0,01$ ). The factors of high importance for the groups are similar and focus on government incentives to expand and upgrade domestic facilities to accommodate exports and the strong rand impacting on exports. The correlation coefficients between groups 1 and 3 and groups 1 and 4 are significant ( $\alpha=0,05$ ) reflecting similar factors of high importance in the continued dependence on the MIDP, the strong rand impacting on exports and government incentives to attract investments. The analysis of proposition 3 is therefore confirmed in that there is general agreement regarding the factors that impact on the business operations of the South African automotive industry in general based on the ownership and employment level criteria.

Table 7.16 reveals that there are highly significant to significant correlations between the different factors impacting on the South African automotive industry in general based on the ownership and employment criteria ( $\alpha=0,01$  and  $\alpha=0,05$ ) and therefore it can be concluded that the selected groups view the importance of the factors in a similar order.

Table 7.17 is a cross-correlation with question 11 relating to the importance of the 15 factors impacting on the business operations of the *specific company in particular* based on ownership and employment levels. For the four groups identified, only the following two factors out of the top five of high importance are similar:

- South African government incentives to attract investments
- Appreciation of the rand against foreign currencies in respect of exports

Table 7.17: Importance of different factors impacting on the business operations of the specific company in particular based on ownership and employment (mean value rating)

	Component companies			OEMs	Total
	<100 employees	100 + employees no foreign owners	100 + employees foreign owners	100+ employees	
	(Group 1)	(Group 2)	(Group 3)	(Group 4)	
	(n=19)	(n=10)	(n=8)	(n=8)	
Q11d: Market access to foreign markets	12,4	8,8	9,4	11,1	10,8
Q11e: Appreciation of the rand against foreign currencies in respect of exports	9,4	11,6	11,4	11,4	10,6
Q11n: Raw material prices	7,8	12,6	13,3	10,4	10,3
Q11c: Free trade agreements in generating business opportunities	10,9	9,8	7,4	9,3	9,7
Q11b: South African government incentives to attract investments	9,4	9,1	10,0	10,9	9,7
Q11a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP	7,1	7,7	11,5	9,6	8,5
Q11k: Participation in National Pavilions to promote the South African automotive industry	11,4	9,1	3,9	4,1	8,2
Q11j: Distance to main automotive markets	6,9	7,6	9,4	10,4	8,1
Q11h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector	7,4	8,0	10,0	7,3	8,0
Q11g: The comparative advantages of South Africa in generating business and attracting	7,1	8,6	8,3	7,8	7,8

<b>investment in the automotive sector</b>					
<b>Q11f: Appreciation of the rand against foreign currencies in respect of investments</b>	7,2	5,7	9,1	9,6	7,6
<b>Q11l: Participation in outward selling missions to promote the South African automotive industry</b>	8,4	6,3	3,8	2,8	6,1
<b>Q11m: Participation in seminars in foreign countries to promote the South African automotive industry</b>	7,0	4,3	3,4	3,6	5,1
<b>Q11o: Formal automotive structures as a forum to discuss automotive policy</b>	4,3	5,6	4,3	7,0	5,0
<b>Q11i: The comparative advantages of the South African automotive industry in generating business and attracting investments for other related sectors</b>	4,0	5,2	5,1	4,8	4,6

Group 1 comprises the 19 *component companies employing less than 100 persons with no foreign ownership* which represent the small to medium size South African owned companies. Of the 19 component companies in this grouping 10 are non-MIDP registered and nine are MIDP registered companies, of which four of the nine component companies revealed that they benefit directly from the MIDP via IRCC claims and five indirectly under the MIDP. The factors of high importance for the non-MIDP registered companies as well as the small to medium sized MIDP registered companies focus on the need to gain export exposure in accessing and penetrating foreign markets in order to generate business opportunities. The dependence on the MIDP in respect of potential WTO impact is not as important for the companies in this group, which consists by and large of the non-MIDP registered component companies and component companies only benefiting indirectly under the MIDP.

Group 2 comprises the 10 *component companies employing more than 100 persons with no foreign ownership* that represent the large South African owned component companies of which six are MIDP registered companies benefiting directly as well as



indirectly under the MIDP and four non-MIDP registered companies. The MIDP registered component companies in this grouping are involved in export programmes via linkages with the OEMs and the factors of high importance focus strongly on cost factors impacting on international competitiveness such as raw material prices and the strong rand as well as government support to attract investments and the continued dependence on the MIDP. For the non-MIDP registered companies export exposure via participation in events and generating business via free trade agreements in penetrating markets are the factors of high importance in generating business opportunities abroad.

Group 3 comprises the eight *component companies employing more than 100 persons with 100 percent foreign ownership* that represent the multinational component companies of which all eight are MIDP registered companies benefiting directly as well as indirectly under the MIDP. The component companies in this grouping are involved in export programmes via linkages with the OEMs and the factors of high importance focus strongly on cost factors impacting on international competitiveness such as raw material prices, the strong rand and the continued dependence on the MIDP as well as government incentives and the attractiveness of the domestic market in attracting investments to accommodate export programmes.

Group 4 comprises the eight *OEMs all employing more than 100 persons* of which all are involved in major export programmes. The factors of high importance for the specific company is a particular focus on the strong rand impacting on profit margins, as the CBU prices are normally determined in foreign currency, as well as increased market access for the increasingly left-hand drive models assembled in South Africa. In addition, cost factors such as raw material prices and logistical costs impacting on international competitiveness as well as adequate government incentives to attract investments in new generation models, to sustain the viability of assembly in South Africa, are also factors of high importance.

Table 7.18: Correlations between the different factors impacting on the business operations of the specific company in particular based on ownership and employment (mean value rating)

Spearman's rho		Component companies			OEMs
		<100 employees, no foreign ownership	100 + employees, no foreign ownership	100 + employees, foreign ownership	100 + employees, 75-100% foreign ownership
		(Group 1)	(Group 2)	(Group 3)	(Group 4)
Component companies with <100 employees, no foreign ownership	Correlation Coefficient	1,000			
	Sig. (2-tailed)				
	N	15			
Component companies with 100 + employees, no foreign ownership	Correlation Coefficient	,746(***)	1,000		
	Sig. (2-tailed)	,001	,		
	N	15	15		
Component companies with 100 + employees, foreign ownership	Correlation Coefficient	,173	,579(**)	1,000	
	Sig. (2-tailed)	,538	,024	,	
	N	15	15	15	
OEMs with 100 + employees, 75-100% foreign ownership	Correlation Coefficient	,334	,591(**)	,815(***)	1,000
	Sig. (2-tailed)	,223	,020	,000	,
	N	15	15	15	15

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

\* Correlation is significant at the 0.10 level (2-tailed).

Proposition 4: There is a general agreement between the four groups regarding the importance of the factors that impact on the business operations of *the specific company in particular* based on the ownership and employment level criteria.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.18 to determine the correlations between the average ranks obtained for the four groups across the 15 factors mentioned based on the ownership and employment level criteria. The correlation coefficients between groups 1 and 2 and groups 3 and 4 are highly significant ( $\alpha=0,01$ ). The factors of high importance for the

small and the large South African owned companies, representing the independent exporters or non-MIDP registered companies, focus on export exposure via participation in exhibitions abroad and opportunities in foreign markets generated via free trade agreements as well as the strong rand impacting on international competitiveness. Groups 3 and 4 represent the multinational companies and the OEMs already engaged in major export programmes and the factors of high importance focus on investment incentives to sustain the production of products in South Africa, a continued dependence on the MIDP, export expansion as well as cost factors impacting on international competitiveness. The correlation coefficients between groups 2 and 3 and groups 2 and 4 are significant ( $\alpha=0,05$ ). The factors of high importance between the large size MIDP registered companies and the multinational companies and the OEMs, all three of which are involved in export programmes, focus on cost factors such as the strong rand and raw material prices impacting on international competitiveness. The correlation coefficients between groups 1 and 3 and groups 1 and 4 are not, however, significant. The difference in the ranking of the factors of high importance is evident between the focus of the OEMs and the multinational companies compared to the focus of the non-MIDP registered and the South African owned, small to medium sized MIDP registered companies. The non-MIDP and small to medium size South African owned companies lack the global linkages of the OEMs and are pursuing export opportunities on an independent basis to generate business, while the multinationals and the OEMs are involved in major export programmes and the focus is strongly on cost factors impacting on international competitiveness and export expansion. The analysis for proposition 4 that there is general agreement regarding the factors that impact on the business operations of the specific company in particular based on the ownership and employment level criteria is not confirmed.

Table 7.18 reveals that there are highly significant, significant and no correlations between the different factors impacting on the specific company in particular based on the ownership and employment criteria and therefore it can be concluded that the selected groups do not view the importance of the factors in the same order.

**Question 15** dealt with information in respect of the mix of the high volume product(s) manufactured/assembled by the respondent.

- Eight OEMs are involved in the assembly of 22 different passenger car and light commercial vehicle models while two OEMs are also involved in the manufacture of engines and catalytic converters.
- The component companies are involved in a diverse range of automotive original equipment and aftermarket components eligible under the MIDP, as well as products not eligible under the MIDP, such as accessories, chemicals, paint coatings and trailers. The products not eligible under the MIDP are manufactured by the non-MIDP registered companies. The respondent component companies are involved in the manufacture of automotive components in the following categories:
  - air conditioners
  - alarm systems
  - automotive tooling
  - body parts/panels
  - brake parts
  - catalytic converters
  - clutches/shaft couplings
  - engine parts
  - gauges/instrument parts
  - ignition/starting equipment
  - lighting/signalling/wiping equipment
  - radiators
  - road wheels/parts
  - seat parts/leather covers
  - shock absorbers
  - silencers/exhaust pipes
  - springs
  - transmission shafts/cranks

- wiring harnesses
- other components

The components and subcomponents produced by the component company respondents represent 20 of the 33 component categories described in Chapter 4. The 20 component categories as well as the engines manufactured by the OEMs represent R19,3 billion or 88,9 percent of the R21,7 billion automotive components exported in 2004. The products not covered are tyres, which are, however, represented in this study by the South African Tyre Manufacturers' Conference (SATMC), automotive glass, of which there is only one manufacturer in South Africa, as well as components such as car radios, gearboxes, axles, seatbelts and steering wheels. Some of the component companies forming part of the empirical survey do however manufacture subcomponents for gearboxes, axles and car audio systems.

**Question 16** dealt with details regarding the respondent's sales, whether they were sales to the OEMs, sales to the aftermarket or sales to exports.

MIDP registered component companies are by and large involved in all three segments of sales, namely sales to the OEMs, sales to the aftermarket and sales to exports. Sales to the OEMs involve original equipment components to assemble the vehicle. Sales to the aftermarket involve replacement or service parts while exports involve original equipment components and/or aftermarket parts. The OEMs export CBUs while two OEMs are involved in engine exports and several OEMs involved in catalytic converter exports. The engines and catalytic converters are supplied to parent companies and subsidiary OEMs in foreign markets. For the following analyses, subgroups were formed as follows:

Group 1: Those that have sales to OEM, aftermarket and exports (n=19)

Group 2: Those that have sales to OEM and aftermarket (n=2)

Group 3: Those that have sales to OEM and exports (n=5)

Group 4: Those that have sales to aftermarket and exports (n=12)

Group 5: Those that have sales to exports (n=5)

Table 7.19 is a cross-correlation with question 9 relating to the importance of the 15 factors impacting on the business operations of the *South African automotive industry in general* based on sales segments. For the five groups identified, the following two factors out of the top five of high importance are similar:

- South African government incentives to attract investments
- Appreciation of the rand against foreign currencies in respect of exports

Table 7.19: Importance of the different factors impacting on the business operations of the South African automotive industry in general based on sales segments (mean value rating)

	Sales to OEM, after-market and exports	Sales to OEM and after-market	Sales to OEM and exports	Sales to after-market and exports	Sales to exports	
	(Group 1)	(Group 2)	(Group 3)	(Group 4)	(Group 5)	Total
	(n=19)	(n=2)	(n=5)	(n=12)	(n=5)	
Q9b: South African government incentives to attract investments	11,8	14,0	9,6	11,8	11,2	11,6
Q9e: Appreciation of the rand against foreign currencies in respect of exports	11,4	10,5	10,4	10,3	11,2	10,9
Q9a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP	11,1	12,5	11,2	9,0	8,6	10,3
Q9n: Raw material prices	10,1	9,0	13,0	9,4	8,6	10,0
Q9d: Market access to foreign markets	9,1	11,0	10,4	10,1	8,8	9,6
Q9c: Free trade agreements in generating business opportunities	10,0	12,0	7,4	10,5	6,2	9,5
Q9f: Appreciation of the rand against foreign currencies in respect of	9,7	8,5	7,8	7,3	8,0	8,6

investments						
Q9h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector	7,1	10,0	7,8	7,3	11,6	7,9
Q9j: Distance to main automotive markets	8,7	1,0	6,0	7,3	9,6	7,8
Q9g: The comparative advantages of South Africa in generating business and attracting investment in the automotive sector	6,8	9,0	8,4	7,5	10,4	7,7
Q9k: Participation in National Pavilions to promote the South African automotive industry	6,6	2,0	6,4	7,6	3,6	6,3
Q9o: Formal automotive structures as a forum to discuss automotive policy	5,9	5,5	5,8	5,5	6,6	5,9
Q9l: Participation in outward selling missions to promote the South African automotive industry	4,8	3,5	6,8	5,8	3,6	5,1
Q9i: The comparative advantages of South Africa automotive industry in generating business and attracting investments for other related sectors	3,6	8,0	5,2	5,2	7,8	4,9
Q9m: Participation in seminars in foreign countries to promote the South African automotive industry	3,2	3,5	3,8	6,4	4,2	4,3

Group 1 comprises the 19 companies involved in *sales to the OEMs, aftermarket and exports segments* and consists of six small to medium size MIDP registered South African owned component companies, five large MIDP registered South African owned component companies, five multinational MIDP registered component companies, two small to medium size non-MIDP registered South African owned component company and one OEM. The factors of high importance focus on satisfying all three sales segments, namely to the OEMs, to the aftermarket and to

exports. Government incentives to attract investments will aim to expand, upgrade and sustain future business operations. The continued dependence on the MIDP is applicable to the MIDP registered companies, while penetrating foreign markets via free trade agreement opportunities reflects the dependence on OEMs business for the MIDP registered component companies and the export orientation of all the companies to obtain economies of scale benefits. The impact of the strong rand on exports reflects the export orientation of the business operations of the South African automotive industry in general. Raw material prices focus on competitiveness pressures experienced by the lower tier component suppliers in the domestic market as well as the international competitiveness pressures by the OEMs and multinational companies relating to exports.

Group 2 comprises two companies involved in *sales to the OEMs and the aftermarket* and represents a small to medium size non-MIDP registered South African owned component company and a large non-MIDP registered South African owned component company. The factors of high importance focus on government support in the form of incentives to attract investments to expand business operations, the continued dependence of the MIDP in respect of the OEM business as well as on increased global market access and foreign market penetration for the aftermarket business. The two component companies supply the OEMs with specific products and although both are not registered under the MIDP, both benefit indirectly from the MIDP via increased volumes and increased orders by the OEMs. Any potential WTO risk relating to the MIDP impacting on future OEM business is therefore of high importance to the two companies. The export expansion focus is on generating increased business opportunities in foreign markets.

Group 3 comprises five companies involved in *sales to OEMs and exports* and represents three multinational MIDP registered component companies, one large MIDP registered South African owned component company and one OEM. The factors of high importance for this group focus on cost factors impacting on domestic and international competitiveness such as raw material prices and the strong rand, the continued dependence on the MIDP as well as increased market access for



exports. All five companies benefit directly from the MIDP via IRCCs as well as indirectly via increased volumes and increased orders, and therefore the WTO impact on the MIDP is ranked as a factor of high importance. The export expansion relies on increased global market access while the cost factors relate to the cost pressures faced in the domestic market in supplying the OEMs as well as internationally in competing with world prices set by emerging markets such as China and India.

Group 4 comprises 12 companies involved in *sales to exports and the aftermarket* and represents five small to medium size non-MIDP registered South African owned component companies, three OEMs, two small to medium size MIDP registered South African owned component companies and two large size MIDP registered South African owned component companies. The factors of high importance focus on government incentives to attract investments in order to expand, upgrade and sustain future business operations, generating business opportunities via increased market access and exposure via free trade agreements as well as cost factors impacting on international competitiveness such as the strong rand and raw material prices. The focus is strongly on export expansion and cost factors impacting on international competitiveness and thus the ability to penetrate foreign markets. For the OEMs cost factors such as the strong rand impact on profit margins as vehicle prices are normally set in a foreign currency. The aftermarket business are not linked to the linkages provided by the OEM in penetrating foreign markets and the dependence on the MIDP is of less importance as a factor of high importance identified by this group.

Group 5 comprises *sales to exports* and represents three OEMs, one large size non-MIDP registered South African owned component company and one small to medium size MIDP registered South African owned component company. The factors of high importance focus strongly on government incentives and the comparative advantages of South Africa and its automotive industry to ensure sustained attractiveness for investments in the production of new generation models in respect of the OEMs, as well as on the impact of the strong rand on export

performance in terms of international competitiveness and profit margins. The component companies require investments to expand and upgrade facilities to accommodate increased export business.

Table 7.20: Correlations between the different factors impacting on the business operations of the South African automotive industry in general based on sales segments

			Sales to OEMs, aftermarket and exports	Sales to OEMs and after market	Sales to OEMs and exports	Sales to after market and exports	Sales to exports
			(Group 1)	(Group 2)	(Group 3)	(Group 4)	(Group 5)
Spearman's rho	Sales to OEMs, aftermarket and exports	Correlation coefficient	1,000				
		Sig. (2-tailed)					
		N	15				
	Sales to OEMs and aftermarket	Correlation coefficient	,748(***)	1,000			
		Sig. (2-tailed)	,001				
		N	15	15			
	Sales to OEMs and exports	Correlation coefficient	,816(***)	,724(***)	1,000		
		Sig. (2-tailed)		,002			
		N	15	15	15		
	Sales to aftermarket and exports	Correlation coefficient	,849(***)	,725(***)	,724(***)	1,000	
		Sig. (2-tailed)	,000	,002	,002		
		N	15	15	15	15	
	Sales to exports	Correlation coefficient	,573(**)	,524(**)	,553(**)	,404	1,000
		Sig. (2-tailed)	,026	,045	,032	,135	
		N	15	15	15	15	15

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

\* Correlation is significant at the 0.10 level (2-tailed).

Proposition 5: There is a general agreement between the five groups regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general* based on the sales segments criterion.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.20 to determine the correlations between the average ranks obtained for the

five groups across the 15 factors mentioned based on the sales segments criterion. The correlation coefficient between groups 1 and 2, groups 1 and 3, groups 1 and 4, groups 2 and 3, groups 2 and 4 and groups 3 and 4 are highly significant ( $\alpha=0,01$ ) reflecting similar factors of high importance relating to exports and sales to the OEMs. The factors of high importance focus on international competitiveness and government support to attract investments as well as the continued dependence on the MIDP due to its export orientation. The correlation coefficient between groups 1 and 5, groups 2 and 5 and groups 3 and 5 are significant ( $\alpha=0,05$ ) reflecting the factors of high importance relating to exports for the MIDP registered companies. The correlation coefficient between groups 4 and 5 is not significant. The OEMs comprising group 5 are involved in major export programmes and the factors of high importance focus on sustained business in attracting investments for new generation model production in South Africa while for the non-MIDP registered companies the factors of high importance focus mainly on export exposure and generating business via market access into foreign markets. The analysis for proposition 5 is therefore not confirmed that there is general agreement regarding the factors that impact on the business operations of the South African automotive industry in general based on the sales segments criterion.

Table 7.20 reveals that there are highly significant, significant and no correlations between the different factors impacting on the business operations of the South African automotive industry in general based on the sales segments criterion and therefore it can be concluded that the selected groups do not view the importance of the factors in the same order.

Table 7.21 is a cross-correlation with question 11 relating to the importance of the 15 factors impacting on the business operations of the specific company in particular based on sales segments. **For the five groups identified, not one factor of high importance is similar in the top five factors of all the groups.** However, based on the mean value rating in Table 7.21 the following three factors are ranked in the order of highest importance :

- Market access to foreign markets
- Appreciation of the rand against foreign currencies in respect of exports
- Raw material prices

Table 7.21: Importance of the different factors impacting on the business operations of the specific company in particular based on sales segments (mean value rating)

	Sales to OEM, after-market and exports	Sales to OEM and after-market	Sales to OEM and exports	Sales to after-market and exports	Sales to exports	
	(Group 1)	(Group 2)	(Group 3)	(Group 4)	(Group 5)	Total
	(n=19)	(n=2)	(n=5)	(n=12)	(n=5)	
Q11d: Market access to foreign markets	10,4	8,5	9,2	11,9	11,4	10,7
Q11e: Appreciation of the rand against foreign currencies in respect of exports	11,7	8,0	11,0	10,3	7,2	10,6
Q11n: Raw material prices	10,7	8,5	13,2	9,8	9,0	10,4
Q11b: South African government incentives to attract investments	9,1	8,0	9,8	10,5	12,4	9,9
Q11c: Free trade agreements in generating business opportunities	9,4	11,0	9,0	10,0	9,4	9,6
Q11a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP	7,8	13,5	11,4	7,3	8,4	8,4
Q11k: Participation in National Pavilions to promote the South African automotive industry	8,1	11,0	4,6	10,2	8,0	8,4
Q11h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector	7,9	9,0	7,8	7,3	9,6	8,0
Q11j: Distance to main automotive markets	9,0	4,0	7,8	7,7	6,6	8,0
Q11g: The comparative advantages of South	7,1	10,0	7,6	7,3	10,6	7,8

<b>Africa in generating business and attract investment in the automotive sector</b>						
<b>Q11f: Appreciation of the rand against foreign currencies in respect of investments</b>	8,1	3,0	8,8	7,1	7,0	7,5
<b>Q11l: Participation in outward selling missions to promote the South African automotive industry</b>	6,4	11,0	5,0	6,2	5,2	6,3
<b>Q11m: Participation in seminars in foreign countries to promote the South African automotive industry</b>	5,4	7,5	3,8	6,3	3,6	5,3
<b>Q11o: Formal automotive structures as a forum to discuss automotive policy</b>	5,3	5,0	5,8	4,5	5,4	5,1
<b>Q11i: The comparative advantages of South Africa automotive industry in generating business and attracting investments for other related sectors</b>	3,8	2,0	5,2	4,8	6,2	4,5

Group 1 comprises 19 companies involved in *sales to the OEMs, aftermarket and exports segments* and consists of six small to medium size MIDP registered South African owned component companies, five large MIDP registered South African owned component companies, five multinational MIDP registered component companies, two small to medium size non-MIDP registered South African owned component company and one OEM. The factors of high importance reflect the combination of companies in this group as well as the sales to all three segments. The dominant factors experienced in South Africa over recent years by the specific company in particular feature prominently and include cost factors such as the strong rand, raw material prices and logistical costs impacting on domestic and international competitiveness, as well as gaining market access and penetrating foreign market opportunities via free trade agreements. The export expansion focus relates to the export orientation of all the companies in the group. Sales to the OEMs relate to cost pressures in the domestic market as automotive components can be imported at

duty free levels by the OEMs by way of the IRCCs. International competitiveness relates to exports, irrespective of whether the domestic-based OEMs generate the global business linkages or whether the products are exported independently by non-MIDP registered component companies.

Group 2 comprises of two companies involved in *sales to the OEMs and the aftermarket* and represents a small to medium size non-MIDP registered South African owned component company and a large non-MIDP registered South African owned component company. The two companies supply the OEMs with specific products and a factor of high importance is the potential impact of the WTO on the MIDP and thus their OEM business indirectly facilitated by the MIDP via increased volumes and increased orders by the OEMs. The strong focus on export exposure via participation in exhibitions and missions abroad relates to generating possible export business opportunities for the aftermarket products not linked to the OEM business.

Group 3 comprises five companies involved in *sales to OEMs and exports* and represents three multinational MIDP registered component companies, one large MIDP registered South African owned component company and one OEM involved in automotive component exports. The factors of high importance for this group focus on cost factors impacting on domestic and international competitiveness such as raw material prices and the strong rand, the continued dependence on the MIDP, government incentives to attract investments as well as increased market access for exports. Domestic cost pressures relate to sales to the OEMs, as automotive components can be imported by the domestic-based OEMs at duty free levels via IRCCs. Internationally comparable attractive government incentives to sustain and expand future business operations, increased market access opportunities and international competitiveness are other factors of high importance in competing with other emerging markets such as China and India.

Group 4 comprises 12 companies involved in *sales to exports and the aftermarket* and represents five small to medium size non-MIDP registered South African owned

component companies, three OEMs, two small to medium size MIDP registered South African owned component companies and two large size MIDP registered South African owned component companies. The factors of high importance focus on export expansion via market access, penetrating foreign markets via free trade agreements, export exposure in participating in exhibitions abroad as well as government incentives to attract investments and the impact of the strong rand on exports. The export orientation of the group features strongly as several OEMs are increasingly assembling left-hand drive models in addition to the right-hand drive models which increases their export reach. The component companies are involved in independent aftermarket exports not linked to OEM business and therefore business opportunities via export expansion and export exposure are of high importance. The strong rand impacts on international competitiveness in respect of exports of the aftermarket components, while also on the profit margins of the OEMs. Government incentives to attract investments are important for expanding and upgrading facilities to accommodate exports in the case of the component companies and sustaining future business operations for new model generation production in South Africa in respect of the OEMs.

Group 5 comprises of *sales to exports* and represents three OEMs, one large size MIDP registered South African owned component company and one small to medium size MIDP registered South African owned component company. The factors of high importance focus strongly on government incentives and the comparative advantages of the South African automotive industry to sustain and attract investments. The OEMs compete with subsidiaries abroad for the production of future new generation models and therefore need to present a business case to parent companies to ensure that South Africa remains an investment destination of choice. The component companies require investments to expand and upgrade facilities to accommodate increased export business. Market access and penetrating markets via preferential access through trade agreements are factors of high importance for the left-hand drive models also increasingly assembled by several OEMs. The component companies require export expansion to generate additional business opportunities to obtain economies of scale benefits.

Table 7.22: Correlations between the different factors impacting on the business operations of the specific company in particular based on sales segments

			Sales to OEMs, aftermarket and exports (Group 1)	Sales to OEMs and after market (Group 2)	Sales to OEMs and exports (Group 3)	Sales to after market and exports (Group 4)	Sales to exports (Group 5)
Spearman's rho	Sales to OEMs, aftermarket and exports (Group 1)	Correlation coefficient	1,000				
		Sig. (2-tailed)					
		N	15				
	Sales to OEMs and aftermarket (Group 2)	Correlation coefficient	,155	1,000			
		Sig. (2-tailed)	,582				
		N	15	15			
	Sales to OEMs and exports (Group 3)	Correlation coefficient	,730(***)	,140	1,000		
		Sig. (2-tailed)	,002	,618			
		N	15	15	15		
	Sales to aftermarket and exports (Group 4)	Correlation coefficient	,869(***)	,286	,545(**)	1,000	
		Sig. (2-tailed)	,000	,302	,036		
		N	15	15	15	15	
	Sales to exports (Group 5)	Correlation coefficient	,561(**)	,381	,588(**)	,731(***)	1,000
		Sig. (2-tailed)	,029	,162	,021	,002	
		N	15	15	15	15	15

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

\* Correlation is significant at the 0.10 level (2-tailed).

Proposition 6: There is a general agreement between the five groups regarding the importance of the factors that impact on the business operations of *the specific company in particular* based on the sales segments criterion.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.22 to determine the correlations between the average ranks obtained for the five groups across the 15 factors mentioned based on the sales segments criterion. The correlation coefficients between groups 1 and 3, groups 1 and 4 as well as groups 4 and 5 are highly significant ( $\alpha=0,01$ ) mainly reflecting the similar factors of



high importance relating to exports in market access and opportunities to penetrate foreign markets presented via free trade agreements. The correlation coefficients for groups 1 and 5, groups 3 and 4, as well as groups 4 and 5 are significant ( $\alpha=0,05$ ) reflecting similarities on the export orientation in market access as well as cost factors impacting on international competitiveness, such as raw material prices. The correlation coefficients for groups 1 and 2, groups 2 and 3, groups 2 and 4 as well as for groups 2 and 5 are not significant. Group 2 comprises two non-MIDP registered companies focusing on aftermarket parts, therefore the focus of the factors of high importance are on gaining export exposure via participation in missions and exhibitions abroad. Groups 1, 3, 4 and 5 are all involved in exports already and the focus of factors of high importance are on increased export expansion opportunities via market access and free trade agreement opportunities as well as cost factors impacting on international competitiveness. The analysis for proposition 6 that there is general agreement regarding the factors that impact on the business operations of the specific company in particular based on the sales segment criterion is therefore not confirmed.

Table 7.22 reveals that there are highly significant, significant and no correlations between the different factors impacting on the business operations of the specific company in particular based on the sales segments criterion and therefore it can be concluded that the selected groups do not view the importance of the factors in the same order.

**Question 17** dealt with the component companies and OEMs level of turnover per annum.

Table 7.23 is a cross-correlation with question 9 relating to the importance of the 15 factors impacting on the business operations of the *South African automotive industry in general* based on the turnover of the company per annum.

Table 7.23 reveals that 19 of the 37 component companies have a turnover of between R1 million to R40 million per annum, nine component companies a turnover

of between R41 million to R200 million per annum and nine component companies a turnover in excess of R201 million per annum. All eight of the OEMs have a turnover in excess of R201 million per annum. The component companies having a turnover in excess of R201 million per annum represent the multinational component companies.

Table 7.23: Turnover of company per annum – cross tabulation

	Turnover			
	R1 to R40 mil pa	R41 mil to R200 mil pa	R201 mil plus pa	Total
<b>Component companies</b>	19	9	9	37
<b>OEMs</b>	0	0	8	8
<b>Total</b>	<b>19</b>	<b>9</b>	<b>17</b>	<b>45</b>

For the following analyses, subgroups were formed as follows:

Group 1: Turnover of component company per annum between R1 million and R40 million (n=19)

Group 2: Turnover of component company per annum between R41 million and R200 million (n=9)

Group 3: Turnover of component company per annum above R201 million (n=9)

Group 4: Turnover of the OEMs per annum above R201 million (n=8)

For the four groups identified, the following three factors out of the top five of high importance are similar:

- South African government incentives to attract investments
- Appreciation of the rand against foreign currencies in respect of exports
- World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP

Table 7.24: Importance of the different factors impacting on the business operations of the South African automotive industry in general based on turnover (mean value rating)

	Component companies			OEMs	Total
	R1mil to R40mil	R41mil to R200mil	R201mil plus	R201mil plus	
	Group 1	Group 2	Group 3	Group 4	
	(n=19)	(n=9)	(n=9)	(n=8)	
<b>Q9b: South African government incentives to attract investments</b>	10,9	11,4	11,7	12,4	11,4
<b>Q9e: Appreciation of the rand against foreign currencies in respect of exports</b>	11,3	9,6	11,4	10,5	10,8
<b>Q9a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP</b>	9,2	10,7	12,2	9,6	10,2
<b>Q9n: Raw material prices</b>	7,6	12,7	12,4	9,6	10,0
<b>Q9d: Market access to foreign markets</b>	10,5	9,4	7,9	10,3	9,7
<b>Q9c: Free trade agreements in generating business opportunities</b>	10,4	11,4	6,4	9,0	9,6
<b>Q9f: Appreciation of the rand against foreign currencies in respect of investments</b>	8,4	7,3	9,7	9,3	8,6
<b>Q9h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector</b>	7,7	7,2	9,3	8,5	8,1
<b>Q9j: Distance to main automotive markets</b>	6,7	7,0	9,1	10,4	7,9
<b>Q9g: The comparative advantages of South Africa in generating business and attracting investment in the automotive sector</b>	7,6	7,6	8,4	8,0	7,8
<b>Q9k: Participation in National Pavilions to promote the South African automotive industry</b>	8,9	5,4	4,6	2,8	6,2
<b>Q9o: Formal automotive structures as a forum to discuss automotive policy</b>	4,6	6,4	4,9	8,5	5,7
<b>Q9i: The comparative advantages of the South</b>	5,4	5,3	4,7	4,4	5,0

<b>African automotive industry in generating business and attracting investments for other related sectors</b>					
<b>Q9l: Participation in outward selling missions to promote the South African automotive industry</b>	6,3	4,8	4,4	3,0	5,0
<b>Q9m: Participation in seminars in foreign countries to promote the South African automotive industry</b>	5,2	3,7	2,8	3,9	4,2

Group 1 comprises 19 component companies and represents 10 non-MIDP registered small to medium size South African owned component companies, and nine MIDP registered component companies. Four of the nine MIDP small to medium size MIDP registered companies benefit directly under the MIDP and five indirectly. The factors of high importance focus on the impact of the strong rand in respect of exports, generating business opportunities via market access and penetrating markets via free trade agreements, government incentives to attract investments for purposes of expanding and upgrading facilities and a dependence on the MIDP. All the companies benefiting directly and indirectly under the MIDP as well as non-MIDP registered revealed in Part 1 that the South African automotive industry will not be able to cope with global competition without the MIDP. The focus of the small to medium size companies in this group is to generate export-related business opportunities to sustain and improve turnover. Direct benefits under the MIDP via IRCCs, indirect benefits under the MIDP relating to increased volumes and/or orders from the OEMs as well as indirect association with the MIDP and MIDP registered companies in respect of exports are thus the focus of sustaining and improving turnover.

Group 2 represents nine companies of which four are non-MIDP registered and five are MIDP registered South African owned component companies. The factors of high importance focus on cost factors such as raw material prices and the strong rand impacting on domestic and international competitiveness, government incentives to attract investments and free trade agreements to penetrate foreign

markets as well as the continued dependence on the MIDP. For the large size companies cost factors impacting on domestic and international competitiveness are of high importance. In the domestic market cost pressures relate to the OEM business, as the OEMs are able to import automotive components at duty free levels via the IRCCs. International competitiveness relates to exports and the ability to expand export business via increased market access and foreign market penetration. Government incentives to attract investments are required to expand and upgrade business facilities to accommodate export business.

Group 3 represents the eight multinational companies and large South African owned MIDP registered component companies. The factors of high importance focus on government incentives to attract investments for expansions and sustaining future production in South Africa relating to exports, the continued dependence on the MIDP, cost factors impacting on international competitiveness such as the strong rand and raw material prices and increased export opportunities generated via free trade agreements. The combination of factors of high importance emphasises the pressures faced by the multinational component companies forming part of the survey, as attractive government incentives and the continued dependence on the MIDP are required to expand and sustain future production in South Africa. Furthermore cost factors impact on international competitiveness in respect of exports, while export expansion opportunities depend on penetrating foreign markets via preferential market access obtained via free trade agreements.

Group 4 represents the eight OEMs. The factors of high importance focus strongly on government incentives to attract investments as well as on the continued dependence on the MIDP in order to convince parent companies to sustain the production of future new generation models in South Africa. The impact of the strong rand on export programmes and thus profit margins as well as logistical costs in distance to markets are also factors of high importance impacting on turnover.

Table 7.25: Correlations between the importance of the different factors impacting on the business operations of the South African automotive industry in general based on turnover

Spearman's rho		Component companies			OEMs
		R1m to R40m	R41m to R200m	R201m plus	R201m plus
		Group 1	Group 2	Group 3	Group 4
Component companies R1mil to R40mil  Group 1	Correlation Coefficient	1,000			
	Sig. (2-tailed)				
	N	15			
Component companies R41mil to R200mil  Group2	Correlation Coefficient	,701(***)	1,000		
	Sig. (2-tailed)	,004			
	N	15	15		
Component companies R201mil plus  Group 3	Correlation Coefficient	,534(**)	,820(***)	1,000	
	Sig. (2-tailed)	,040	,000		
	N	15	15	15	
OEMs R201mil plus  Group 4	Correlation Coefficient	,604(**)	,731(***)	,784(***)	1,000
	Sig. (2-tailed)	,017	,002	,001	
	N	15	15	15	15

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

\* Correlation is significant at the 0.10 level (2-tailed).

Proposition 7: There is general agreement between the four groups regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general* based on the turnover of the company per annum criterion.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.25 to determine the correlations between the average ranks obtained for the four groups across the 15 factors mentioned based on the turnover of the company per annum criteria. The correlation coefficient between groups 1 and 2, groups 2 and 3, groups 2 and 4 as well as groups 3 and 4 are highly significant ( $\alpha=0,01$ ) reflecting similar factors of high importance relating to government incentives to attract investments, the strong rand impacting on exports as well as the continued dependence on the MIDP. The correlation coefficient between groups 1 and 3 and

groups 1 and 4 are significant ( $\alpha=0,05$ ) with the focus of the factors of high importance on government incentives to attract investments and the impact of the strong rand on exports. The non-MIDP registered and South African owned MIDP registered companies in groups 1 and 2 are pursuing business opportunities via export expansion while the multinational companies and the OEMs are already involved in export programmes. In respect of the factors impacting on the business operations of the South African automotive industry in general based on turnover the factors of high importance are similar. The analysis for proposition 7 is therefore confirmed that there is general agreement regarding the factors that impact on the business operations of the South African automotive industry in general based on the turnover of the company per annum criterion.

Table 7.25 reveals that there are highly significant and significant correlations between the different factors impacting on the business operations of the South African automotive industry in general based on the turnover of the company per annum criterion ( $\alpha=0,01$  and  $\alpha=0,05$ ) and therefore it can be concluded that the selected groups view the importance of the factors in the same order.

Table 7.26 is a cross-correlation with question 11 relating to the importance of the 15 factors impacting on the business operations of *the specific company in particular* based on the turnover of the company per annum.

For the four groups identified, the following two factors out of the top five of high importance are similar:

- South African government incentives to attract investments
- Appreciation of the rand against foreign currencies in respect of exports

Table 7.26: Importance of the different factors impacting on the business operations of the specific company in particular based on turnover (mean value rating)

	Component companies			OEMs	Total
	R1mil to R40mil	R41mil to R200mil	R201mil plus	R201mil plus	
	Group 1	Group 2	Group 3	Group 4	
	(n=19)	(n=9)	(n=9)	(n=8)	
Q11e: Appreciation of the rand against foreign currencies in respect of exports	10,0	10,2	11,7	11,4	10,6
Q11n: Raw material prices	7,9	12,2	13,4	10,4	10,3
Q11c: Free trade agreements in generating business opportunities	10,7	10,9	6,9	9,3	9,7
Q11b: South African government incentives to attract investments	9,0	9,8	10,0	10,9	9,7
Q11d: Market access to foreign markets	10,5	9,4	7,9	10,3	9,7
Q11a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP	6,8	7,8	11,7	9,6	8,5
Q11k: Participation in National Pavilions to promote the South African automotive industry	11,9	8,0	4,4	4,1	8,2
Q11j: Distance to main automotive markets	7,0	6,9	9,7	10,4	8,1
Q11h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector	7,7	7,7	9,6	7,3	8,0
Q11g: The comparative advantages of South Africa in generating business and attracting investment in the automotive sector	7,4	8,3	7,9	7,8	7,8
Q11f: Appreciation of the rand against foreign currencies in respect of investments	7,1	5,4	9,3	9,6	7,6
Q11l: Participation in outward selling missions to promote the South African automotive industry	8,1	6,9	4,1	2,8	6,1



<b>Q11m: Participation in seminars in foreign countries to promote the South African automotive industry</b>	6,6	5,0	3,4	3,6	5,1
<b>Q11o: Formal automotive structures as a forum to discuss automotive policy</b>	3,7	6,6	4,7	7,0	5,0
<b>Q11i: The comparative advantages of the South African automotive industry in generating business and attracting investments for other related sectors</b>	4,5	4,6	4,7	4,8	4,6

Group 1 comprises 19 component companies and represents 10 non-MIDP registered small to medium size South African owned component companies, and nine MIDP registered component companies. Four of the nine MIDP small to medium size MIDP registered companies benefit directly under the MIDP and five indirectly. The factors of high importance for the specific company in particular focus strongly on export expansion via market access into foreign markets, export exposure through participating in exhibitions abroad, generating business opportunities via free trade agreements and the impact of the strong rand impacting on exports and turnover. The component companies in group 1 by and large represent the independent exporters not linked to OEM business or those only benefiting indirectly under the MIDP. For the small to medium size South African owned companies the factors of high importance thus focus more on the ability to generate business opportunities in respect of exports and export expansion to sustain and improve turnover.

Group 2 represents nine companies of which four are non-MIDP registered and five MIDP registered South African owned component companies. The factors of high importance focus on cost factors such as raw material prices and the strong rand impacting on domestic and international competitiveness, increased export opportunities via market access and free trade agreements to penetrate foreign markets as well as government support in the form of incentives to attract investments for expansions and upgrading domestic facilities. Domestic competitiveness relates to the OEM business, as the OEMs are able to import

automotive components at duty free levels into South Africa via the IRCCs. International competitiveness relates to export business, irrespective of whether the exports are provided via the OEM linkages or on an independent basis. The focus of the large and multinational companies is on export expansion to obtain improved economies of scale benefits impacting positively on turnover.

Group 3 represents the eight multinational companies and large South African owned MIDP registered component companies involved in major export programmes. The multinational companies are all involved in follow-sourcing strategies in following their main customers, the OEMs. The factors of high importance impacting on turnover focus strongly on cost factors impacting on international competitiveness, such as raw material prices, the strong rand and logistical costs. Furthermore government incentives to attract investments and the continued dependence on the MIDP in order to expand and sustain future production in domestic facilities in accommodating exports are also factors of high importance.

Group 4 represents the eight OEMs and the factors of high importance focus on government incentives and the strong rand to attract investments in order to sustain the production of future new generation model production in South Africa as well as on cost factors impacting on exports and thus on turnover, such as the strong rand, raw material prices and logistical costs in respect of distance to markets.

Table 7.27: Correlations between the importance of the different factors impacting on the business operations of the specific company in particular based on turnover

Spearman's rho		Component companies			OEMs
		R1m to R40m	R41m to R200m	R201m plus	R201m plus
		Group 1	Group 2	Group 3	Group 4
Component companies R1mil to R40mil  Group 1	Correlation Coefficient	1,000			
	Sig. (2-tailed)	,			
	N	15			
Component companies R41mil to R200mil  Group2	Correlation Coefficient	,746(***)	1,000		
	Sig. (2-tailed)	,001	,		
	N	15	15		
Component companies R201mil plus  Group 3	Correlation Coefficient	,134	,547(**)	1,000	
	Sig. (2-tailed)	,634	,035	,	
	N	15	15	15	
OEMs R201mil plus  Group 4	Correlation Coefficient	,361	,610(**)	,838(***)	1,000
	Sig. (2-tailed)	,186	,016	,000	,
	N	15	15	15	15

\*\*\* Correlation is significant at the 0,01 level (2-tailed).

\*\* Correlation is significant at the 0,05 level (2-tailed).

\* Correlation is significant at the 0,10 level (2-tailed).

Proposition 8: There is a general agreement between the four groups regarding the importance of the factors that impact on the business operations of *the specific company in particular* based on the turnover of the company per annum criterion.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.27 to determine the correlations between the average ranks obtained for the three groups across the 15 factors mentioned based on the turnover of the company per annum criteria. The correlation coefficient between groups 1 and 2 and groups 3 and 4 are highly significant ( $\alpha=0,01$ ). Groups 1 and 2 represent the non-MIDP registered and South African owned MIDP registered component companies and similar factors of high importance relate to export expansion via market access and business opportunities in penetrating foreign markets through free trade agreements

as well as the impact of the strong rand on company turnover. Groups 3 and 4 represent the multinational component companies and the OEMs already involved in major export programmes and the similar factors of high importance focus on cost factors impacting on international competitiveness and thus company turnover such as the strong rand, raw material prices and logistical costs as well as on government incentives to attract investments and sustain future production in the domestic market. The correlation coefficient between groups 2 and 3 and groups 3 and 4 are significant ( $\alpha=0,05$ ). Groups 2, 3 and 4 represent the large companies, multinational companies and the OEMs all with relatively high turnovers and all involved in export programmes. The factors of high importance focus on cost factors impacting on international competitiveness and thus turnover, such as raw material prices and the strong rand as well as on government incentives to attract investments in expanding, upgrading facilities and sustaining future production to accommodate exports. The correlation coefficients between groups 1 and 3 and groups 1 and 4 are not significant reflecting the difference between the non-MIDP registered, small to medium size South African owned MIDP registered companies in group 1 and the multinational companies and the OEMs in groups 3 and 4, respectively. The main focus of group 1 is on generating business via export exposure and export expansion while the multinational companies and the OEMs are already involved in major export programmes and the focus of the factors of high importance relates to cost factors impacting on international competitiveness as well as the continued dependence on the MIDP. The analysis for proposition 8 is therefore not confirmed that there is general agreement regarding the factors that impact on the business operations of the specific company in particular based on the turnover of the company per annum criterion.

Table 7.25 reveals that there are highly significant, significant and no correlations between the different factors impacting on the business operations of the specific company in particular based on the turnover of the company per annum criterion. It can therefore be concluded that the selected groups do not view the importance of the factors in the same order.

**Question 18** dealt with the company's exports, direct and/or indirect, as a percentage of the company's turnover per annum. Respondents were requested to provide the best estimate should the actual data not be readily available.

Table 7.28 reveals that 24 or 70,6 percent of the component companies' exports were less than 50 percent while 10 or 29,4 percent of the component companies' exports were more than 50 percent of the company's annual turnover. Seven or 87,5 percent of the OEMs' exports were less than 50 percent of the company's turnover per annum while one OEM's exports were more than 50 percent of the company's turnover per annum. Question 16 revealed that the component companies' sales and the OEMs' sales are spread over three segments, namely sales to the OEMs, sales to the aftermarket and sales to exports. Although sales to the domestic market represent a high percentage of the respondents' sales, sales to exports are significant for both the component companies and the OEMs in its contribution in achieving economies of scale benefits.

Table 7.28: Exports (direct and/or indirect) as a percentage of turnover – cross tabulation

	Exports as % of turnover		Total
	<50	50+	
<b>Component companies</b>	24	10	34
<b>OEMs</b>	7	1	8
<b>Total</b>	<b>32</b>	<b>13</b>	<b>42</b>

Table 7.29 is a cross-correlation with question 9 relating to the importance of the 15 factors impacting on the business operations of the *South African automotive industry in general* based on exports as a percentage of turnover.

For the following analyses, subgroups were formed as follows:

Group 1: Component companies with less than 50 percent exports as a percentage of turnover (n=24)

Group 2: Component companies with 50 percent or more exports as a percentage of turnover (n=10)

Group 3: OEMs with less than 50 percent exports as a percentage of turnover (n=7)

Group 4: OEM with 50 percent or more exports as a percentage of turnover (n=1)

For the four groups identified, the following two factors out of the top five of high importance are similar:

- South African government incentives to attract investments
- Appreciation of the rand against foreign currencies in respect of exports

Table 7.29: Importance of the different factors impacting on the business operations of the South African automotive industry in general based on exports as a percentage of turnover (mean value rating)

	Exports as a percentage of turnover				
	Component companies		OEMs		Total
	<50% exports	50%+ exports	<50% exports	50%+ exports	
	(Group 1)	(Group 2)	(Group 3)	(Group 4)	
	(n=24)	(n=10)	(n=7)	(n=1)	
<b>Q9b: South African government incentives to attract investments</b>	11,5	10,5	12,6	11,0	11,4
<b>Q9e: Appreciation of the rand against foreign currencies in respect of exports</b>	11,3	10,0	10,0	14,0	10,8
<b>Q9a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP</b>	9,3	12,6	8,9	15,0	10,2
<b>Q9n: Raw material prices</b>	10,7	9,4	10,1	6,0	10,2
<b>Q9d: Market access to foreign markets</b>	9,9	8,3	10,7	7,0	9,6
<b>Q9c: Free trade agreements in generating business opportunities</b>	9,4	9,5	9,1	8,0	9,3
<b>Q9f: Appreciation of the rand against foreign currencies in respect of investments</b>	8,6	7,7	8,7	13,0	8,5
<b>Q9j: Distance to main automotive markets</b>	6,8	9,6	10,1	12,0	8,2
<b>Q9h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector</b>	7,5	8,4	8,4	9,0	7,9
<b>Q9g: The comparative advantages of</b>	7,7	7,8	7,7	10,0	7,8

<b>South Africa in generating business and attracting investment in the automotive sector</b>					
<b>Q9k: Participation in National Pavilions to promote the South African automotive industry</b>	8,5	4,4	2,4	5,0	6,4
<b>Q9o: Formal automotive structures as a forum to discuss automotive policy</b>	5,1	5,5	9,1	4,0	5,8
<b>Q9l: Participation in outward selling missions to promote the South African automotive industry</b>	5,6	5,8	3,0	3,0	5,1
<b>Q9i: The comparative advantages of South African automotive industry in generating business and attracting investments for other related sectors</b>	4,6	5,7	4,9	1,0	4,8
<b>Q9m: Participation in seminars in foreign countries to promote the South African automotive industry</b>	4,2	4,8	4,1	2,0	4,3

Group 1 represents by and large the 14 non-MIDP registered and 10 small to medium size South African owned companies. The factors of high importance as far as the business operations of the South African automotive industry in general is concerned focus on government incentives to attract investments to expand and upgrade the domestic business operations with the aim to generate business opportunities via market access and penetrating markets via free trade agreements, despite the strong rand impacting on exports.

Group 2 represents the eight multinational companies and two large MIDP registered South African owned companies with export programmes linked to OEM business linkages. The factors of high importance focus strongly on the dependence of the MIDP and thus OEM export related business, government investments to attract investments for expansions and upgrading purposes as well as cost factors such as the strong rand and logistical costs impacting on international competitiveness.

Group 3 represents the OEMs exporting less than 50 percent of their turnover. The OEMs are involved in major export programmes of CBUs as well as exports of automotive components such as engines and catalytic converters in the case of some. The increase of sales in the domestic market increased by record-breaking levels in 2004 and 2005 as discussed in Chapter 4, which contributed significantly to the turnover of the OEMs. Factors of high importance for the OEMs in group 3 focus

on government incentives to sustain the production of new generation models in the domestic market, market access for the increasing number of left-hand drive models also assembled in South Africa as well as cost factors such as raw material prices, the strong rand and logistical costs impacting on international competitiveness and profit margins. The dependence of group 3 on the MIDP, as far as the impact on the business operations of *the South African automotive industry in general* is concerned, tends to be not as significant, which could be attributed to the phasing down of the MIDP benefits since 2003 as well as the improved economies of scale benefits achieved via domestic and export market growth since 2004.

Group 4 represents one OEM with exports as a percentage of turnover in excess of 50 percent. The factors of high importance focus strongly on the dependence of the MIDP in respect of policy certainty to sustain the export programme, the strong rand and logistical costs impacting on international competitiveness, as well as government incentives and the impact of the strong rand on attracting investments to sustain manufacturing operations for new generation model production in South Africa.



Table 7.30: Correlation between the importance of the different factors impacting on the business operations of the South African automotive industry in general based on exports as a percentage of turnover

			Component companies		OEMs	
			<50% exports	50%+ exports	<50% exports	50%+ exports
			(Group 1)	(Group 2)	(Group 3)	(Group 4)
Spearman's rho	Component companies with <50% exports	Correlation coefficient	1,000			
		Sig. (2-tailed)				
		N	15			
	Component companies with 50%+ exports	Correlation coefficient	,689(***)	1,000		
		Sig. (2-tailed)	,004	,		
		N	15	15		
	OEMs with <50% exports	Correlation coefficient	,665(***)	,705(***)	1,000	
		Sig. (2-tailed)	,007	,003		
		N	15	15	15	
	OEM with 50%+ exports	Correlation coefficient	,607(**)	,779(***)	,472	1,000
		Sig. (2-tailed)	,016	,001	,075	
		N	15	15	15	15

\*\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

\* Correlation is significant at the 0.10 level (2-tailed).

Proposition 9: There is general agreement between the four groups regarding the importance of the factors that impact on the business operations of *the South African automotive industry in general* based on the exports as a percentage of turnover criterion.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.30 to determine the correlations between the average ranks obtained for the four groups across the 15 factors mentioned based on the exports as a percentage of turnover criteria. The correlation coefficients between groups 1 and 2, groups 1 and 3, groups 2 and 3 as well as groups 2 and 4 are highly significant ( $\alpha=0,01$ ) mainly reflecting the similar factors of high importance relating to attracting investments for purposes of expanding and upgrading facilities and cost factors, such as the strong rand and logistical costs impacting on international competitiveness. The correlation coefficient between group 1 and 4 is significant

( $\alpha=0,05$ ) with the main difference the dependence on the MIDP by group 4 exporting more than 50 percent of its turnover and depending on policy certainty and the MIDP benefits compared to group 1 comprising the non-MIDP component companies and MIDP companies not exporting 50 percent of their turnover and thus the focus is still on factors relating to export expansion. The correlation coefficient between groups 3 and 4 is not significant as the OEMs exporting less than 50 percent of their turnover focus on government incentives to attract investments to sustain new model business operations in South Africa as well as increased market access, while the one OEM exporting more than 50 percent of its turnover focuses strongly on the dependence of the MIDP and the strong rand impacting on exports and investment decisions. The analysis for proposition 9 is therefore not confirmed that there is general agreement regarding the factors that impact on the business operations of the South African automotive industry in general based on the exports as a percentage of turnover criterion.

Table 7.30 reveals that there are highly significant, significant and no correlations between the different factors impacting on the business operations of the South African automotive industry in general based on the exports as a percentage of turnover criterion. It can therefore be concluded that the selected groups do not view the importance of the factors in the same order.

Table 7.31 is a cross-correlation with question 11 relating to the importance of the 15 factors impacting on the business operations of *the specific company in particular* based on exports as a percentage of turnover.

For the four groups identified, only the following factor out of the top five of high importance is similar:

- Market access to foreign markets

Table 7.31: Importance of the different factors impacting on the business operations of the specific company in particular based on exports as a percentage of turnover (mean value rating)

	Exports as a percentage of turnover				
	Component companies		OEMs		Total
	<50% exports	50%+ exports	<50% exports	50%+ exports	
	(Group 1)	(Group 2)	(Group 3)	(Group 4)	
	(n=24)	(n=10)	(n=7)	(n=1)	
Q11d: Market access to foreign markets	11,1	10,1	11,3	10,0	10,9
Q11e: Appreciation of the rand against foreign currencies in respect of exports	11,3	8,7	11,0	14,0	10,7
Q11n: Raw material prices	10,9	10,0	10,9	7,0	10,6
Q11b: South African government incentives to attract investments	9,2	10,6	10,7	12,0	9,9
Q11c: Free trade agreements in generating business opportunities	9,5	10,0	9,0	11,0	9,5
Q11a: World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP	6,6	11,3	8,9	15,0	8,3
Q11j: Distance to main automotive markets	7,5	8,4	10,7	8,0	8,2
Q11k: Participation in National Pavilions to promote the South African automotive industry	10,0	6,9	4,1	4,0	8,1
Q11h: The comparative advantages of the South African automotive industry in generating business and attracting investments in the automotive sector	7,7	8,9	7,4	6,0	7,9
Q11f: Appreciation of the rand against foreign currencies in respect of investments	7,8	6,3	9,7	9,0	7,8
Q11g: The comparative advantages of South Africa in generating business and attracting investment in the automotive sector	7,5	7,9	7,0	13,0	7,7
Q11l: Participation in outward selling missions to promote the South African automotive industry	6,8	6,4	2,7	3,0	5,9
Q11m: Participation in seminars in foreign countries to promote the South African automotive industry	5,8	4,8	3,9	2,0	5,1
Q11o: Formal automotive structures as a forum to discuss automotive policy	4,8	4,4	7,9	1,0	5,1
Q11i: The comparative advantages of the South African automotive industry in generating business and attracting investments for other related sectors	4,3	5,3	4,7	5,0	4,6

Group 1 represents the 14 non-MIDP registered and 10 small to medium size South African owned companies. The factors of high importance as far as the business

operations of the specific company in particular is concerned focus on cost factors such as the strong rand and raw material prices impacting on international competitiveness in respect of exports as well as on business opportunities generated via market access, free trade agreements in penetrating foreign markets and export exposure through participation in exhibitions abroad. The dependence on the MIDP is not of high importance for this group consisting mainly of non-MIDP registered and small to medium size South African owned companies not benefiting from the MIDP directly.

Group 2 represents the eight multinational companies and two large MIDP registered South African owned companies with export programmes linked to OEM-generated business linkages. The factors of high importance focus strongly on the dependence of the MIDP to support the export-related business, government investments to attract investments for expansions and upgrading purposes as well as market access and opportunities for export expansion into foreign markets provided by free trade agreements.

Group 3 represents the OEMs exporting less than 50 percent of their turnover. The OEMs are involved in major export programmes of CBUs as well as exports of automotive components, such as the engines and catalytic converters exported by some OEMs. Sales in the domestic market increased by record-breaking levels in 2004 and 2005, while exports are also on an upward curve, as discussed in Chapter 4, which contributes significantly to the economies of scale benefits and the turnover of the OEMs. Factors of high importance for the OEMs in group 3 focus on market access for the increasing number of left-hand drive models also assembled in South Africa, cost factors such as raw material prices, the strong rand and logistical costs impacting on international competitiveness and profit margins, as well as government incentives to sustain the production of new generation models in the domestic market.

Group 4 represents one OEM with exports as a percentage of turnover in excess of 50 percent. The factors of high importance focus strongly on the dependence of the

MIDP in respect of policy certainty to sustain the CBU export programme, the strong rand impacting on international competitiveness and profit margins, as CBU prices are normally determined in foreign currency, and increased foreign market penetration via free trade agreement opportunities. Furthermore, government incentives and the comparative advantages of the country as an investment destination of choice to sustain manufacturing operations for new generation model production in South Africa were also highly important factors.

Table 7.32: Correlations between the importance of the different factors impacting on the business operations of the specific company in particular based on exports as a percentage of turnover

			Component companies		OEMs	
			<50% exports	50%+ exports	<50% exports	50%+ exports
			(Group 1)	(Group 2)	(Group 3)	(Group 4)
Spearman's rho	Component companies with <50% exports	Correlation coefficient	1,000			
		Sig. (2-tailed)				
		N	15			
	Component companies with 50%+ exports	Correlation coefficient	,553(**)	1,000		
		Sig. (2-tailed)	,033			
		N	15	15		
	OEMs with <50% exports	Correlation coefficient	,663(***)	,601(**)	1,000	
		Sig. (2-tailed)	,007	,018	,	
		N	15	15	15	
	OEM with 50%+ exports	Correlation coefficient	,441(*)	,736(***)	,583(**)	1,000
		Sig. (2-tailed)	,099	,002	,023	
		N	15	15	15	15

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\*\* Correlation is significant at the 0.10 level (2-tailed).

Proposition 10: There is general agreement between the four groups regarding the importance of the factors that impact on the business operations of *the specific company in particular* based on the exports as a percentage of turnover criterion.

In order to test the above proposition, Spearman's rank correlations were used in Table 7.32 to determine the correlations between the average ranks obtained for the

four groups across the 15 factors mentioned based on the exports as a percentage of turnover criterion. The correlation coefficients between groups 1 and 3 and groups 2 and 4 are highly significant ( $\alpha=0,01$ ) mainly reflecting the similar factors of high importance relating to export expansion via increased market access, the impact of the strong rand on exports and cost factors such as raw materials prices impacting on international competitiveness. Both groups 1 and 3 revealed that the dependence on the MIDP is not of high importance, although for group 1 the low dependence reflects the non-MIDP registered companies' views and for group 3 reflects the lower dependence attributed to improved economies of scale benefits combined with the gradual reduction in benefits enjoyed under the MIDP since 2003. The correlation coefficients between groups 1 and 2, groups 2 and 3 as well as groups 3 and 4 are significant ( $\alpha=0,05$ ) reflecting that the factors of high importance for all four groups focus on export expansion via market access and free trade agreement opportunities, cost factors impacting on international competitiveness and government incentives to invest for expansion and upgrading in accommodating exports. However, the factors of high importance differ to a small degree in their order for the four groups. The correlation coefficient between groups 1 and 4 is only moderately significant ( $\alpha=0,10$ ) as group 1 by and large represents the non-MIDP registered companies and small to medium size South African owned companies exporting less than 50 percent of turnover while group 4 represents the one foreign owned OEM exporting more than 50 percent of its turnover. The factors of high importance for group 1 focus mainly on opportunities to generate business via market access, free trade agreements and exposure by participating in exhibitions abroad, while the focus of group 4 is strongly on the dependence of the MIDP, government incentives to attract investments to sustain new generation model production in South Africa as well as the strong rand impacting on international competitiveness and profit margins. The analysis for proposition 10 is therefore confirmed that there is general agreement regarding the factors that impact on the business operations of the specific company in particular based on the exports as a percentage of turnover criterion.

Table 7.32 reveals that there are highly significant, significant and moderate correlations between the different factors impacting on the business operations of the specific company in particular based on the exports as a percentage of turnover criteria ( $\alpha=0,01$ ,  $\alpha=0,05$  and  $\alpha=0,10$ ). It can therefore be concluded that the selected groups view the importance of the factors in the same order.

## 7.9 SUMMARY

Part 4 described the demographic details of the component companies and the OEMs. The criteria included ownership, employment, product mix, sales segments, turnover and exports as a percentage of turnover. Cross-correlations were done with questions 9 and 11 to determine the importance of factors impacting on the business operations of *the South African automotive industry in general* and *the specific company in particular* based on the demographic details. Spearman's rank correlations was used extensively to test certain propositions to determine the correlations between the average ranks obtained for the component companies and the OEMs across the 15 factors in respect of the level of agreement between the selected groups.

In respect of ownership and employment, highly significant to significant correlations between the different factors impacting on *the South African automotive industry in general* based on the ownership and employment criteria were determined and it was concluded that the selected groups view the importance of the factors in a similar order. As far as the different factors impacting on the business operations of *the specific company in particular* based on the ownership and employment criteria were concerned, the selected groups do not view the importance of the factors in the same order. The differences in the factors of high importance between the non-MIDP registered and small to medium size MIDP registered South African owned companies group, mainly focusing on generating business via export exposure, and the multinationals and the OEMs groups, already involved in major export programmes and focusing on cost factors impacting on international competitiveness and dependence on the MIDP, were evident.

The product mix revealed that the OEMs manufacture 22 different passenger car and light commercial vehicle models in South Africa. Two OEMs are also involved in the manufacture and export of engines and several in catalytic converters, which are exported to generate the IRCCs necessary to rebate the import duties on completely built-up vehicles and original equipment components. The components manufactured by the respondents represent a diverse range of MIDP eligible automotive components as well as non-MIDP eligible products such as trailers and vehicle accessories and represent by and large the bulk of the component categories and value of the automotive components exported in 2004.

The OEMs and component companies are both involved in sales to the OEMs, sales to the aftermarket and sales to exports. Highly significant, significant and no correlations between the different factors impacting on the business operations of *the South African automotive industry in general* based on the sales segments criterion concluded that the selected groups do not view the importance of the factors in the same order. The correlations between the different factors impacting on *the specific company in particular* concluded that the selected groups do not view the importance of the factors in the same order. The main differences were between the non-MIDP registered South African owned companies and the multinational and OEM groups. The non-MIDP companies mainly focused on export exposure and export expansion opportunities, while the multinationals and the OEMs mainly focused on cost factors impacting on domestic and international competitiveness.

Highly significant and significant correlations between the different factors impacting on the business operations of *the South African automotive industry in general* based on the turnover of the company per annum criterion concluded that the selected groups view the importance of the factors in the same order. Highly significant, significant and no correlations for *the specific company in particular*, based on the turnover of the company per annum criterion concluded that the selected groups do not view the importance of the factors in the same order. The priorities in the factors of high importance reflected the differences between the non-



MIDP registered and the MIDP registered multinational companies and the OEMs as far as turnover per company is concerned.

Highly significant, significant and no correlations between the different factors impacting on the business operations of *the South African automotive industry in general* based on the exports as a percentage of turnover criterion concluded that the selected groups do not view the importance of the factors in the same order. For the importance of the factors impacting on *the specific company in particular* based on the exports as a percentage of turnover criterion, highly significant, significant and moderate correlations concluded that the selected groups view the importance of the factors in the same order. The export focus was strongly highlighted, although for the non-MIDP registered component companies it was more on export exposure, compared with the multinational and the OEMs where the focus was on export expansion.

#### **7.10 PART 5 OF THE QUESTIONNAIRE**

Part 5 of the questionnaire covers questions 19 and 20 and dealt with the qualitative views of the respondents on the value and relevance of the MIDP as a promotional tool for the South African automotive industry in general and for the specific company in particular, respectively.

**Question 19** dealt with the respondents' qualitative views on the value and relevance of the MIDP as a promotional tool for the *South African automotive industry in general* in the global automotive environment.

The detailed views of the respondents are attached as Appendix F. The main views of the stakeholders, the component companies and the OEMs on the value and relevance of the MIDP as a promotional tool for the South African automotive industry in general in the global automotive environment are summarised below.

The views by the 12 stakeholders are summarised as follow:

- Seven of the stakeholders highlighted the role of the MIDP in contributing to and attracting investments into the South African automotive industry.
- Six stakeholders highlighted the role of the MIDP in ensuring the sustainability and, to a large extent, the existence of the automotive industry in South Africa.
- Six stakeholders highlighted the role of the MIDP in contributing to the international competitiveness improvement of the South African automotive industry in general, despite the logistical costs, distance to markets and small domestic market.
- Three stakeholders highlighted the role of the MIDP in sustaining and growing employment levels in the South African automotive industry.
- One stakeholder highlighted the view that the MIDP is a well-known scheme globally.

The stakeholders' views holistically focus on the MIDP's ability to attract investments, to generate business via its contribution to the domestic automotive industry's improved international competitiveness in general and to trigger interest in South Africa, as the MIDP's contribution to the positive developments in the South African automotive industry in general becomes increasingly visible to foreigners.

The main views of the 37 component companies are summarised below:

- 15 component companies highlighted the MIDP's role in improving the international competitiveness of the South African automotive industry in general.
- Seven component companies highlighted the MIDP's role to attract investments into the South African automotive industry in general.
- Seven component companies highlighted the MIDP's value in raising the prominence of the South African automotive industry in general in the global automotive environment.

- Six component companies highlighted the MIDP's role in respect of enabling the sustainability, and to a large extent, the existence of the South African automotive industry in general.
- Three component companies raised views on only receiving indirect benefits under the MIDP as well as the phasing down of the benefits under the MIDP over time.

The 37 component companies forming part of the survey represent a mixture of 23 MIDP registered and 14 non-MIDP registered component companies. The MIDP registered companies focus on the MIDP's ability to attract investments into South Africa, to generate business by contributing to improved international competitiveness and the indirect benefits received under the MIDP. The non-MIDP registered companies have all participated in exhibitions abroad and revealed that the positive developments in the South African automotive industry in general under the MIDP has triggered interest in South Africa. The MIDP's role therefore is one of enhancing the domestic automotive market in the global automotive environment which in turn generates business opportunities for the non-MIDP companies in their association with the MIDP registered companies during missions and exhibitions abroad.

The main views of the eight OEMs are summarised below:

- Six OEMs highlighted the MIDP's role in improving the international competitiveness of the South African automotive industry in general.
- Four OEMs highlighted the MIDP's role to attract investments.
- Two OEMs highlighted the MIDP's role in raising the prominence of the South African automotive industry in general in the global automotive environment.
- Two OEMs highlighted the MIDP's role in sustaining and creating employment in the South African automotive industry in general.

The OEMs' views focus on the MIDP's role in generating business via improved international competitiveness, attracting investments and triggering interest, the latter

raised by the prominence of the domestic automotive industry in general resulting from the positive developments achieved under the MIDP.

**Question 20** dealt with the respondents' qualitative views on the value and relevance of the MIDP as a promotional tool for the *specific company in particular* in the global automotive environment.

The detailed views of the respondents are attached as Appendix G. The main views of the component companies and the OEMs on the value and relevance of the MIDP as a promotional tool for the specific company in particular are summarised below.

The main views of the 37 component companies are summarised below:

- 14 component companies highlighted the MIDP's role in improving the global competitiveness of the specific company in particular.
- Eight component companies highlighted the MIDP's role in providing exposure, creating interest and raising the prominence of the specific company in particular in the global automotive environment.
- Three component companies highlighted the MIDP's role in attracting investment in the specific company in particular.
- Two component companies highlighted the MIDP's role in respect of the sustainability, and to a large extent, the existence of the specific company in particular.
- Two component companies raised views on receiving no benefits or only indirect benefits from the MIDP.
- One company raised a view on the administrative burden of the MIDP on the specific company in particular.

The 37 component companies represent a mixture of 23 MIDP registered and 14 non-MIDP registered companies. The MIDP registered companies expressed clear views on the MIDP's role in generating business via improved international competitiveness, and in fact the sustainability of the specific company in particular,

as well as in attracting investments into the specific company in particular. The non-MIDP component companies, not receiving any benefits under the MIDP, as well as the MIDP registered companies, only benefiting indirectly under the MIDP, revealed that the MIDP's role in triggering interest in the South African automotive industry has created opportunities for these companies in foreign markets.

The main views of the eight OEMs are summarised below:

- Five OEMs highlighted the MIDP's role in improving the international competitiveness of the specific company in particular.
- Three OEMs highlighted the MIDP's role in attracting investments in the specific company in particular.
- Two OEMs highlighted the MIDP's role in respect of the viability of the specific company in particular.
- Two OEMs highlighted the MIDP's role in adding value to the global strategies of parent companies.
- One OEM highlighted the MIDP's role in enhancing the specific company in particular in securing export programs.

The OEMs' views focus on the MIDP's role to generate business resulting from improved international competitiveness, and in fact the economic viability of the specific company in particular, as well as to attract investments into the specific company in particular. The MIDP's aim is essentially to encourage the OEMs to specialise in one or two high volume models, obtain economies of scale benefits to export competitively and in turn import the models not produced in South Africa at lower or duty free levels. The OEMs have rationalised the number of model platforms from 42 in 1995 to 22 in 2005 under the MIDP (NAAMSA, 2005:23). The approach by the OEMs also assists the component companies to reduce complexity in the production of the range of components, obtain economies of scale benefits and in turn improve the economic viability of plants in South Africa. As discussed in Chapter 4, the OEMs are increasingly becoming internationally competitive under the MIDP, which in turn enhances the MIDP's role in triggering interest in the specific company

in particular which in turn benefits the specific company in particular again and the momentum continues.

## **7.11 SUMMARY**

The stakeholders, component companies and the OEMs expressed strong views on the MIDP's role in generating business, attracting investments and triggering interest in respect of its relevance and value as a promotional tool for the *South African automotive industry in general*. Improved economies of scale benefits achieved by the OEMs under the MIDP ensure improved international competitiveness by the OEMs and their component suppliers, which in turn generates increased business opportunities and economic viability of investments in the domestic automotive industry in general. Following the positive developments in the domestic automotive market, non-MIDP registered companies also benefit from business opportunities generated via their association with the MIDP registered companies.

As far as the value and relevance of the MIDP as a promotional tool for the *specific company in particular* in the global automotive environment is concerned, the 23 MIDP registered component companies and the OEMs expressed strong views on the MIDP's role in generating business as well as attracting investments into the specific company in particular. Increased business, and in fact the sustainability of the specific company in particular is generated via improved international competitiveness. The 14 non-MIDP component companies, not receiving any benefits under the MIDP, as well as the nine MIDP registered companies, only benefiting indirectly under the MIDP, revealed that the MIDP's role in triggering interest has created opportunities for these companies in foreign markets. The OEMs rationalised the number of model platforms significantly under the MIDP, which resulted in improved economies of scale benefits and increased international competitiveness. Following the positive developments, more business opportunities are generated in export markets, the economic viability of investments increases, the complexity for the component suppliers reduces and the momentum of growth by the OEMs continues.

## 7.12 SUMMARY OF CHAPTER 7

Chapter 7 focused on the analysis and presentation of the research results for the empirical study to establish and measure the relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. The analysis was done in the same sequence as the questionnaire structure. Part 1 dealt with the general business operations of the respondents. Part 2 focused on the quantitative analysis of the value and relevance of the MIDP as a promotional tool for the *South African automotive industry in general* as well as for the *specific company in particular* in the global automotive environment. In Part 3 of the questionnaire the respondents were requested to quantitatively rank and qualitatively express their views on 15 factors impacting on the business operations of the *South African automotive industry* in general and on the business operations of the *specific company in particular*. Part 4 described the demographic details of the 37 component companies and the eight OEMs and the criteria included ownership, employment levels, product mix, sales segments, turnover and exports as percentage of turnover. The demographic details were cross-correlated with the factors impacting on the business operations of the *South African automotive industry in general* and the *specific company in particular*. Spearman's rank-order correlation was used extensively to determine the significance of the correlations between the average ranks obtained from the component companies and the OEMs, based on their respective demographic details, across the 15 factors. Part 5 dealt with the qualitative views of the respondents on the value and relevance of the MIDP as a promotional tool for the *South African automotive industry in general* and for the *specific company in particular* in the global automotive environment.

## **CHAPTER 8 CONCLUSIONS AND RECOMMENDATIONS**

### **8.1 INTRODUCTION**

The aim of this study was to analyse the Motor Industry Development Programme (MIDP) as a promotional tool for the South African automotive industry in the global automotive environment. At the time of writing, the 2005/6 MIDP Review was still in progress with the aim to extend the programme, in its current or new format, from 2010 until 2012, to extend the Productive Asset Allowance (PAA) from 2008 until 2012 and to address the WTO concern regarding automotive leather exports to Australia.

The literature review revealed that the strategies of a few dominant OEMs, mainly operating from the Triad regions of North America, Europe and Japan, impact significantly on the developments in an intensely competitive global automotive industry. The consequent opportunities, resulting from the major global trends, create significant benefits to the economies of developing countries in particular. Government trade and industrial policy play an important role in attracting investments into and creating market access for exports. The literature study further revealed that the small, highly protected and inwardly focused South African automotive industry has become fully integrated in the global strategies of parent companies, contributing significantly to the South African economy in terms of exports, investment, employment and the country's GDP. The theoretic principles underlying marketing strategies and competitiveness, as discussed in Chapter 5, integrated theory and practice for the purposes of this study. In this regard the South African automotive industry's international competitiveness forms part of the global competitiveness of the parent companies abroad.

The empirical research results were presented, analysed and discussed in Chapter 7. Chapter 8 answers the research objectives based on the empirical research. The research objectives are reviewed and then discussed in the light of the data obtained. Finally, recommendations on the promotional relevance and value of the



MIDP for the South African automotive industry are presented and a number of future areas for research, relating to the objectives of this study, will be presented. The conclusions and recommendations presented below will follow the same sequence as discussed and analysed in Chapter 7.

## **8.2 OBJECTIVES OF THE STUDY**

This chapter concludes the research process. The primary objective of the study is

- to analyse the MIDP as a promotional tool for the South African automotive industry in the global automotive environment.

More specifically, the aim of the research is to establish and measure the relevance and value of the MIDP as a promotional tool in the global automotive environment by capturing the responses and perceptions of direct automotive industry exporters and automotive industry stakeholders for

- the South African automotive industry in general, and
- the companies forming part of the empirical survey.

In addition, the secondary objectives of the study are:

- To assist government and industry, by way of frequent reviews of the MIDP, in their approach to deal with the global automotive opportunities and challenges within World Trade Organisation (WTO) guidelines in amending and improving the MIDP as a promotional tool for the South African automotive industry in the global automotive environment.
- To add informational value to government and industry offensive and defensive strategies and planning in respect of current and future investment and export patterns in adapting the MIDP to be better equipped to seize global opportunities and minimise risks.
- To add value to related key economic sectors, via their synergies with the automotive value chain, as raw materials such as metals, plastics, rubber,

chemicals and leather, among others, also benefit from increased exports and investments in the automotive sector.

The extent to which the primary and secondary objectives of this study have been achieved will be discussed in the conclusions to the responses to each part of the questionnaire in the next sections.

### **8.3 CONCLUSIONS TO PART 1 OF THE QUESTIONNAIRE**

Part 1 of the questionnaire, covering questions 1 to 4, dealt with the respondents' general business operations.

The collaboration and collective action by individual firms, government and key stakeholders entering into or engaging foreign counterparts in respect of automotive exports are increasingly evident. The component companies and the OEMs operating in the domestic market are more likely to find themselves in competition with each other rather than cooperating due to the relatively small size of the domestic automotive market. However, now that the South African automotive industry has been integrated into the global automotive environment, there is collective action to raise the domestic automotive industry's prominence worldwide in respect of its capabilities and the positive developments achieved.

Chapter 3 provided an understanding of the extent, functioning and complexities of the MIDP to assist the domestic automotive industry's global integration into the global automotive environment. The domestic market is not big enough to warrant economies of scale benefits. Chapter 2 revealed that plants need to manufacture 250 000 vehicles and one to two million automotive parts to obtain economies of scale benefits in a global automotive environment. In South Africa the eight OEMs shared the production of 389 000 units in 1995 with 42 different model platforms. Although production increased to 525 000 units with 22 different models in 2005, as discussed in Chapter 4, the volumes remain low in global terms for the domestic OEMs and even more so for the automotive component suppliers. Chapter 5

explained the theoretical principles underlying exports to obtain economies of scale benefits.

All eight OEMs are registered under the MIDP and all eight benefit directly from the MIDP via Import Rebate Credit Certificates (IRCCs) obtained from exports. The aim of the OEMs is to achieve duty neutrality, thus, not to pay any import duties on CBU and original equipment automotive component imports. Chapter 4 revealed that South African CBU exports have only started to take off since 1999. Chapter 4 furthermore revealed that initially high value, low volume type automotive components, such as stitched leather seat covers and catalytic converters, were exported to obtain IRCCs. The German-based OEMs were the first to reap the benefits of the MIDP in respect of exports. The Japanese-based and USA-based OEMs have subsequently followed suit and the evolution of the South African automotive industry was completed in 2005 when all eight of the OEMs were involved or announced CBU export programmes. The consecutive record-breaking levels of CBU exports achieved during the first nine years of the MIDP are indicative of the positive developments achieved.

In respect of the OEMs, the IRCCs obtained via exports on CBUs and automotive components are used to rebate the import duties on completely built-up vehicles and original equipment automotive components, the latter used to assemble vehicles in South Africa. The technical parameters of the MIDP, as discussed in Chapter 3, revealed that the import duties on CBU and original equipment components were 65 percent ad valorem and 49 percent ad valorem at the start of the MIDP, respectively. The import duties have been gradually phased down to 32 percent ad valorem and 26 percent ad valorem, respectively, by 2006 allowing for more import competition into South Africa. Chapter 4 revealed that imports of CBUs into South Africa have built up momentum since 1995 when the MIDP was introduced and in 2005 comprised nearly 38 percent of the domestic new vehicle market. The imports of CBUs are in line with the objectives of the MIDP to rationalise and reduce the number of models produced in South Africa to obtain economies of scale benefits to export competitively and in turn import those models not produced in South Africa.

Now that the domestic market is open to imports, the domestic model mix can be arranged to provide the most effective combination of domestically assembled and imported models to satisfy consumers. However, in an intensely competitive domestic automotive market environment, the import duties represent a significant cost factor impacting on vehicle affordability and price competitiveness should they not be rebated but added to the selling price of the CBUs.

The OEMs revealed that they also benefit indirectly from the MIDP mainly via increased volumes provided by economies of scale benefits and subsequently increased international competitiveness. As part of the integration into the global automotive environment competition is not restricted to the domestic market, but globally amongst subsidiaries competing for new generation model investments and production for exports.

As far as the automotive component manufacturers are concerned, 23 of the 37 or 62 percent are registered under the MIDP. Although 14 of the 23 component companies benefit directly under the MIDP, nearly all revealed that they also benefit indirectly from the MIDP and mainly via increased volumes and/or via increased orders by the OEMs. The domestic OEMs create the global linkages for the domestic component companies in generating business in foreign markets. The understanding is that the OEMs obtain the IRCCs by exporting the automotive components themselves or that the IRCC be ceded to the OEM by the component company in exchange for generating the business opportunity. For this reason the automotive component companies revealed that they only benefit indirectly from the MIDP. However, owing to model rationalisation by the OEMs, the complexity and proliferation of the components have been reduced. The increased volumes also improve the economic viability for automotive component manufacturers to follow the OEMs into South Africa by investing in Greenfield operations or alternatively in collaborating with South African owned component companies, in turn increasing the local content of South African assembled vehicles. The 14 automotive component companies benefiting directly from the MIDP via IRCCs are the companies focusing on the aftermarket or replacement parts exports. The technical parameters, as

discussed in Chapter 3, revealed that the benefits under the MIDP obtained by the independent exporters amounted to 39,2 percent and 39 percent in 1995 if completely-knocked down components and CBUs were imported, respectively. The MIDP benefits assisted exporters to overcome the logistical costs associated with the distance to export markets as well as to achieve price levels to secure export contracts. The gradual phasing down of the MIDP benefits since 2003 required exporters to become increasingly internationally competitive. The consecutive record-breaking levels of automotive component exports for the first eight years of the MIDP are indicative of the positive developments achieved under the MIDP.

All 57 or 100 percent of the respondents, including the eight component companies not registered under the MIDP or not experiencing any direct or indirect impact from the MIDP on their business operations, revealed that the South African automotive industry will not be able to cope with global competition without the MIDP. The non-MIDP registered component companies' association with the MIDP registered component companies in events and missions abroad raise the prominence of their specific companies in particular in the global automotive environment as well. However, the relatively small size of the domestic market, distance to main markets, logistical costs and design and technology constraints, among others, were reiterated as reasons for the dependence on support for the domestic automotive industry in the form of the MIDP.

All eight of the OEMs, all 37 of the component companies and nine of the 12 stakeholders have participated in organised and/or individual automotive trade events and missions abroad and were therefore able to share first-hand experience on the relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment.

#### **8.4 CONCLUSIONS TO PART 2 OF THE QUESTIONNAIRE**

Part 2 of the questionnaire covers questions 5 to 8, and dealt with the quantitative value of the MIDP as a promotional tool for the *South African automotive industry in*

*general* and for *the specific company in particular* in the global automotive environment.

The investment behaviour of the OEMs and investment expansion in foreign markets are influenced by a number of aspects such as market factors, sound financial returns and adequate government incentives as discussed in Chapter 5. Increased competitiveness places pressure on firms to increase production as a way of reducing unit costs and thus the importance of economies of scale. This in turn may require that the parent company creates export opportunities for the South African subsidiary and invests accordingly. Investments are therefore required to expand, upgrade and sustain future production in order not to face the prospect of losing market share and eventually becoming unviable. Chapter 2 discussed the targeting of emerging markets for automotive investments and the benefits following these investments for the developing countries. The mechanisms under the MIDP in the import/export complementation scheme and the Productive Asset Allowance (PAA), which is the automotive specific investment incentive, were discussed in Chapter 3. Chapter 4 discussed the achievements in respect of export and investment intensity and the growing interest in the domestic automotive market over the past decade since the MIDP was implemented.

The most important value of the MIDP for the stakeholders in promoting the *South African automotive industry* in general in the global automotive environment, since it was implemented in 1995 was to generate business and to trigger interest in South Africa. For the automotive component companies the most important value of the MIDP was to generate business and for the OEMs it was to attract investments. The stakeholders perceived the positive developments in the South African automotive industry, regarded as a lower cost developing country, to trigger interest in and consequently generate business for the domestic OEMs by integrating the OEMs into the global strategies of parent companies. The automotive component companies generate business via increased CBU exports as well as via the global linkages created by the OEMs in their search to achieve duty neutrality under the MIDP. For the OEMs, attracting investments by upgrading domestic facilities and for

sustaining investments into future new generation models, as part of the global strategies of parent companies, was perceived to be the most important value of the MIDP in promoting the South African automotive industry in general.

The most important value of the MIDP for the component companies in promoting the *specific company in particular* in the global automotive environment since 1995 when the MIDP was implemented was to generate business, and for the OEMs it was to attract investments. The increased exports of automotive components and the model rationalisation by the OEMs reduced the complexity for the automotive component companies, provided economies of scale benefits and improved the economic viability of investments into automotive component manufacturing in South Africa. The OEMs revealed that attracting investments to upgrade facilities in line with global quality standards as well as attracting investments for new generation models, in fierce competition with subsidiaries around the world, was the most important value of the MIDP in promoting the specific company. The JD Power Gold Quality award awarded to BMW SA is indicative of the quality levels achieved in the domestic market. The introduction of the Productive Asset Allowance, the automotive specific investment incentive introduced as part of the 1999 MIDP Review, contributed to the objective of model rationalisation, improved economies of scale benefits as well as the sound financial returns achieved in the domestic market.

The OEMs, component companies and the stakeholders strongly believe that the MIDP's role in generating business, attracting investments and triggering interest in South Africa until 2012 will increase. The expectation is that the 2005/6 MIDP Review will not entail any significant amendments to the format and the structure of the programme, that the PAA will be improved and that the extension of the MIDP will provide longer-term policy certainty. Policy certainty provides investor confidence as well as the confidence in bidding for long-term export contracts.

The stakeholders, automotive component manufacturers and the OEMs revealed a high to very high level of continued dependence on government support for the South African automotive industry in general post 2012, when the MIDP is due to

expire. The exception was three automotive component companies not registered under the MIDP and not receiving benefits at present and therefore the companies revealed a low level of dependence on support post 2012 when the MIDP is due to expire.

As far as the dependence on support post 2012 for the specific company in particular is concerned, the automotive component companies and the OEM revealed a high to very high level of dependence on support post 2012, when the MIDP is due to expire. The exception was the eight automotive component companies not registered under the MIDP and therefore not receiving any benefits under the MIDP at present. A further exception was an OEM that is confident that its increased international competitiveness and economies of scale benefits will assist in less dependence on support post 2012. The technical parameters of the MIDP in Chapter 3 revealed that the gradual phasing down of benefits under the MIDP from 2003 until 2012 will entail that the OEMs have to increase exports and/or local content up to 2012 to enjoy the same benefits as enjoyed in 2002. The benefits for the automotive component companies exporting directly will reduce from 39,2 to 11,2 percent if original equipment components are imported and from 39 percent to 8,4 percent if CBUs are imported. For both the OEMs and the automotive component companies the reduced benefits create increased pressure to sustain the growth momentum of the automotive industry, to remain internationally competitive in terms of prices as well as the costs incurred by the distance to the main export markets. With continued support the respondents revealed that increased interest in South Africa as well as increased investments and business would be generated. Dependence on continued support post 2012 is therefore required for the interest in, the investments into and the business generated for the domestic automotive industry and the specific company in particular to be sustained.

As far as the primary objective of this study is concerned, Part 2:

- Confirms that the promotional relevance and value of the MIDP as a promotional tool is embedded in its ability to trigger interest in, to generate



business for and to attract investments into the South African automotive industry in general and the specific company in particular.

As far as the secondary objectives of the study are concerned, Part 2:

- Contributes by assisting government and industry, by way of the frequent reviews of the MIDP, in their approach to deal with the global automotive opportunities and challenges within World Trade Organisation (WTO) guidelines in amending and improving the MIDP as a promotional tool for the South African automotive industry in the global automotive environment.
- Adds informational value to government and industry offensive and defensive strategies and planning in respect of current and future investment and export patterns in adapting the MIDP to be better equipped to seize global opportunities and minimise risks. Important decisions for new generation models post 2012 are already starting to take place from 2007 and the MIDP until 2012 and the format of support post 2012 will play a major role in triggering interest, attracting investments and generating business for the domestic market and its role-players.

## **8.5 CONCLUSIONS TO PART 3 OF THE QUESTIONNAIRE**

Part 3 of the questionnaire dealt with the respondents' quantitative and qualitative views on 15 different factors impacting on *the South African automotive industry's business operations in general* and on *the specific company's business operations in particular*. These factors impact on the performance of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment and therefore their relevance as ranked by the respondents is important to understand.

The environmental analysis of external factors impacting on the operations of the global economy is discussed in Chapter 5. The mix of factors identified for purposes

of the empirical survey for this study reflects the dynamic environment in which *the South African automotive industry in general* and *the specific company in particular* is operating. The natural operation of market forces requires firms to adapt and those best able to adapt will have a better chance of benefiting from business opportunities than competitors. The dominant combination of factors foremost in the minds of the stakeholders, automotive component companies and OEMs impacting on both the business operations of *the South African automotive industry in general* and *the specific company in particular* were South African government incentives to attract investments, the appreciation of the rand against foreign currencies in respect of exports, WTO rules and regulations and the potential impact on the MIDP, raw material prices, global market access and trade arrangements in penetrating foreign markets. Chapter 5 indicated that an important criterion for evaluating countries is the available investment incentives. As far as the automotive industry is concerned, the PAA, due to its objective of model rationalisation, limits applications and therefore the majority of automotive component companies as well as the medium and heavy commercial vehicle sector are excluded. The Small Medium Enterprise Development Programme is restricted insofar as it only accommodates investments up to R100 million. Chapter 4 highlighted the investment intensity in the domestic automotive sector, mainly towards export growth, although it was highlighted that the supply side measures and investment incentives in the domestic market were of insufficient scale to assist the manufacturing sector adequately in the global environment. The stakeholders, automotive component companies and OEMs ranked government incentives to attract investments consistently as a highly ranked factor impacting on the business operations of *the South African automotive industry in general* and *the specific company in particular*. Investments are required to upgrade and expand domestic operations as well as to sustain future production in South Africa, mainly to accommodate export business.

Chapter 4 discussed several external factors impacting on the South African automotive industry. Cost factors eroding international competitiveness were ranked as highly important factors in view of the automotive industry's export orientation. The rand appreciated significantly against a basket of currencies and especially to

the order of 130 percent against the US dollar between the end of 2001 and 2005. Currency movements impact on export competitiveness and investment decisions in respect of the cost of capital as well as on increased import competition. The weak rand added impetus to the automotive component export momentum between 1995 and 2002. The strong rand however resulted in a consolidation period as far as automotive component exports in nominal terms were concerned from 2002 to 2004. Vehicle volumes have increased significantly but the strong rand has impacted on profit margins since 2002 as export prices are normally determined in foreign currency. Chapter 4 also highlighted import parity pricing, which could increase raw material prices up to 50 percent and logistical costs comprising in the order of 14 percent of the company's operating costs.

Chapter 4 furthermore discussed the potential risk in respect of a WTO challenge on the MIDP, which could have a destabilising effect on the entire industry given any sudden changes forced upon the industry. Part 1 highlighted the respondents' current and future dependence on the MIDP to trigger interest, attract investments and generate business. As far as free and preferential trade agreements are concerned, the challenge is to maintain the integrity of the MIDP in these negotiations. The MIDP is a specific programme and in order not to discriminate against any of the role-players, the same rules should apply to everyone. However, the hallmark of international trade is duty-free market access. In order to gain market access, countries should be willing to compromise, which means increased competition in the domestic market and increased pressure for tariff concessions under the MIDP.

Spearman's rank-order correlations were used to determine the correlations between the average ranks obtained for the stakeholders, component companies and the OEMs across the 15 factors impacting on the business operations of the *South African automotive industry in general*. The correlations were highly significant and the conclusion was that the respondents view the factors in a similar order. Spearman's rank-order correlations were used in a similar fashion for the *specific company in particular* forming part of the survey. The correlations between the

component companies and the OEMs were highly significant and the conclusion was that the importance of the factors was viewed in a similar order.

The qualitative views of the stakeholders, automotive component companies and OEMs substantiated the rankings of the highest ranked factors impacting on the business operations of *the South African automotive industry in general* and *the specific company in particular*. The qualitative views mainly revealed the need for government incentives to attract investments, continued dependence on the MIDP, global market access and trade arrangements in penetrating foreign markets as well as cost factors impacting on the international competitiveness of *the South African automotive industry in general* and *the specific company in particular*.

As far as the primary objective of the study is concerned, Part 3:

- Confirms the relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment via the quantitative and qualitative responses by the stakeholders, the automotive component companies and the OEMs. The potential threat of a WTO challenge to the MIDP and the associated risk of sudden changes to be enforced on the MIDP and hence the domestic automotive industry were consistently ranked as a factor of high importance by the stakeholders, the automotive component companies and the OEMs. It was recognised that certain external factors impact on the business operations of the South African automotive industry in general and the specific company in particular and therefore on the performance of the MIDP as well.

As far as the secondary objectives of this study are concerned, Part 3:

- Contributes by assisting government and industry, by way of frequent reviews of the MIDP, in their approach to deal with the global automotive opportunities and challenges within the WTO guidelines in amending and

improving the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. The implications of the potential impact of the WTO rules and regulations on the MIDP, an improved PAA and long-term policy certainty has consistently been emphasised by the stakeholders, automotive component companies and OEMs as important highly factors impacting on business operations and will be addressed in the 2005/6 MIDP Review.

- The identification of the main factors by the stakeholders, component companies and OEMs impacting on the business operations of *the South African automotive industry in general and the specific company in particular* have informational value for government and industry in respect of offensive and defensive strategies and planning in respect of current and future investment and export patterns. The MIDP could therefore be adapted, within WTO guidelines, to be better equipped to seize global opportunities and minimise risks.
- A highly ranked factor impacting on the business operations of the South African automotive industry in general and the specific company in particular were raw material prices. Raw materials are important inputs into the automotive value chain and their usage increases along with improvements in and the growth of the domestic automotive sector. This study therefore adds value to related key economic sectors, via their synergies with the automotive value chain, as raw materials such as metals, plastics, rubber, chemicals and leather, among others, also benefit from increased exports and investments in the automotive sector.

## **8.6 CONCLUSIONS TO PART 4 OF THE QUESTIONNAIRE**

Part 4 of the questionnaire described the demographic details of the component companies and the OEMs. The criteria included ownership, employment, sales segments, annual turnover and exports as a percentage of annual turnover.

The South African automotive industry operated under high levels of protection for decades before the introduction of the MIDP in 1995. With the domestic automotive industry being fully integrated into the global automotive environment, firms have had to adapt to demanding, complex and rapidly changing market requirements. Customers in export markets as well as multinational and South African owned large firms prove to be demanding customers. Furthermore, amidst unfavourable market conditions for growth globally in the Triad regions and increasing competition from emerging markets, domestic automotive firms are facing escalating cost pressures. Global market forces and several factors in the domestic market have a specific and combined impact on the performance of *the South African automotive industry in general* and *the specific company in particular* and thus the performance of the MIDP. In order to determine how the importance of the 15 different factors impact on the business operations of *the South African automotive industry in general* and *the specific company in particular* based on the demographic criteria, cross correlations were done with Part 3 of the questionnaire. Spearman's rank-order correlations were used extensively to determine the correlations between the average ranks obtained across the 15 factors in respect of the level of agreement or perceived differences between the selected groups.

The product mix represented by the respondents comprise all the vehicle exports from South Africa in unit and value terms in 2004 while the automotive components represent a diverse range of MIDP eligible or identifiable automotive components comprising by and large the component categories by value in 2004. Furthermore, non-MIDP eligible products such as trailers and vehicle accessories were also represented by the respondents. The 12 stakeholders represented the interest of all the automotive industry exporters in South Africa.

As far as ownership is concerned, foreign ownership relates to the decision-making power by parent companies abroad impacting on the business operations of the relevant companies in South Africa. The foreign owned or multinational companies in the study represent the large companies in respect of employment levels, sales, annual turnover and export levels. Business opportunities for the multinational

companies are generated via the linkages with the OEMs in order for the OEMs to obtain the IRCCs necessary to rebate the import duties on imported CBUs and original equipment components. The South African owned companies in the study represent the small to medium size MIDP registered component companies, as well as some of the large companies, and the non-MIDP registered companies. Opportunities for the South African owned component manufacturers are associated with specialisation and upgrading competences, with some development for product innovation. The opportunities for the South African owned, MIDP registered companies are to supply parts and subcomponents to the first tier suppliers or multinational companies, which are cost-driven. The opportunities for the non-MIDP registered MIDP South African owned companies are to pursue business on an independent basis.

An analysis based on Spearman's rank-order correlations in respect of ownership and employment revealed that for the factors impacting on the business operations of *the South African automotive industry in general* the views on the importance of the factors were in a similar order. For the factors impacting on the business operations of *the specific company in particular*, the views were not similar and the differences relate to the differences in importance of the factors between the non-MIDP registered and South African owned small to medium size, MIDP registered companies and the multinationals and OEMs. The non-MIDP and South African owned, MIDP registered companies are still at the stage of pursuing export expansion and exposure to generate business opportunities abroad and on government incentives to attract investments for upgrading and expansions to accommodate the export business. The multinational companies and the OEMs are already involved in major export programmes and the focus is on cost factors impacting on international competitiveness, the continued dependence on the MIDP and government incentives to sustain future business operations.

Both the component companies and the OEMs are involved in sales to OEMs, to the aftermarket and to exports. The correlations between the selected groups based on the combination of sales to the different sales segments were not similar based on

the importance of the 15 factors with regard to the business operations of *the South African automotive industry in general* as well as *the specific company in particular*. The factors of high importance ranged from highly significant to significant to no significance between the selected groups. The major CBU export programmes and the linkages of the multinational companies with the OEMs, to generate business opportunities in foreign markets, resulted in different views compared to the non-MIDP registered companies not dependent on support as well as the South African owned MIDP registered component companies pursuing all possible avenues to generate potential and incremental export business.

In respect of turnover, the correlations between the selected groups were significant as the factors of high importance were in the same order for *the South African automotive industry in general*. Irrespective of size, the South African automotive industry's integration into the global automotive environment has resulted in an export oriented focus for all the component companies and the OEMs. The correlations between the selected groups in respect of turnover, however were not in the same order. The main difference related to the focus of the small to medium size South African owned companies, which is on generating business via export exposure and export expansion while the multinational companies and the OEMs are already involved in major export programmes. The factors of high importance for the multinationals and the OEMs thus focus on cost factors impacting on international competitiveness as well as the continued dependence on the MIDP.

For the exports as a percentage of turnover criterion, the correlations between the selected groups for the business operations of *the South African automotive industry in general* were not similar while for *the specific company in particular* the correlations between the selected groups were similar. Although only one OEM and 10 component companies export more than 50 percent of their turnover, exports are significant in contributing to the respondents' annual turnover. Export expansion, cost factors impacting on improved international competitiveness and government support to attract investments to accommodate export business were ranked as similar factors. The main difference related to the strong dependence on the MIDP to



sustain its CBU export programme by the one OEM exporting more than 50% of the company's turnover compared to the other groups focusing more on incremental exports and export exposure.

As far as the primary objective of the study is concerned, Part 4:

- Confirms the South African and non-MIDP registered component companies' dependence on the MIDP's role to raise the prominence of *the South African automotive industry in general and the specific company in particular* as a factor of high importance. The multinational companies and the OEMs ranked the potential impact of WTO rules and regulations on the MIDP, and therefore the dependence on the MIDP, consistently as a factor of high importance in respect of the sustainability of their business operations and the implications on long-term policy certainty for investment decisions.

As far as the secondary objectives of this study are concerned, Part 4:

- Contributes to assisting government and industry, by way of frequent reviews of the MIDP, in their approach to deal with the global automotive opportunities and challenges within the WTO guidelines in amending and improving the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. The 15 factors impact differently on the selected groups indicating a possible differentiated approach to assist the OEMs and the component companies based on demographic criteria.
- The identification and the varying importance of the specific factors impacting on the business operations of *the South African automotive industry in general and the specific company in particular* in respect of their demographic details provide informational value to government and industry in respect of offensive and defensive strategies and planning for current and future investment and export patterns. The specific and varying requirements by the companies depending on their demographic

details in respect of government support and intervention, industry participation in events abroad and other areas could be better utilised based on the fulfilment of individual company or group needs to seize global opportunities and minimise risks.

- A highly ranked factor impacting on the business operations of *the South African automotive industry in general and the specific company in particular* was raw material prices. Raw materials are important inputs into the automotive value chain and their usage increases along with improvements in and the growth of the domestic automotive sector. Through government intervention to address the identified problem areas, increased beneficiation of the raw materials in the domestic market could be enhanced. This study therefore adds value to related key economic sectors via their synergies with the automotive value chain, as raw materials such as metals, plastics, rubber, chemicals and leather, among others, also benefit from increased exports and investments in the automotive sector.

## **8.7 CONCLUSIONS TO PART 5 OF THE QUESTIONNAIRE**

Part 5 of the questionnaire covers questions 19 and 20 and dealt with the qualitative views of the respondents on the value and relevance of the MIDP as a promotional tool for the *South African automotive industry in general and the specific company in particular* in the global automotive environment.

Chapter 5 discussed the comparative and competitive advantages of a nation. The comparative advantages of South Africa and its automotive industry as well as the competitive advantages of its automotive industry were highlighted in Chapter 4. The mechanisms of the MIDP, the Reviews of the programme to ensure corrective actions and its gradually phased-down benefits are aimed at achieving its objectives, including improved international competitiveness.

As far as the value and relevance of the MIDP as a promotional tool for *the South African automotive industry in general* is concerned, the 12 stakeholders, 37

component companies and eight OEMs highlighted the fact that the MIDP has significantly contributed by broadening the output base as well as increasing the domestic industry's output in respect of CBUs and automotive components. Greater emphasis was placed on South Africa's competitive advantages in respect of flexibility and adaptability. Production re-organisation, workplace restructuring and employment function and skills redefining have occurred. The view is that the MIDP has changed the face of the South African automotive industry over the past decade entirely and consequently raised the prominence of the domestic automotive industry in the global automotive environment. The rapid export growth of CBUs and automotive components, the sustained employment levels, attracting large-scale foreign and domestic investments, rationalising the level of domestically produced models, vastly improving production capacity utilisation and improving the overall operational efficiencies are evidence of the MIDP's contribution to *the South African automotive industry in general*. As far as the views of the value and relevance of the MIDP as a promotional tool for the specific company in particular is concerned, the 37 component companies and eight OEMs expressed views on the MIDP's role in reducing the complexity in manufacturing plants contributing to improved international competitiveness. Despite the detractors of the scheme, the OEMs and component companies expressed a strong dependence on the MIDP and on stable and predictable government policy for the purposes of forward planning and future investment decisions.

As far as the primary objective of the study is concerned, Part 5:

- Concludes that the stakeholders, component companies and OEMs have reiterated that the MIDP is working and therefore is playing a significant role in raising the prominence of *the South African automotive industry in general* in the global automotive environment. The views expressed by some of the component companies and the OEMs are that the MIDP is imperative in raising the prominence of *the specific company in particular* in convincing parent companies to consider investments in South Africa, mainly to accommodate export programmes. The positive developments

under the MIDP increasingly trigger interest in South Africa leading to increased investments in and global sourcing opportunities for the domestic market.

As far as the secondary objectives of this study are concerned, Part 5:

- Contributes by assisting government and industry, by way of frequent reviews of the MIDP, in their approach to deal with the global automotive opportunities and challenges within the WTO guidelines in amending and improving the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. The stakeholders, component companies and OEMs revealed a strong dependence on the MIDP to sustain the growth of *the South African automotive industry in general and the specific company in particular*. The implications of the potential impact of the WTO rules and regulations on the MIDP, its format and structure in the future, as well as long-term policy certainty has consistently been emphasised as being vital by the respondents in respect of the sustainability of their business operations.
- The views expressed by the MIDP registered as well as non-MIDP registered respondents in respect of the role and relevance of the MIDP as a promotional tool in the global automotive environment as well as identifying detractors of the MIDP have informational value for government and industry in respect of offensive and defensive strategies and planning for current and future investment and export patterns.
- This study adds value to related key economic sectors via their synergies with the automotive value chain, as raw materials such as metals, plastics, rubber, chemicals and leather, among others, also benefit from increased exports and investments in the automotive sector. In improving the MIDP and its performance through frequent reviews and addressing detractors of the programme contribute to the growth of the South African automotive industry and related sectors.

## 8.8 RECOMMENDATIONS IN RESPECT OF PARTS 1 TO 5

The recommendations following the conclusions will be discussed in the next section and will follow the same sequence as the conclusions. Similar recommendations might apply for the different Parts but will not be duplicated.

The recommendations in respect of Part 1 are:

- *That the MIDP should be extended until 2012, in its current or new format, the latter with similar benefits as currently enjoyed.*

The OEMs and automotive component companies benefit directly from the MIDP via IRCCs, while both the OEMs and the automotive component companies also benefit indirectly via increased orders, increased volumes and increased interest. The domestic market does not warrant sufficient volumes to obtain economies of scale benefits for the OEMs and the automotive component companies; however the MIDP allows firms to obtain economies of scale benefits from exports under the programme's import/export complementation scheme. Furthermore, exports allow firms to achieve duty neutrality for those vehicle models and automotive components that are not manufactured in South Africa due to the low volumes and thus uneconomic viability. Exports are channelled via the OEMs by and large, as the OEMs are the major beneficiaries of the IRCCs. The OEMs are however the key drivers in the automotive value chain and the automotive component suppliers benefit indirectly via the global linkages provided by the OEMs, which would otherwise not have existed to the same extent. The mechanisms of the MIDP allow for the domestic automotive industry's relatively rapid integration into the global automotive environment. The key industry stakeholders, the component companies, both the MIDP registered and non-MIDP registered component companies, and the OEMs all revealed that the South African automotive industry would not be able to cope with global competition without the MIDP. Longer term policy certainty is generally regarded as

imperative for investor confidence as well as the confidence in bidding for long-term export contracts.

- *That funding from the Department of Trade and Industry for exhibitions and missions abroad should continue and even be expanded to raise the prominence of the South African automotive industry and the achievements under the MIDP.*

The DTI's Export Marketing and Investment Assistance (EMIA) Scheme allows specifically the small to medium size MIDP registered and the non-MIDP registered component companies to gain export exposure by generating business opportunities in foreign markets. The hallmark of international trade is increased global market access. Organised events in the form of National Pavilions at major world events accompanied by seminars and as trade missions have provided useful platforms for showcasing the capabilities and raising the prominence of the domestic automotive market in the global automotive environment. Participants in the exhibitions and missions abroad emphasised the association between the MIDP and the positive developments achieved in the South African automotive industry. Although only a relatively small number of companies participate in exhibitions and missions abroad, they represent the interest of the total South African automotive industry. Increased participation and increased professionalism shown in the events could contribute to raise the prominence of the domestic automotive industry in the global automotive environment.

The recommendations in respect of Part 2 are:

- *That the positive connotation to the MIDP's ability to trigger interest, attract investment and generate business is significant and that the name of the MIDP should not be changed until 2012, irrespective of any*

*potential amendments to its format and structure resulting from the 2005/6 MIDP Review.*

The South African automotive industry has established international credibility for its ability to supply products reliably to required quality levels and at increasingly internationally competitive prices. OEM subsidiary assembly plants around the world compete for export programmes based on price competitiveness and sound financial returns. In this regard South Africa has competitive advantages in its ability to build plants quickly and operate competitively at much lower volumes than plants in other countries set up for high volume operations. The domestic automotive industry's integration into the global automotive environment empowers it to add value to the global strategies of parent companies abroad. The intensely competitive global automotive environment ensures that investments follow trade and the investments by the German-based OEMs and consequent export successes have forced the Japanese-based and USA-based OEMs to follow suit with investments and CBU export programmes. Positive developments to increase market share and increase profitability attract attention. In this regard the achievements in the South African automotive industry under the MIDP are increasingly becoming significant. Changing the name of the MIDP could result in that the credibility and positive connotation linked to the programme that was established over the past decade in the global automotive environment could potentially be lost over the short to medium term under a new name for a support scheme.

- *That long-term automotive policy certainty post 2012 is provided by government.*

The lead-time for the OEMs is long term as a model run is in the order of seven years. The investment decisions by OEMs also impact on their sourcing decisions and consequently on the first and lower tier automotive suppliers in the automotive value chain. Chapter 2 discussed the follow

sourcing strategy by the multinational companies and the potential business opportunities in the host country generated for the lower tier suppliers linked to the multinational companies. Policy certainty and government incentives, in order to attract investments and trigger interest in a country to be considered as an investment destination of choice, are imperative to sustain the future production of new generation models in a country. The developments by the OEMs determine the developments of the automotive component suppliers. All eight of the OEMs in South Africa have made investments or announcements for investments in new generation models in 2005. Over the short term the post 2012 investment decisions by the OEMs' parent companies will start featuring. In this regard the automotive support package, whether it is the MIDP or an alternative scheme, should be announced as soon as possible. The key recommendation of the 2005/6 MIDP Review should be to come up with a WTO compliant MIDP or alternative support package that could be sustainable post 2012. Commitments of support for the South African automotive industry by political leaders are encouraging but the details of the support are required for the business and investment decisions to be realised in favour of South Africa.

The recommendations in respect of Part 3 are:

- *That different factors impact simultaneously on the performance of the South African automotive industry in general and the specific company in particular and thus the performance of the MIDP, which should be taken into consideration in the 2005/6 MIDP Review.*

Major global trends, raw material prices, logistical costs, trade arrangements, Broad Based Black Economic Empowerment (BBBEE), HIV/Aids, the strong rand and the potential WTO challenge on the MIDP are all dominant factors foremost in the minds of the respondents impacting on the performance of the domestic automotive industry and the MIDP's ability to achieve its objectives. The MIDP plays a multifunctional



role in the South African automotive industry and could be regarded as a trade, economic, financial and social instrument impacting on the business operations of *the South African automotive industry in general* as well as on *the specific company in particular*. The technical capabilities of the MIDP in achieving its objectives are however hampered by external factors. High level intervention by government to address the import parity pricing in respect of raw materials could result in lower input prices for the domestic automotive sector, increased beneficiation of raw materials in South Africa as well as increased benefits for related key economic sectors via their synergies with the automotive sector. In addition, other factors of high importance directly affecting the performance of the MIDP are the uncertainties around BBBEE requirements and potential impact on investor confidence, the volatility and appreciation of the rand impacting on exports and increased import competition, refraining from tampering with the integrity of the MIDP in free and preferential trade agreements trade agreements as well as WTO rules and regulations and potential impact on the MIDP. Should the external factors be adequately addressed by the authorities, the performance of the MIDP and its relevance and value as a promotional tool for the domestic automotive industry in the global automotive environment could be improved.

The recommendations in respect of Part 4 are:

- *That external factors impact differently on selected groups based on their demographic details and that these differences require different approaches in government support within or outside of the MIDP.*

The selected groups in Part 4 of the empirical survey, based on the ownership, employment levels, sales segments and turnover criteria revealed that they do not view the importance of the 15 factors impacting on the business operations of *the specific company in particular* as similar. The focus of the small to medium MIDP registered companies and non-MIDP registered companies is on a much lower level as these

companies are still pursuing business opportunities abroad via export exposure or the companies export independently without the global linkages provided by the OEMs. The dependence on government incentives is to upgrade facilities to comply with stringent global automotive standards and to expand facilities to cope with potential and increased export business. All potential avenues to access and penetrate foreign markets are pursued to generate business opportunities. In comparison, the multinational companies and the OEMs are already involved in major export programmes and the focus is on government incentives to sustain future business, the dependence on the MIDP to ensure long-term policy certainty and cost factors to address international competitiveness. Government support in the form of incentives to attract investments and the MIDP should distinguish between the different requirements of the different levels of exporters and investments by the selected groups to increase the effectiveness of the support.

The recommendations in respect of Part 5 are:

- *That the MIDP's ability to attract investment should be benchmarked against those of competitor countries to ensure that South Africa is considered as an investment destination of choice in global automotive investment decisions.*

A factor consistently ranked as being of high importance was government incentives to attract investments. Although the application and focus may have differed, the stakeholders, component companies and OEMs, irrespective of the differences in demographic details believed that investments were imperative to upgrade, expand or sustain future business operations in South Africa. The package of supply-side measures as a whole is of insufficient scale to restructure the manufacturing sector adequately in the domestic market. Trade follows investments and as an export-oriented economy, especially in the automotive sector, investments are required in best practice assets and

state-of-the-art equipment to accommodate export programmes. The automotive specific investment incentive under the MIDP in the form of the PAA has achieved a significant level of investment, despite the restricted rules and despite the exclusion of a large part of the component sector as well as the medium and heavy commercial vehicle sector. The PAA is under review as part of the 2005/6 MIDP Review and the scope exists to accommodate the requirements of the broader automotive industry. An expanded, internationally attractive PAA with less restricted rules and accessibility to the broader automotive industry should contribute to increased interest in South Africa as an investment destination of choice. Key investment decisions for the production of future new generation models post 2012 are imminent for several OEMs and an improved PAA will contribute towards triggering interest in South Africa. The investments by the OEMs also result in investments by component companies following their main customers, the OEMs. Especially in view of the South African government's target of a six percent economic growth rate by 2010, foreign direct investment flows have become more relevant in respect of the wellbeing of the country. The domestic automotive sector, as the country's leading manufacturing sector, can play a significant role in achieving the six percent economic growth rate given adequate government incentives to attract investments.

## **8.9 POTENTIAL AREAS OF FURTHER RESEARCH**

Based on the quantitative and qualitative research done for this study the following potential areas for further research have been identified:

The benefits under the MIDP linked to exports and linked to local content are not WTO compliant as was highlighted by the potential WTO challenge by Australia as far as automotive leather exports to Australia are concerned. The 2005/6 MIDP Review has as one of its aims to ensure that the MIDP complies with South Africa's international obligations in terms of the WTO. The recommendations could entail amendments to the current format and structure of the MIDP so as not to incentivise

exports or local content. In anticipation of the outcome of the 2005/6 MIDP Review, a potential research area in future could be:

- An analysis of the relevance and value of an amended MIDP as a promotional tool for the South African automotive industry in the global automotive environment.

The PAA was implemented as part of the 1999 MIDP Review. The PAA's main objective is model rationalisation and is restricted to investments by the OEMs and dedicated automotive component suppliers in order to achieve this objective. Model rationalisation has been achieved to a large extent as the number of model platforms has been reduced from 31 in 1999 to 18 in 2006 as was indicated in Chapter 4. Should the PAA, as part of the 2005/6 MIDP Review, be increased from the current 20 percent to a higher level and be expanded so as to be accessible to the broad spectrum of automotive component manufacturers as well as medium and heavy commercial vehicle assemblers, which are currently excluded, potential research areas could include:

- An analysis of the impact of an expanded, WTO compliant PAA on investment decisions for future new generation models by the OEMs.
- An analysis of the impact of an expanded WTO compliant PAA on investments in the automotive component sector.
- An analysis of the impact of an expanded WTO compliant PAA on increased industrial activity and investments in the medium and heavy commercial vehicle sector.

The MIDP's contribution to the South African automotive industry has been discussed in Chapter 4. Raw materials are important inputs into the automotive value chain and their usage increases along with the improvements and the growth of the domestic automotive industry. Owing to the synergies of the automotive sector with a large number of related upstream sectors supplying raw materials such as metals, plastics, chemicals and rubber, among others, a potential research area could be:

- An analysis of the impact of the MIDP on related economic sectors in South Africa.

For decades industry comments on automotive policy, via the industry associations, have formed part of the majority of automotive tariff investigations and automotive policy reports by the International Trade and Administration Commission (ITAC). A Motor Industry Task Group, including the industry associations, was appointed to investigate the South African automotive industry in 1992 and subsequently arrived at the MIDP as discussed in Chapter 3. The Motor Industry Development Council (MIDC), as discussed in Chapter 4, is the government-industry-labour automotive forum advising the Minister of Trade and Industry on automotive policy and related issues. Since the associations represent relevant industry constituents, a potential research area could be:

- An analysis of the role and relevance of industry associations in informing and influencing automotive industry policy and/or the development on the automotive industry in South Africa.

## **8.10 SUMMARY OF CHAPTER 8**

In a relatively short period of time the South African automotive industry has been fully integrated into a dynamic global automotive environment. The 1300 percent increase in vehicle exports, massive foreign investments, model rationalisation and overall production and operational efficiencies are evident of the successful transformation of the South African automotive industry since the MIDP was implemented just over a decade ago.

In view of the positive developments and the successes achieved, the primary objective of this study was to analyse the relevance and value of the MIDP as a promotional tool for the South African automotive industry in the global automotive environment. The empirical research, based on the responses and perceptions of direct automotive industry exporters and automotive industry stakeholders, conclusively confirm the relevance and value of the MIDP as a promotional tool for

the South African automotive industry in the global automotive environment. In addition, the empirical survey also confirms that the secondary objectives of this study were achieved, which are:

- To assist government and industry, by way of frequent reviews of the MIDP, in their approach to deal with the global automotive opportunities and challenges within WTO guidelines by amending and improving the MIDP as a promotional tool for the South African automotive industry in the global automotive environment.
- To add informational value to government and industry offensive and defensive strategies and planning in respect of current and future investment and export patterns in adapting the MIDP to be better equipped to seize global opportunities and minimise risks.
- To add value to related key economic sectors via their synergies with the automotive value chain, as raw materials such as metals, plastics, rubber, chemicals and leather, among others, also benefit from increased exports and investments in the automotive sector.

Foremost in the minds of the respondents is not only to sustain the remarkable achievements under the MIDP, but also to elevate the achievements to new heights. The outcome of the 2005/6 MIDP Review will determine the future policy direction of the South African automotive industry. In order to achieve the projected one million new vehicle sales in the domestic market by 2010 and to be a sustainable manufacturing base for future new generation models for exports to markets around the world, long-term policy certainty is vital. Various potential areas for further research have been identified following this study. Value-adding research is imperative for government, industry and labour to capitalise on opportunities and minimise risks. The South African government's target of a six percent economic growth rate by 2010 will largely depend on the ongoing successes achieved in priority sectors such as the domestic automotive sector.

## LIST OF REFERENCES

- Aaker, DA. (2001) *Strategic market management*. Sixth edition. New York: Wiley and Sons.
- Aaker, DA, Kumar, V & Day, GS. (1995) *Marketing research*. Fifth edition. New York: Wiley & Sons.
- Barnes, J. (1997) *Facing up to the global challenge: the state of KwaZulu-Natal's automotive components industry*. CSDS Research. Report No. 11. Durban: University of Natal,.
- Barnes, J. (1999) *International competitiveness and value chains in selected manufacturing sectors: the political economy of the South African automotive value chain*. Durban: University of Natal, Industrial Restructuring Project, School of Development Studies.
- Barnes, J. (2002) *Dynamic growth or limited value adding? The domestic auto industry's trajectory into the new millennium*. KwaZulu-Natal Benchmarking Club Newsletter. 5(7) July.
- Barnes, J & Black, A. (2004) *A strategic assessment of the South African motor vehicle, parts and accessories sector*. Pretoria: Trade and Industrial Policy Strategies.
- Barnes, J, Kaplinsky, R & Morris, M. (2003) *Industrial policy in developing economies: developing dynamic comparative advantage in the South African automobile sector*. Durban: University of Natal, Industrial Restructuring Project, School of Development Studies.
- Barnes, J & Morris, M. (1999) *International competitiveness and value chains in selected manufacturing sectors. Working paper: an analysis of the endogenous and exogenous factors impacting on the success of the Motor Industry Development Programme*. Durban: Industrial Restructuring Projects, School of Development Studies, University of Natal.
- Beeld. (2004) *China se brandstofplan kan motorvervaardigers hope kos*. Sake-Beeld. 10 November:2.
- Beeld. (2005a) *Strategiese flater kos GM dalk gradering*. 16 February:25.
- Beeld. (2005b) *General Motors se nuus ry VSA*. 23 November:28.

- Beeton, F. (2003) *Wheels within wheels*. Auto Alert No. 0048, 24 January:2.
- Bentley West Management Consulting and MPL Consulting (Bentley West). (2004) *Study to explore the retention and creation of employment in the South African automobile sector*. (T15/05/04) for FRIDGE (Fund for Research into Industrial Development Growth and Equity). May 2005:36.
- Black, A. (1998) *The impact of trade liberalisation on the South African automotive industry*. Cape Town: School of Economics, University of Cape Town.
- Black, A. (2001) *Globalisation and restructuring in the South African automotive industry*. Journal of International Development 13(6).
- Blum, C. (2000) *The case of an industry committed to the environment*. World Automotive Manufacturing No. 27, July:4, 5.
- Botha, Z. (2003) *Chev makes SA comeback*. Engineering News. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 17 September 2003.
- Brown, K & Mde, V. (2005) *Mpahlwa grilled as Cosatu puts industrial policy under the spotlight*. Available online: [www.businessday.co.za](http://www.businessday.co.za), accessed 18 August 2005.
- Bruggemans, C. (2005) *Our industrial dislocation set to deepen*. Weekly comment. Chief Economist, First National Bank. Available online: [www.fnb.co.za/economics](http://www.fnb.co.za/economics), accessed 14 April 2005.
- Burns, AC & Bush, RF. (2000) *Marketing research*. Third edition. New Jersey: Prentice-Hall.
- Business Day. (2004a) *China looks to boost exports of cars, parts*. Available online: [www.bday.co.za](http://www.bday.co.za), accessed 4 May 2004.
- Business Day. (2004b) *Exhibitions more than just for show*. Available online: [www.bday.co.za](http://www.bday.co.za), accessed 30 September 2004.
- Business Map Foundation. (2003) *The MIDP: What has it achieved?* Ref. No. 2003/018/INV/MP. 10 November:1-4.
- Campbell, K. (2004a) *Leading auto group responds to sustainability challenge*. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 16 August 2004.
- Campbell, K. (2004b) *Debate over future of electronics in cars*. Engineering News 24(25) July 2-8:21.



- Carson, I. (2004) *A survey of the car industry: perpetual motion*. The Economist 372(8391). September 4-10:3, 4.
- Centre for the Promotion of Imports from developing countries (CBI). (2004a) *Hungary, Slovakia and Slovenia*. No 297. May/June 2004:9.
- Centre for the Promotion of Imports from developing countries (CBI). (2004b) *EU Market Survey 2004: parts for cars, trucks, trailers and other mobile equipment*. Compiled for CBI by Van Lotringen International.
- Chew, E. (2004) *How can suppliers get leaner? Fix the RFQ efficiencies*. No. 8. SupplierBusiness.com weekly. 28 June:5, 6.
- Chiaberta, S. (2004a) *10th Anniversary of the DTI in a democratic South Africa, Erwin reflects on a decade of trade and industrial development*. Engineering News 24(14) April 16-22:25-28.
- Chiaberta, S. (2004b) *Service delivery now the main focus*. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 19 April 2004.
- Cokayne, R. (2006) *SA cars are overpriced, says report. MIDP has failed consumers*. Business Day, 22 May:1.
- Consult 101. (2005) *The effect of the proposed SACU-Mercusor states and SACU-India trade deal on the South African automotive industries*. Fund for Research into Industrial Development, Growth and Equity (FRIDGE). Nedlac. Sandton, pp 264, 265.
- Cooper, DR & Schindler, PS. (2001) *Business research methods*. Seventh edition. Singapore: McGraw-Hill.
- Crawford, BA. (2004a) *Investment, support needed for SA to tap global car market*. Metalworking News 3(5).
- Crawford, BA. (2004b) *BMW boss urges vehicle makers to produce a million a year*. Metalworking News 3(4).
- Creamer, T. (2005) *Luxury-car giant finalizing R2 billion capex plan*. Engineering News. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 25 February 2005.
- Czernowalow, M. (2005) *BMW parts suppliers open manufacturing facility*. Engineering News. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 19 April 2005.

- Czinkota, MR & Ronkainen, IA. (2004) *International Marketing*. Seventh edition. Ohio: South-Western, Thomson Learning.
- Damoense, MY & Alan, S. (2004) *An analysis of the impact of the first phase of South Africa's Motor Industry Development Programme (MIDP), 1995-2000*. Development Southern Africa 21(2) June:252, 264.
- Davies, H & Ellis, P. (2000) *Porter's competitive advantage of nations: time for the final judgment*. Journal of Management Studies No. 37 December:8.
- Davies, M. (2004) *Creating market space in China's auto sector*. *Emerging Market Focus: Asia*. Asia Business Briefing. Available online: [www.emergingmarkets.co.za](http://www.emergingmarkets.co.za), accessed 26 July 2004.
- Davies, R & Van Seventer, DE. (2003) *Is the public sector crowding out an appropriate analytical framework for the liberalising economy of SA?* Trade & Industry Monitor Vol. 28 December:9.
- De Lange, R. (2005) *Small cars a big headache*. Finance24. Available online: [www.finance24.com](http://www.finance24.com), accessed 5 May 2005.
- Department of Trade and Industry (DTI). (1996) *Current developments in the automotive industry*. September. Pretoria.
- Department of Trade and Industry (DTI). (1997a) *Current developments in the automotive industry*. September. Pretoria.
- Department of Trade and Industry (DTI). (1997b) *Export strategy for the automotive sector*. December. Pretoria.
- Department of Trade and Industry (DTI). (1998) *Current developments in the automotive industry*. September. Pretoria.
- Department of Trade and Industry (DTI). (1999) *Current developments in the automotive industry*. September. Pretoria.
- Department of Trade and Industry (DTI). (2000) *Current developments in the automotive industry*. September. Pretoria.
- Department of Trade and Industry (DTI). (2001) *Current developments in the automotive industry*. September. Pretoria.
- Department of Trade and Industry (DTI). (2002a) *Current developments in the automotive industry*. September. Pretoria.

- Department of Trade and Industry (DTI). (2002b) *Dti announces extension of the Motor Industry Development Programme (MIDP)*. Press release. 6 December. Pretoria.
- Department of Trade and Industry (DTI). (2003a) *Motor Industry Development Programme Review Report*. 13 May. Pretoria.
- Department of Trade and Industry (DTI) (2003b) *Current developments in the automotive industry*. September. Pretoria.
- Department of Trade and Industry (DTI) (2004) *Current developments in the automotive industry*. September. Pretoria.
- Department of Trade and Industry (DTI) (2005) *Minister Mpahlwa's budget address in the NCOP*. Available online: [www.thedti.gov.za](http://www.thedti.gov.za), accessed 14 April 2005.
- De Vos, F. (2003) *Special report: luxury cars, stability drive*. Financial Mail August 8:63-66.
- De Vos, F. (2005). *Toyota se blink sake-toekoms: Wat beteken dit vir die verbruiker?* Rapport. 27 February:62, 63.
- De Witt, R. (2004) *German contribution to South Africa: a R20 billion investment*. Engineering News 23(42) October 31-November 6:58.
- Downing, R. (2004) *Economy outlook: South African economic prospects*. October 2004. 20 April:6.
- Economist. (2004) *Driving change*. The Economist 372(8391) September 4-10:15, 16.
- Economist Intelligence Unit (EIU). (2003) *Automotive forecast October 2003*. United Kingdom. Available online: [www.eiu.com](http://www.eiu.com), accessed 6 May 2005.
- Economist Intelligence Unit (EIU). (2004) *World investment prospects: the revival of globalisation?* p 182.
- Emslie, R. (2005) *Hybrids too expensive*. RMI Automobil. February:16.
- Engineering News. (2004) *SA exporters taking strain*. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 3 December 2004.
- Engineering News. (2005a) *52 new models launched at 2005 Detroit Auto Show*. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 25 January 2005.
- Engineering News. (2005b) *Auto sector is a key industry for steel giant*. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 4 April 2005.

- Filipovski, I. (2004) *Automotive industry soundbites*. December (Press extracts). CNC Design Consultants. Available online: [www.cdcza.co.za](http://www.cdcza.co.za), accessed 5 January 2005.
- Flatters, F. (2002) *From import substitution to export promotion: driving the South African motor industry*. Canada: Queen's University.
- Flatters, F. (2005) *The economics of the MIDP and the South African motor industry*. Canada: Queen's University.
- Fraunhofer. (2002). *Management summary: Future Automotive industry structure (FAST) 2015*. Mercer Management Consulting and the Fraunhofer Society. Available online: [www.fraunhofer.de](http://www.fraunhofer.de), accessed, 4 April 2005:1-6.
- Gabrys, RM. (2002) *The case of an industry committed to the environment. Deloitte Research: Collaborative Commerce in the automotive industry*. Detroit, Mich.: Deloitte Consulting, pp 4, 5.
- Gartside, M. (2003) *Autofacts global automotive outlook release*. Quarter 4. London, UK: PriceWaterhouseCoopers.
- Gekis, A. (2004) *Economic impact assessment study. Background study: The manufacturing sector in Southern Africa*. US: The Services Group (TSG) for the United States Agency for International Development (USAID)
- Gelb, S. (2004) *Foreign companies in South Africa. Quarterly Journal for Trade Partners and Investors* No. 4:41-45.
- Gillespie, K, Jeannet, J-P & Hennessey, DH. (2004) *Global marketing, an interactive approach*. Boston, Mass.: Houghton Mifflin.
- Graham, D. (2004) *Editor's letter*. SA Quarterly Journal. December 2003–February 2004: 4.
- Haelterman, P. (2004) *Supply chain management: focus on OEM/suppliers relationships*. Vehicle News No. 282. November: 56-60.
- Hanival, S. (2003) *Non-tariff measures: the bigger picture for South and Southern African Exports*. Trade & Industry Monitor. Newsletter of Trade and Industrial Policy Strategies (TIPS) Vol. 28. December:1-3.
- Havenga, M. (1998) *The South African assembly industry*. FNB Industry Analysts, 5 June. Johannesburg.

- Haynes, C. (2003a) *The dark side of telematics*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 27 January 2003.
- Haynes, C. (2003b) *Excess capacity situation getting much worse*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 12 June 2003.
- Haynes, C. (2003c) *Emerging markets may help cut global costs*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 17 June 2003.
- Haynes, C. (2003d) *Global overcapacity is not a problem, it's where the overcapacity is located. Suppliers adopt OEM tactics to cut costs. Grovelling apology withdrawn*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 15 August 2003.
- Haynes, C. (2003e) *Merger talk: auto parts sector faces renewed consolidation*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 9 September 2003.
- Haynes, C. (2003f) *Need for an extra 170 auto assembly plants worldwide? Delphi and other suppliers cut jobs and report losses*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 27 October 2003.
- Haynes, C. (2003g) *More bullying of suppliers in a new twist on adversarial commerce. Advertising reflects the move from product to brand*. Autocluster Africa Weekly Report. Available online: [www.autocluster.com](http://www.autocluster.com). Weekly update, accessed 6 November 2003.
- Haynes, C. (2003h) *American manufacturing moves from passenger to truck*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 20 November 2003.
- Haynes, C. (2004a) *Collaboration is a better business model than bullying*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 21 May 2004.

- Haynes, C. (2004b) *New benchmarks for cost-efficient design and manufacturing*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 11 June 2004.
- Haynes, C. (2004c) *World's largest manufacturing sector account for US\$13 trillion of global economic activity*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 13 July 2004
- Haynes, C. (2004d) *You don't have to be mean to succeed in the motor business*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 12 August 2004.
- Haynes, C. (2004e) *The Chinese attack begins. Somebody's getting it right*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 27 August 2004.
- Haynes, C. (2004f) *GM to dump 12 000 workers as Europe becomes too expensive: Developing countries would be better off without cars*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 15 October 2004.
- Haynes, C. (2004g) *Global megatrends*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 11 November 2004.
- Haynes, C. (2005a) *Industry hit new record levels of recalls*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 13 January 2005.
- Haynes, C. (2005b) *Many of the world's automakers are making heavy losses or destroying value*. Autocluster Africa Weekly Report. Weekly update. Available online: [www.autocluster.com](http://www.autocluster.com), accessed 26 January 2005.
- Holmes, M. (2001) *MIDP takes high road: PGMs and chromium behind converter blast-off*. South Africa Wealth of Prospects. 2001/2002:67. Pinegowrie.
- Humphrey, J & Memedovic, O. (2003) *The global automotive industry value chain: What prospects for upgrading by developing countries?* Vienna: United Nations Industrial Development Organisation.
- Industrial Development Corporation (IDC). (1993) *Study of the competitiveness of the South African Motor Industry*. December. Sandton.



International Organisation of Motor Vehicle Manufacturers (OICA). (2004) *The world's automotive industry: some key figures*. Information pamphlet. Available online: [www.oica.net](http://www.oica.net), accessed 23 September 2005.

International Trade and Administration Commission (ITAC) (1932a) *Customs tariff amendment: motorcar building industry*. Report No. 139. May. Pretoria.

International Trade and Administration Commission (ITAC) (1932b) *Imposition of exchange dumping on motor cars*. Report No. 142. June. Pretoria.

International Trade and Administration Commission (ITAC). (1949) *Die Motornywerheid*. Report No 313. February. Pretoria.

International Trade and Administration Commission (ITAC). (1960) *Investigation into the motor industry in South Africa*. Report No. 613. April. Pretoria.

International Trade and Administration Commission (ITAC). (1965) *Review of the rebates of the customs and excise duties applicable to the industry manufacturing passenger cars in the Republic*. Report No. 1120. March. Pretoria.

International Trade and Administration Commission (ITAC). (1977) *An enquiry into the local manufacture of motor vehicles and components*. Report No. 1777. April. Pretoria.

International Trade and Administration Commission (ITAC). (1985) *Investigation into a South African content programme for heavy commercial vehicles*. Report No. 2435. December. Pretoria.

International Trade and Administration Commission (ITAC). (1988) *Investigation into the industry manufacturing passenger cars and light commercial vehicles*. Report No. 2627. March. Pretoria.

International Trade and Administration Commission (ITAC). (1989) *Investigation into a structural adjustment programme for the industries manufacturing motor vehicles and automotive components: Phase VI of the local content programme*. Report No. 2767. January. Pretoria.

International Trade and Administration Commission (ITAC). (1992) *Amendment of Phase VI of the local content programme for motor vehicles*. February. Pretoria.

International Trade and Administration Commission (ITAC). (1994) *Reduction of the customs duty and exemption from the payment of surcharge on passenger cars and goods motor vehicles and buses*. Report No 3469. April. Pretoria

International Trade and Administration Commission (ITAC). (1995) *Revised Customs dispensation for the motor industry*. Report No 3625. Augustus. Pretoria.

International Trade and Administration Commission (ITAC). (2000a) *Amendment of the rebate provisions pertaining to drive train components for medium and heavy motor vehicles falling under the Motor Industry Development Programme*. Report No 4040. May. Pretoria.

International Trade and Administration Commission (ITAC). (2000b) *Midterm review and extension of the Motor Industry Development Programme for light motor vehicles*. Report No 4045. May. Pretoria.

International Trade and Administration Commission (ITAC). (2003a) *Amendment of the rates of duty on automotive components and light motor vehicles and the qualifying value of automotive exports under the Motor Industry Development Programme (MIDP) for light motor vehicles*. November. Pretoria.

International Trade and Administration Commission (ITAC). (2003b) *Calculation of company specific percentages for duty free allowance purposes*. December. Pretoria.

International Trade and Administration Commission (ITAC). (2003c) *Detailed information on import rebate credit certificates (IRCCs)*. December. Pretoria.

International Trade and Administration Commission (ITAC). (2003d) *Detailed information on the Motor Industry Development Programme (MIDP) for light motor vehicles*. December. Pretoria.

International Trade and Administration Commission (ITAC). (2003e) *Detailed information on the Motor Industry Development Programme (MIDP) for medium and heavy motor vehicles*. December. Pretoria.

International Trade and Administration Commission (ITAC). (2003f) *Guidelines in respect of the Productive Asset Allowance (PAA)*. December. Pretoria.

International Trade Centre (ITC). (2000) *Redefining trade promotion: the need for a strategic response*. Geneva:16.



- Kaplinsky, R & Morris, M. (2000) *A handbook for value chain research*. Durban: Industrial Restructuring Project, School of Development Studies, University of Natal.
- Katz, A. (2003) *Peugeot Citroen expects slowdown in profit growth this year*. Business Day, 13 February:23.
- Kok, L. (2003) *BMW brei SA aanleg teen R2 miljard uit*. Beeld (Sake-Beeld), 3 Maart:4.
- Kok, L. (2004) *SA kan gou miljoen nuwe motors per jaar verkoop*. Beeld (Sake Beeld), 28 October:1
- Kok, L. (2005) *Groep vervaardig R120 miljard se motors vir uitvoermark: Toyota slaan bulkontrak los*. Beeld (Sake-Beeld), 26 April:19.
- Kok, L. (2006) *Dit reën pap, maar motorbedryf gly ook effens op die nat stysel*. Beeld, 24 March:22.
- KPMG. (2005a) *China automotive and components market 2005*. Hong Kong: KPMG, pp 4, 6.
- KPMG. (2005b) *2005 KPMG global automotive executive survey*. Automotive Momentum. Industrial Markets. Johannesburg: KPMG, 1(1):1-15.
- KPMG. (2006) *KPMG global automotive survey: Industrial, automotive and pharmaceutical*. Johannesburg: KPMG, pp 1-15.
- KwaZulu-Natal Benchmarking Club Newsletter (KZN). (2002) *The East European Tigers: South Africa's most important competition*. 5(9) September: 1, 2.
- KwaZulu-Natal Benchmarking Club Newsletter (KZN). (2003) *Achieving consistent quality through appropriate Quality Management Systems: an insight into automotive certifications*. 3(3) August:3.
- Lamprecht, N. (2004) *Automotive imports under the Motor Industry Development Programme (MIDP)*. Autoinsight. August:15.
- Lamprecht, N. (2005a) *The MIDP Review 2005*. Autoinsight. April:13, 14.
- Lamprecht, N. (2005b) *Latest automotive component export data*. Autoinsight. June:49, 50.
- Lourens, C. (2003) *Strong rand will boost foreign direct investment in SA*. Business Day. Available online: [www.businessday.co.za](http://www.businessday.co.za), accessed 27 October 2003.

- Lourens, C. (2005a) *New support scheme proposed for motor industry*. Business Day. Available online: [www.businessday.co.za](http://www.businessday.co.za), accessed 2 February 2005.
- Lourens, C. (2005b) *Vehicle sector needs to conjure up new deal*. Business Day. Available online: [www.businessday.co.za](http://www.businessday.co.za), accessed 4 May 2005.
- Mabokano, M. (2004) *South African demo car*. Pretoria: Department of Science and Technology.
- Magney, P. (2005) *Automotive industry jumps into electronics*. Asia-Pacific Transportation Magazine. ISSN 1727-1169. January: 4, 5.
- Malhotra, NK. (2004) *Marketing research: an applied orientation*. Fourth edition. New Jersey: Pearson Education.
- Mawson, N. (2005a) *Supplier park brings value to the auto industry*. Engineering News. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 11 March 2005.
- Mawson, N. (2005b) *Post-MIDP profitability concerns raised*. Engineering News. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 14 April 2005.
- Mercer, G. (2004) *Spectacular industry: big challenges*. RMI Automobil. April:18-20.
- Mittner, M. (2005) *SA staan man as belê-plek*. Beeld. 14 December:23.
- Motor Industry Task Group (MITG). (1994) *Report and recommendations: Development Programme for passenger cars and light commercial vehicles*. March. Pretoria.
- Msiza, M. (2004) *Don't compare SA, overseas*. Finance24. Available online: [www.finance24.co.za](http://www.finance24.co.za), accessed 7 May 2004.
- Mullineux, N. (1999) *The car aftermarket in Europe*. Second edition. London: Financial Times Automotive, FT Management Report.
- National Association of Automotive Components and Allied Manufacturers (NAACAM). (2005) *President's Report. Dave Coffey*. Official Directory of the National Association of Automotive Component and Allied Manufacturers pp 5, 6.
- National Association of Automotive Components and Allied Manufacturers (NAACAM). (2001) *NAAMSA annual report 2000/2001*. Pretoria.
- National Association of Automobile Manufacturers of South Africa (NAAMSA). (2003) *Press release: Vehicle affordability: Comment by NAAMSA*. 3 December.

- National Association of Automobile Manufacturers of South Africa (NAAMSA). (2004) *NAAMSA annual report 2004*. Pretoria.
- National Association of Automobile Manufacturers of South Africa (NAAMSA). (2005) *NAAMSA annual report 2005*. Pretoria.
- National Association of Automobile Manufacturers of South Africa (NAAMSA). (2006) *Quarterly review of business conditions: Motor vehicle manufacturing industry: 4th Quarter 2005*. Pretoria.
- Newman, D. (2003) *How the MIDP works*. Engineering News 23(40) October 17-23:60.
- Njobeni, S. (2005) *Mpahlwa vows to end import parity pricing*. Business Day. Available online: [www.businessday.co.za](http://www.businessday.co.za), accessed 28 June 2005.
- Noffke, C. (2004) *Developing world growth will accelerate energy*. USA-SA Business Spotlight Exclusive 8(16) 21 April:1.
- Oxford Intelligence Business Analysis. (2003) *Global investment strategies and location benchmarking: advanced and performance automotive engineering*. Oxford. Oxford Intelligence and IBM business Consulting Services, p. 1.
- Perrie, M. (2004) *The Brazilian Rumba, Chinese Take-aways or Indian cuisine*. RMI Automobil May:36, 37.
- Pretorius, B. (2004) *Key improvements*. RMI Automobil November:14.
- Preuss, H. (2005) *Vehicle sales exceed expectations*. Business Day, 3 March:1.
- PriceWaterhouseCoopers (PWC). (2005) *Global Automotive Financial Review: an overview of 2004 industry data, trends and financial reporting practices*. August:5, 6, 41.
- Porter, ME. (1990) *The competitive advantage of nations*: President and Fellows of Harvard College, Harvard. Harvard Business Review. March/April.
- Rhys, G. (2002) *The motor industry: the challenge of change*. Car Conference presentation at Auto Africa Expo. University of Cardiff. Director, Centre for Automotive Industry Research. 23 October:28.
- Richardson, E. (2003) *Auto exports in the fast lane: South Africa*. Quarterly Journal for Trade Partners and Investors. Johannesburg. The International Marketing Council of South Africa. No. 5:44-49.

- Robbins, T. (2004) *China a threat to SA's automotive success*. Engineering News. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 9 November 2004.
- Robertson, I. (2004) *The challenges facing the MIDP: a NAAMSA perspective*. Autoinsight March:10.
- Sasao, R. (2002). *The South African automotive industry: status quo and problems to be tackled*. Available online: [www.aidc.co.za](http://www.aidc.co.za), accessed 28 August 2002.
- Smeets, R. (2004) *Ripe for revolution*. The Economist 372(8391) September 4-10:11.
- South African Consulate General Chicago (SACG). (2004) *Automotive and automotive parts industries in the United States of America*. DTI, Chicago. November 2004.
- Strydom, JW. (2004) *Introduction to marketing*. Third edition. Cape Town: Juta.
- Teraï, M. (2003) *Analysis of the automotive industry in Japan and Asia: Asian Strategy – Japanese automakers focus on production in Thailand and expansion into China*. Asian Automotive Business Review 14(3) July:19-20.
- Trade Secrets. (2004) *The export answer book for small and medium size exporters*. Pretoria, ITC:76, 273.
- Twine, T. (2004) *Trade winds of change*. SA Quarterly Journal. December 2003–February 2004: 16.
- Tull, DS & Hawkins, DI. (1993) *Marketing research: measurement and method*. Sixth edition. New York: Macmillan.
- Tustin, DH, Lighthelm, AA, Martins, JH & Van Wyk, HdeJ. (2005) *Marketing research in practice*. First edition. Pretoria: Unisa Press.
- United Nations Conference on Trade and Development (UNCTAD). (2000) *Tax incentives and foreign direct investment: a global survey*. ASIT Advisory Studies. No.16. Geneva.
- United Nations Industrial Development Organisation (UNIDO). (2003) *Republic of South Africa country service framework*. Pretoria: Department of Trade and Industry and Department of Environment and Tourism, pp 5-8.
- Venter, I. (2004a) *Gearing up: Where to next for SA's motor industry?* Engineering News 24(28) July 23-29:16, 17.

- Venter, I. (2004b) *Rand bites autocat exports*. Engineering News. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 22 October 2004.
- Venter, I. (2005) *Toyota SA is fast becoming leader in export race*. Engineering News. Available online: [www.engineeringnews.co.za](http://www.engineeringnews.co.za), accessed 12 April 2005.
- Venter, I. (2006) *Automotive anomaly. When the MIDP ends, will South Africa still have an automotive industry?* Engineering News 26(9) March 17-23:16, 17.
- Verband der Automobilindustrie (VDA). (2004) *Auto Annual Report 2004*. Frankfurt: VDA Communications, p. 28.
- Von Keyserlingk, C. (2005) *GM-koors wys VSA is siek*. Rapport (Sake Rapport), 27 March:3.
- Von Kirchbach, F & Mimouni, M. (2003) *Market access barriers: A growing issue for developing country exporters?* No. 2. Geneva, Switzerland: International Trade Forum, pp 25-30.
- Wasserman, H. (2006) *Toyota kan GM onttoorn*. Rapport, 8 January:19.
- Whitebread, C. (2003) *OEM sourcing strategies*. Autobusiness. Available online: [www.just-auto.com](http://www.just-auto.com). February 2003:1-19.
- Williams, C. (2004a) *Interview with Clive Williams, Executive Director of NAACAM, about the MIDP and related issues*. Autoinsight 15 March:14, 15.
- Williams, C. (2004b) *The workings of the MIDP*. NAACAM Directory:8, 9.
- Williams, F. (2005) *Sny koste van vervoer vir flink ekonomie. So kan SA meeding – Maria Ramos*. Beeld, 18 March:23.
- Zhuwakinyu, M. (2003) *Auto sector strength is not guaranteed*. Engineering News 23(40) October 17-23:7.

## Appendix A: Empirical survey

### MIDP QUESTIONNAIRE

Questions 1 to 4 require you to tick of the relevant box/es applicable to your company's business operations.

*(Please do not write in the grey boxes!)*

1. Please indicate if your company is registered under the MIDP?

YES			NO		
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*(The following questions apply to respondents irrespective of your answer to Question 1, whether it was YES or NO).*

2. Please indicate if your company benefits from the MIDP: *(Tick for directly and indirectly should both apply)*

- directly

Via IRCC claims		
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- indirectly (Tick for all applicable alternatives)

Via increased order by OEMs		
Via increased volumes		
Via increased interest		
Via other areas		

- no impact

On your business operations		
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3. Please indicate whether (you think) the automotive industry in SA is capable of coping with global competition without the MIDP.

YES			NO		
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4. Please indicate if you or your company has ever participated in: (Tick for all applicable alternatives)

Any organised automotive pavilion		
Any organised automotive mission		
Any automotive event individually		

**Questions 5 to 8 require you to indicate on a 7-point scale your views and opinion where 1 indicates a low value/impact, 7 a high value/impact and 4 a neutral position.**

5. Please indicate how you would rate the value of the MIDP to promote *the SA automotive industry in general* in the global automotive environment since it was implemented in 1995 to:

	Low value/low impact				High value/high impact			
Generate business (domestic market and/or internationally)	1	2	3	4	5	6	7	
Attract investments	1	2	3	4	5	6	7	
Trigger interest into SA	1	2	3	4	5	6	7	
Other? ( <i>please specify</i> )	1	2	3	4	5	6	7	

6. Please indicate how you would rate the value of the Motor Industry Development Programme (MIDP) to promote *your company in particular* in the global automotive environment since it was implemented in 1995 to:

	Low value/low impact				High value/high impact			
Generate business (domestic market and/or internationally)	1	2	3	4	5	6	7	
Attract investments	1	2	3	4	5	6	7	
Trigger interest into SA	1	2	3	4	5	6	7	
Other? ( <i>Please specify</i> )	1	2	3	4	5	6	7	

7. Please indicate your views on the role of the MIDP with its extension until 2012 in terms of:

	Increase	Remain similar	Decrease	
Generating business (domestic market and/or internationally)				
Attracting investments				
Trigger interest into SA				
Other? ( <i>Please specify</i> )				

8. Please indicate your views on the dependence on support for the automotive industry post 2012 when the MIDP is due to expire in terms of:

Low value/low impact				High value/high impact				
SA automotive industry	1	2	3	4	5	6	7	

Low value/low impact				High value/high impact				
Your company	1	2	3	4	5	6	7	



**Question 9 requires you to indicate your views and opinion in ranking the following 15 factors in the table from 1 to 15 where position number 1 will have the highest value/impact, position number 2 the second highest value/impact with position number 15 the lowest value/impact.**

9. Please indicate how you would rate the following factors on *the SA automotive industry's business operations in general* ranking them in priority from number 1 indicating the highest impact/value to number 15 indicating the lowest value/impact.

World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP		
SA Government incentives to attract investments		
Free trade agreements in generating business opportunities		
Market access into foreign markets		
Appreciation of the Rand against foreign currencies in respect of exports		
Appreciation of the Rand against foreign currencies in respect of investments		
The comparative advantages of SA to generate business and attract investments in the automotive sector		
The comparative advantages of the SA automotive industry to generate business and attract investments in the automotive sector		
The comparative advantages of the SA automotive industry to generate business and attract investments for other related sectors		
Distance to main automotive markets		
Participation in National Pavilions to promote the SA automotive industry		
Participation in outward selling missions to promote the SA automotive industry		
Participation in seminars in foreign countries to promote the SA automotive industry		
Raw material prices		
Formal automotive structures such as the Motor Industry Development Council as a forum represented by all industry stakeholders to discuss automotive policy and related issues		

10. Please explain your ranking in question 10. (Please indicate any other factor/s not mentioned in the table, which you may deem important as well as the ranking).

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**Question 11 requires you to indicate your views and opinion in ranking the following 15 factors in the table from 1 to 15 where position number 1 will have the highest value/impact, position number 2 the second highest value/impact with position number 15 the lowest value/impact.**

11. Please indicate how you would rate the following factors on *your company's business operations* ranking them in priority from number 1 indicating the highest impact/value to number 15 indicating the lowest impact/value.

World Trade Organisation (WTO) rules and regulations and potential impact on the MIDP		
SA Government incentives to attract investments		
Free trade agreements in generating business opportunities		
Market access into foreign markets		
Appreciation of the Rand against foreign currencies in respect of exports		
Appreciation of the Rand against foreign currencies in respect of investments		
The comparative advantages of SA to generate business and attract investments in the automotive sector		
The comparative advantages of the SA automotive industry to generate business and attract investments in the automotive sector		
The comparative advantages of the SA automotive industry to generate business and attract investments for other related sectors		
Distance to main automotive markets		
Participation in National Pavilions to promote the SA automotive industry		
Participation in outward selling missions to promote the SA automotive industry		
Participation in seminars in foreign countries to promote the SA automotive industry		
Raw material prices		
Formal automotive structures such as the Motor Industry Development Council as a forum represented by all industry stakeholders to discuss automotive policy and related issues		

12. Please explain your ranking in question 11. (Please indicate any other factor/s not mentioned in the table, which you may deem important as well and the ranking).

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**Questions 13 to 18 require specific information in respect of your company.**

13. Please provide information in respect of the ownership of your company. (*Associations, agencies, unions, etc should just indicate not applicable*)

% Foreign owned		
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14. Please provide information in respect of the total employment in your company. (*Associations, agencies, unions, etc should just indicate not applicable*)

Employment (total including monthly, hourly and contract workers)		
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15. Please provide information in respect of the mix of products manufactured/assembled by your company. (*Associations, agencies, unions, etc should just indicate not applicable*)

Product mix (please indicate high volume products in case of a diverse number of products manufactured/assembled)	List of products:	
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16. Please just tick the relevant box/es applicable in respect of your company's sales.  
*(Associations, agencies, unions, etc should just indicate not applicable)*

Sales to OEMs (motor vehicle assemblers)			Sales to aftermarket			Sales to exports		
--	--	--	-------------------------	--	--	------------------	--	--

17. Please just tick the relevant box in respect of your company's turnover. *(Associations, agencies, unions, etc should just indicate not applicable)*

R1 to R40 million per annum			R41 million to R200 million per annum			R201 million to R500 million per annum		
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18. Please provide information in respect of your company's exports, direct and/or indirect.  
*(The current position or closest estimate should be provided. Associations, agencies, unions, etc should just indicate not applicable)*

Exports (direct and/or indirect) as % of turnover		
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**Questions 19 to 20 require your views and opinion.**

19. Please indicate your views on the value and relevance of the MIDP as a promotional tool for *the SA automotive industry in general* in the global automotive environment.

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20. Please indicate your views on the value and relevance of the MIDP as a promotional tool for *your company* in particular in the global automotive environment.

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21. Contact details:

Name: .....

Position: .....

Company: .....

Tel No: .....

E-mail: .....

**Thank you for your time and contribution in participating in this research study!**

*Please fax the completed survey back to Fax No (012) 394 2165 or e-mail to  
norman@isa.org.za.*

## **Appendix B: Covering letter**

Dear Participant

### **TITLE OF STUDY: ANALYSIS OF THE MOTOR INDUSTRY DEVELOPMENT PROGRAMME (MIDP) AS A PROMOTIONAL TOOL FOR THE SA AUTOMOTIVE INDUSTRY IN THE GLOBAL AUTOMOTIVE ENVIRONMENT**

The South African automotive industry has come a long way since 1995 when the Motor Industry Development Programme (MIDP) was implemented. As part of my research for a post graduate study at UNISA, your views and expressions of the relevance and value of the MIDP, directly or indirectly, as a promotional tool for your company's business operations in particular and for the SA automotive industry in general in the global automotive environment will be highly appreciated.

The SA automotive industry was ranked 20<sup>th</sup> in 2003 comprising a market share of only 0,7% of global vehicle production. Despite its small size, it is the leading manufacturing sector in the SA economy and is regarded as a benchmark for the other priority sectors in many respects. Total automotive exports in value terms are growing at a compounded annual rate of 33% since 1995 when the MIDP was introduced. Completely built up vehicles and components were exported to 117 destinations around the world in 2003 with exports in both instances achieving record breaking levels for several consecutive years since 1995. Significant investments in best practice assets and state-of-the-art technology accommodate these exports accompanied by technology transfers, skills upgrading and productivity gains, among others.

Government and industry are continuously endeavouring to pursue opportunities via automotive National Pavilions, trade missions and seminars, among others, to promote the world class capabilities of the SA automotive industry and to inform key decision makers of the positive developments taking place in order to establish the SA automotive industry as an investment destination or source country of choice.



SA's comparative advantages includes its first world infrastructure, emerging markets costs and abundance of raw materials while the automotive industry's comparative advantages include its flexibility and ability to produce short production runs competitively compared to the long production runs of companies overseas.

Thank you for your participation in this research study. In this ever demanding industry, your inputs will play an important role in improving the current as well as potential new approaches by all industry stakeholders to promote the SA automotive industry in general and your company in particular in the global automotive environment. All the information will be treated in the strictest confidence and will only be published in aggregate format. Feedback on this research study, after its completion, will be made available on request.

Yours faithfully

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## Appendix C: List of respondents to the empirical survey

### *Twelve stakeholders*

1. Mr. Nico Vermeulen, Director, National Association of Automobile Manufacturers of South Africa (NAAMSA)
2. Mr. Clive Williams, Executive Director, National Association of Automotive Components and Allied Manufacturers (NAACAM)
3. Mr. Brian Potter, Chairperson, Catalytic Converter Interest Group (CCIG)
4. Dr. Etienne Human, Chief Executive Officer, South African Tyre Manufacturers' Association (SATMC)
5. Mr. David Hughes, Executive Director, Aluminium Federation of South Africa (ALUSAF)
6. Mr. Roger Pitot, Automotive Industry Export Council (AIEC) and Chairperson, NAAMSA MIDP Specialist Committee
7. Dr Paulo Fernandes, Managing Director, Automotive Industry Development Centre (AIDC)
8. Mr. Johan Potgieter, Deputy Project Director, Eboni Consulting International (Pty) Ltd, South African International Business Linkages (SAIBL), A Corporate Council on Africa Programme, USAID.
9. Dr Justin Barnes, Chief Facilitator, Durban Automotive Cluster, South African Automotive Benchmarking Club and consultant to the Department of Trade and Industry for the 1999 and 2002 MIDP Reviews.
10. Prof Anthony Black, Director, School of Economics, University of Cape Town and consultant to the Department of Trade and Industry for the 1999 and 2002 MIDP Reviews (**Academic**)
11. Mr. Gustav Meyer, Director: Automotive, Trade and Investment South Africa, a division of the Department of Trade and Industry and Chairperson: Motor Industry Development Council (**Government**)

12. Mr. Pieter Goosen, Deputy Director, International Trade and Administration Commission, division of the Department of Trade and Industry **(Government)**

*Eight motor vehicle manufacturers (OEMs)*

1. BMW South Africa (Pty) Ltd
2. DaimlerChrysler South Africa (Pty) Ltd
3. Fiat Auto South Africa (Pty) Ltd
4. Ford Motor Company of Southern Africa (Pty) Ltd
5. General Motors South Africa (Pty) Ltd
6. Nissan South Africa (Pty) Ltd
7. Toyota South Africa Motors (Pty) Ltd
8. Volkswagen of South Africa (Pty) Ltd

*37 Component manufacturing companies*

1. African Outback Products
2. Alfred Teves Brake Systems (Pty) Ltd
3. Auto Component Manufacturing cc
4. Autotube Manufacturing (Pty) Ltd
5. Behr Engine Cooling
6. Behr South Africa (Pty) Ltd
7. Cable Technique
8. C&J Services
9. Dorbyl Automotive Technologies
10. Delford Industrial cc
11. Diagnostic Developments
12. Durham (Pty) Ltd
13. Fabkomp (Pty) Ltd
14. Faurecia Autoplastics South Africa (Pty) Ltd

15. F1-X Sportsline
16. Feltex Automotive Trim
17. Gabriel SA (Pty) Ltd
18. Geman Automotive Components (Pty) Ltd
19. Hanibal Safari Equipment
20. Hayes Lemmerz South Africa (Pty) Ltd
21. Kaymac Rotomoulders
22. Maxe Stainless Steel
23. Move on Up
24. Mr Lens
25. PFK Electronics (Pty) Ltd
26. Pinetown Precision Engineering cc
27. Pretoria Clutch and Brake Specialists (Pty) Ltd
28. Prisma Engineering
29. Shurlock International (Pty) Ltd
30. Sigma International
31. Spanjaard Ltd
32. Supreme Spring
33. Universal Clips
34. Universal Pressure Testing cc
35. Venture South Africa
36. Vibol Systems (Pty) Ltd
37. Volkspares (Pty) Ltd

## **Appendix D: Detailed qualitative responses to Question 10 of the empirical survey**

*Qualitative responses to Question 10 of the questionnaire relating to the **stakeholders'** qualitative views in respect of their rating of the factors with the highest to the lowest value/impact impacting on the South African automotive industry's business operations in general*

- South Africa has to increase its competitiveness position as both manufacturer and exporter base to maintain its position in the global automotive networks. Issues that will enhance our competitiveness are therefore of the utmost importance.
- Marketing efforts are of importance but the industry has to be competitive for these to be successful and firms will only invest if it makes economic sense. However these efforts need to be continued and improved where feasible. The same applies to the role of the MIDC – close government-industry relationships are important. Distance to the major automotive markets is clearly a problem in one respect, we do not have the advantage of Mexico or the Czech Republic. However, too much should not be made of this, look at the history of Japan and more recently Korea.
- Government's unexplained urgency to open our markets to South America, China and India will seriously harm our window of opportunity to develop our industry. Charity should start at home. Black economic empowerment, high tax rates and labour laws are hampering our industry to become world competitive.
- Global competitiveness is a key in respect of product development capabilities, conversion capabilities and all of the world-class manufacturing parameters. If firms can operate at genuinely world class levels then the artificial crutches needed to support the industry become less important.
- The appreciation of the rand is more important than its fluctuation. The WTO rules will play a bigger role in future, more than so now.

- The automotive industry needs government support and involvement in order to attract international investment and trade. Promoting South Africa to the international market is essential. This will focus the attention on the individual small and medium enterprises. International Trade Pavilions will also continue to assist South African black economic empowerment companies to display their products and abilities to the global markets.
- The individual company links to the international networks of markets and technologies is a major determinant of where a company can go. All component makers need manufacturing technology and most need export markets to get the volumes.
- Factors affecting trade and investment in a global environment are not important, the lesser named factors are consequential and do not necessary lead the development of the industry. Other factors include socio-political stability, disciplined macro-economic policies, sound monetary and fiscal policy. An effective and efficient public service, linkages into multi-national vehicle manufacturers and stable industrial relations are also important.

*Qualitative responses to Question 10 of the questionnaire relating to the **component companies'** qualitative views in respect of their rating of the factors with the highest to the lowest value/impact impacting on the South African automotive industry's business operations in general*

- I believe that actual business and manufacturing costs are more important than marketing and promotional activities.
- It is vital to be competitive in the automotive industry and therefore issues around advantages, raw materials at world prices and the right investment environment are important for the industry.
- It is without a doubt the biggest influencing factor how Government facilitates support for the automotive industry. Incentives, of some format, are crucial for creating sustainability for the industry. South Africa might be targeting one million vehicle sales, but the component industry will still

be faced with low volume runners, multitudes of derivatives, relative distance to market, raw material pricing or import parity pricing and hidden taxes and duties in countries exported to. Free trade agreements currently being proposed/pursued will further compromise the component sector and with the OEMs ruthlessly targeting low cost opportunities will have a severely negative impact on the industry.

- It is our opinion that the most important factors which would contribute to growth in the domestic automotive industry are – stable and competitive raw material prices to support downstream industries, a stable rand at R7,00 to R7,50 to the US dollar, government incentives similar as other developing countries and a stable labour force.
- South Africa still needs incentives to attract multinational automotive companies to do business here. The current strong rand is starting to have a severe impact. We have not participated in Automotive Pavilions as our license agreement precludes us from competing outside Southern Africa.
- South Africa needs to be economically competitive prior to any advertising. To be competitive, our distance from markets will have the biggest negative impact. To compete against geographical disadvantages, South Africa needs to be at an advantage with raw materials and conversion costs when compared against other countries. Only once the underlying costs are correct, government incentives swing the vote in our favour. All advertising channels come last, once the basic infrastructure and economic structure has been established. It makes selling easier, if what we are selling truly is world class.
- The strengthening of the rand against foreign currencies has had a major impact on exports.
- To compete against Eastern countries with the rand at its current state has significantly reduced profit margins to generally unacceptable levels.
- The South African automotive industry needs to be competitive on a global basis to succeed. Competitiveness in essence requires companies to be able to produce the same quality product at a lower cost than global

competitors. Raw materials, logistics, currency and government support (incentives) therefore are the main contributing factors. Although market acceptance, achieved through missions and pavilions, are important, this interest need to be sustained through real cost competitiveness.

- I believe that the exchange rate is going to have a tremendous effect on the South African automotive industry. The rand's strength will affect both the original equipment and aftermarket. The OEMs will find the MIDP less appealing as vehicles will cost more to produce in US dollars and Euros. In terms of the aftermarket cheaper imports will certainly hurt local manufacturers. Raw material price increases have made the automotive industry's pricing unpredictable. This is however a world phenomenon.
- The largest challenge is competitive advantage with focus on cost and world class manufacturing platforms. Hence the advantage of the MIDP is critical in keeping the products quite competitive.
- As a manufacturer the biggest obstacle is South Africa's uncompetitive raw material prices and lack of foreign knowledge of South African manufacturing operations.
- My explanation in selecting the most critical factor as the free trade agreements is with reference to the impact this will have on local business in succeeding especially if the local industry is left without some form of protection when agreements are made with countries with massive production capabilities and are allowed unconditional access into our markets. I envisage that certain companies, no matter how well they structured, will in the short term not be able to survive the product price differentiation and in most instances be taken out of business.
- Tariffs and duties are major factors, as covered by the trade agreements, as well as the fluctuation of the rand and the impact on raw material imports.
- I believe the world markets that would buy from South Africa are mature, and economic rather than any other "soft" benefits would be the overriding factors.



- A weaker rand for exports, better raw material costs, exposure and more customer confidence in South African products.
- Foreign market access is critical for the domestic automotive industry while financial and economic issues are fundamental.
- Market access into foreign markets is vital with global supply. I have ranked the rand's strength lower as I believe currency strength is a short term view. If we don't have free trade agreements, we will be left behind, and it will defeat the object of global supply. Distance is becoming less of an issue as alliances are created and logistics being the future of every action.
- It is important that the forums or National Pavilion exhibitions that are organised should continue to be done professionally, as the impression then created is one of an organised professional country.
- A stable rand exchange rate and stable raw material prices are major factors for the export of South African finished products.
- South Africa needs the MIDP. Raw material prices will be a major contributing factor to the viability of most companies if they cannot pass on increases. Investment is needed and incentives, including tax breaks need to be considered.

*Qualitative responses to Question 10 of the questionnaire relating to the **OEMs'** qualitative views in respect of their rating of the factors with the highest to the lowest value/impact impacting on the South African automotive industry's business operations in general*

- To retain our automotive industry, South Africa will have to offer/maintain the necessary incentives and compete with other areas such as Asia. In other words, South Africa must remain attractive, otherwise it will lose its automotive industry within the next 10 years.
- With the current challenges facing the MIDP in terms of the WTO compliance it is crucial for our future existence to obtain finality on the future programme in order to attract future investment. A generally strong

rand against major foreign currencies is good for the South African economy as a whole, but has a very huge negative effect on profitability and sustainability of export car producers. The South African automotive industry faces many challenging aspects in producing cars in this country and any instability in a government support programme causes current and potential investors to look elsewhere when significant investments are being looked at.

- Without any market access anything else is irrelevant, even if we have the best cars at the cheapest prices, if we cannot sell it in a market it will not help us at all. Once we have access the two main factors to be evaluated are cost and quality. Thereafter the industry and governmental support structures become essential to make any new investment work.
- The MIDP is the driving force behind the local automotive industry. Without that it is questionable whether the industry would still be in existence today or into the future, as even with the MIDP the South African automotive industry will battle to compete with other low cost, high volume markets.
- South Africa remains situated logistically uncompetitive, which makes incentives from government essential until such time that volumes reaches the level to eliminate this disadvantage. It is a fact that it is essential to stay in touch with global technology/demand/development and thus very important to stay up to date with the latest in the automotive industry. As we are relatively new to the global market, it is essential to promote/advertise our products internationally. Macro economics remain an essential element to consider on an ongoing basis and business or the MIDP needs to take cognisance of this through reviews as is the case currently.
- The MIDP and WTO requirements are extremely important to the industry. It has a direct impact on the cost of locally produced vehicles as well as imported vehicles. Free trade agreements could allow entry into various global markets and directly improve sales volumes.

- The cost of raw materials is an ongoing concern and important variable to control in the manufacturing process. Attracting investments to maintain and grow the manufacturing industry is important to ensure success in future. The value of the rand impacts severely on the export programs currently invested in as well as future developments.
- As an OEM, parent companies determine our destiny. South Africa's comparative advantages and market growth potential weighs heavily on parent company investment decisions. The MIDP is a known piece of legislation even if it is not WTO friendly.

## **Appendix E: Detailed qualitative responses to Question 12 of the empirical survey**

*Qualitative responses to Question 12 of the questionnaire relating to the **component companies'** qualitative views in respect of their rating of the factors with the highest to the lowest value/impact impacting on the business operations of the specific company in particular*

- Competitive advantages and the right investment environment is important as well as a stable political and social environment. Our business is part of a global player and therefore being world competitive is important.
- Being part of an international player has benefits which are not overly affected by politics, independent marketing or creating/displaying certain core competencies. It is normal to leverage of the business base and market share, among others, of the parent company. Important still are the economic environment, political stability, support infrastructure, access to beneficial raw material prices and various incentives for growth stimulation.
- Free trade agreements coupled with the strength of the rand makes it very difficult to compete against developing countries such as India and Brazil. We have already lost two contracts against Brazil where their selling prices were less than our material costs.
- To be competitive, our distance from markets will have the biggest negative impact. To compete against geographical disadvantages, South Africa needs to be at an advantage with raw materials and conversion costs when compared against other countries. Only once the underlying costs are correct, government incentives swing the vote in our favour. All advertising channels come last, once the basic infrastructure and economic structure has been established. It makes selling easier, if what we are selling truly is world class.

- The strengthening of the rand against foreign currencies has had a major impact on exports. To compete against Eastern countries with the rand at its current state has significantly reduced profit margins to generally unacceptable levels.
- Our company is competitive on a global basis, mainly because our productivity measures are up to global standards. We are however vulnerable as a result of the strength of the rand, raw material prices and distance to the market. The MIDP assists in overcoming these fluctuations, but without the MIDP, we would not be able to export at the moment.
- In terms of our company I believe that the exchange rate is a major factor. Export pricing literally changes by the hour. We are also facing increased competition in the local market from imported products. The raw material price volatility is also a major factor. This means that we have to re-cost every job before commencing production. Our OE customers are in many instances not prepared to negotiate increases and as in the past price increases are negotiated annually. National Pavilions are very important for us as prospective clients see you at the various shows around the world and realize that the company has staying power. Free trade agreements are also important for our business as prospective customers can benefit from these agreements.
- Access to markets as well as the MIDP is critical for being competitive.
- The uncompetitive raw material prices as well as the lack of knowledge of domestic manufacturing.
- In the electronics industry 95% of all the components are imported because there are almost no electronic components being manufactured in South Africa. The strong rand thus is of benefit for local consumption but not for exports.
- We are not reliant on the MIDP and all the benefits are passed onto our customers with the exception of operational efficiencies resulting from increased volumes.

- Due to the fact that this is the first time my company is participating in a Pavilion and that I do not have any funding from the MIDP, my ranking is based on a rather limited general knowledge, however, having something that is actively promoting the industry has definite advantages.
- We need to export products at the right export price. Our company already has the right technical expertise to manufacture, but further involvement/technical input can always be looked at while raw material prices are a major factor.
- Raw material price increases and instability is my current major risk.

*Qualitative responses to Question 12 of the questionnaire relating to the **OEMs'** qualitative views in respect of their rating of the factors with the highest to the lowest value/impact impacting on the business operations of the specific company in particular*

- South Africa will have to offer/maintain the necessary incentives and compete with other areas such as Asia. In other words, South Africa must remain attractive otherwise it will lose its automotive industry within the next 10 years.
- The current instability and threat to the MIDP forces our parent company to look at sourcing volume from other plants around the globe. South Africa being only 0,7% of global vehicle production makes it easy for our foreign investors to source the volume produced by their plant in South Africa from other manufacturing facilities. Instability from government perspective has a very serious impact on the future sustainability of this facility.
- South Africa remains situated logistically uncompetitive, which makes incentives from government essential until such time that volumes reach the level to eliminate this disadvantage. It is a fact that it is essential to stay in touch with global technology/demand/development and thus very important to stay up to date with the latest in the automotive industry. As we are relatively new to the global market, it is essential to

promote/advertise our products internationally. Macro economics remain an essential element to consider on an ongoing basis and business or the MIDP needs to take cognisance of this through reviews as is the case currently.

- The MIDP and WTO requirements are extremely important to the company. It has a direct impact on the cost of locally produced vehicles as well as imported vehicles. Free trade agreements could allow entry into various global markets and directly improve sales volumes. The cost of raw materials is an ongoing concern and important variable to control in the manufacturing process. Attracting investments to maintain and grow the manufacturing industry is important to ensure success in future. The value of the rand impacts severally on the export programs currently invested in as well as future developments.
- Local market size is problematic if you are not a major exporter. Market growth via free trade agreements with Mercusor and India will be a great opportunity. The MIDP certainty will be a great lever to encourage long term planning.
- Without any market access anything else is irrelevant, even if we have the best cars at the cheapest prices, if we cannot sell it in a market it will not help us at all. Once we have access the two main factors will be evaluated are cost and quality. Thereafter the industry and governmental support structures become essential to make any new investment work.

## **Appendix F: Detailed qualitative responses to Question 19 of the empirical survey**

*Qualitative responses to Question 19 relating to qualitative views of the **stakeholders** on the value and relevance of the MIDP as a promotional tool for the South African automotive industry in general in the global automotive environment*

- The MIDP represents the appropriate and timely policy framework to safeguard the sustainability of our vehicle manufacturing and associated industries going forward. There have been a number of significant achievements and structural changes in the South African automotive industry attributable to the provisions of the MIDP. The integration of the South African automotive industry into global markets would have been extremely difficult, if not impossible, without the MIDP. Motor vehicle manufacturers have substantially rationalised their operations and the number of car and light commercial vehicle base models produced has declined from 42 at the commencement of the MIDP to 22 in 2005. This in turn has reduced complexity and improved efficiencies throughout the component and vehicle manufacturing supply chain and has resulted in significantly higher production runs per model for both domestic and export markets. There has been a substantial increase in investment in both the vehicle manufacturing and component production sectors. The main areas of investment have been in product, local content and export development. On balance, the automotive industry's track record during the tenure of the MIDP has been positive and the automotive industry in South Africa remains one of the most impressive business success stories over the past decade.
- Most international players know about the MIDP. South African companies need all the help they can get and in this respect the MIDP plays a major role in providing both local and international assistance.
- Whilst many of our top companies can probably survive without the MIDP, most smaller companies will not. The termination of the MIDP will



therefore probably not spell the end of the industry in South Africa, but it will have a significant effect on the economic strength of the sector and more specifically, on the capacity of the sector to address some of the pressing socio-economic issues facing South Africa, particularly employment. The termination of the MIDP in my opinion, will have a serious detrimental effect on the attractiveness of the country for further investments.

- The MIDP is the single most important program available to the South African automotive industry. The MIDP provides South Africa with an advantage that very few other countries have. Without the MIDP, the entire face of the South African automotive industry would be different, similar to the pre-MIDP status.
- I think the MIDP is an exceptionally well crafted programme that has underpinned much of the industry's success. This is in spite of the general environment in South Africa not being particularly conducive to manufacturers.
- The MIDP is a great motivator for investment in South Africa and generator of export orders.
- The MIDP has played an important role but is not without costs in terms of higher prices paid by consumers of vehicles, import tariff revenues forgone by government, among others.
- The MIDP supports the industry and this has led to investments which may be less viable as the support is phased down, although support must be gradually phased down. The benefits of supporting exports rather than simply providing protection against imports is that types of investments that have taken place are of a large scale nature and therefore more efficient than the low volume, high variety production that characterised the protectionist phase.
- The MIDP is the most important incentive available to the automotive industry and the most important reason for the successes achieved by industry in the global context. South African companies are located a long way from their markets and the logistical, production and labour expenses

are higher than of most other developing nations with an automotive industry.

- The South African government, no doubt, have come up with creative ideas to ensure South Africa still plays a major role in the global automotive industry in the next 10 to 15 years and to achieve this we most probably have to explore the continuation of a motor industry specific programme after 2012.
- The automotive industry is one of the biggest employers in the country. In global terms the South African automotive industry is still small and would be unable to compete without duty protection on imports. The country without an automotive industry would not be able to afford the number of cars that we have on our roads. The MIDP allows the OEMs to claim refunds on duties paid provided they in turn export either vehicles or components thus allowing them to be competitive with imports and competitive with car prices in most other countries. In other words the duties need not be passed onto the customer. We have eight OEMs in open competition among themselves and with importers and we find that we have a highly competitive industry passing on the benefits of free trade to the public.

*Qualitative responses to Question 19 relating to qualitative views of the **component companies** on the value and relevance of the MIDP as a promotional tool for the South African automotive industry in general in the global automotive environment*

- The MIDP is an extremely important incentive to maintain and develop our motor industry and related industries.
- There is no doubt that the MIDP has had a major impact on bringing the South African automotive industry into the global arena.
- The MIDP has provided stability for the industry and some major incentives for the OEMs to assemble vehicles in South Africa.
- The MIDP has put pressure on becoming globally competitive and contributed to the growth of the industry.

- The MIDP as a development tool is very successful but the problem as a promotional tool is the understanding of the MIDP by new or foreign companies.
- The component industry has not seen volume growth, creating the economies of scale, but the introduction of more variants and further competition from imports. I think the MIDP has uplifted the component industry efficiencies, effectiveness and competencies, which forms a better base for future growth.
- Local OEMs have not allowed the component industry to benefit directly from the MIDP.
- The relevance and value of the MIDP as a promotional tool on the South African automotive industry is evident in the growth of the industry.
- The MIDP is an extremely valuable promotional tool but the promotion thereof needs to be circumspect at present as it may also be used against us as it is contrary to WTO regulations.
- The MIDP has been extremely valuable to the South African automotive industry and I don't think that our industry would have survived without the MIDP.
- The MIDP is critical while our rand is strong.
- Without the MIDP the South African automotive industry would have stuttered and been focused purely domestically.
- The MIDP was a necessary tool for the expansion of the South African automotive industry.
- I don't see the MIDP as a pure promotional tool but as a tool to offset the disadvantage South Africa has been stuck at the foot of the Dark Continent and it gets us economically closer to the market.
- The MIDP is absolutely vital to the South African automotive industry.
- The MIDP is extremely important as a promotional tool for the South African automotive industry. South Africa is far from major markets and logistical costs, the strong currency and the "Africa" factor needs to be overcome if the domestic industry wants to survive.

- The MIDP is a major factor in terms of the OEMs moving facilities into the country which is the driving force behind the industry. The OEMs invariably have a local content focus, which in turn drives the component manufacturers while the presence of brand in the country drives the aftermarket.
- The MIDP has assisted in creating a global, world-class manufacturing platform via indirect cost subsidisation.
- The value creation in the South African automotive industry has been limited to OEM benefit, directly and indirectly.
- The MIDP provides exporters with capital to invest in business for financing growth.
- The MIDP encourages manufacturers to design and develop new products and it also encourages new investments.
- The MIDP serves as a buffer against our volatile currency and raw material price increases to keep the industry competitive.
- The MIDP creates a huge interest in the South African automotive industry and has resulted in receiving increased business from current and new customers.
- The MIDP opened up several opportunities and focused companies on becoming more competitive and raise quality levels.
- The MIDP enabled certain companies to actively pursue export opportunities through various channels.
- Some businesses survive entirely because of the MIDP.
- Over time businesses have become more competitive as the MIDP nurtures new business.
- South Africa needs assistance otherwise global players will swat us away.
- The MIDP is a huge incentive for OEMs to invest in South Africa as it makes assembly viable and in turn stimulate the growth of the automotive component industry to supply both local and overseas markets.

- The MIDP serves as a major incentive for non-represented OEMs to procure components from South Africa to off-set the import duties again to the benefit of local component suppliers.
- In short the MIDP assisted to establish a viable automotive industry.
- I believe that the MIDP is well known internationally in the global automotive environment and will not carry much promotional value for South Africa.
- The MIDP is of great importance for the South African automotive industry in general.
- It provides stronger representation as one group.
- The MIDP has enforced focus and direction from government.
- Not relevant in the long term. Benefits should not be used as a cost advantage but rather as an opportunity to upgrade facilities to meet future demands.
- The MIDP has tremendous value to all exporters. I often used the kick back as a buffer for the currency fluctuation.
- The dropping of the MIDP will cause a major problem in the industry especially with job creation and retention. If companies start struggling they will just throw in the towel.
- Continued support to the automotive industry can only help local business.
- Due to the reduced benefits I do not believe the MIDP will have a major impact anymore. More important is a stable and reliable value of the rand in terms of international production.
- The MIDP makes it cost effective to cover costs and increase expenses trying to promote South African products overseas.
- The MIDP maintains the positive growth in the sector.

*Qualitative responses to Question 19 relating to qualitative views of the **OEMs** on the value and relevance of the MIDP as a promotional tool for the South African automotive industry in general in the global automotive environment*

- The OEMs export through their parent companies and to their parent companies. Consequently they are all in the same situation in respect of the MIDP incentives to produce in South Africa instead of Asia and other regions.
- A very important tool for attracting foreign investment into the South African automotive industry. Automotive manufacturers in South Africa face very unique challenges in respect of labour conditions, political history and logistical challenges, which make the MIDP vital in promoting the potential of the South African automotive industry.
- The MIDP assists in making exports more cost competitive.
- The MIDP has been successful in stimulating the automotive industry which has grown significantly as a result. Some of the MIDP's objectives have not been met in respect of stimulating the local market, improving employment significantly and improving affordability, as most of the focus has been on exports. The nature of the export contracts under the MIDP has been such that the benefit has not always accrued to the local market other than possibly to offer a wider array of products to the local consumer. However, the prominence of South Africa in the global market has definitely been raised and South Africa is a factor in considering future investments. With the additional volumes and investments resulting from the MIDP, this creates ever increasing momentum which can ultimately result in a bigger and stronger local industry.
- The MIDP is an essential tool to ensure a healthy automotive industry. We cannot currently compete internationally without the MIDP and it is not expected that we will be in that privileged position by 2012 either. It was the intention when the MIDP started that no duties will be payable. Lately a significant amount of duties were paid from the industry. It is our view

that this is a result of the steep decline in the export complementation percentage and should be addressed in the MIDP mid term review.

- We do not see the MIDP as a promotional tool but as an incentive to assist OEMs to reduce cost and incentivise exports. It is a program that also contributes to job creation, generates investments and improves economies of scale.
- The MIDP is a well balanced and carefully developed programme with a long term certainty. The MIDP allows foreign companies to assess their future strategies in a 5 to 7 year model life cycle. The MIDP is a trade enhancing instrument and via the Productive Asset Allowance (PAA) it allows the parent companies to compare competing nations' incentives with those of South Africa.
- As a development tool the MIDP stimulated a well developed but still growing vehicle assembly industry as well as a strong component supplier base.
- The MIDP in my opinion is a big success in its role in the whole-being of the industry and the country. The specific focus to improve international competitiveness is obtained if we look at the export contracts earned by the OEMs. The MIDP also did a lot to improve job creation and growth of small businesses because of promoting local suppliers. There will have to be a follow up programme after 2012 to keep the impact of the MIDP on the economy stable.

## **Appendix G: Detailed qualitative responses to Question 20 of the empirical survey**

*Qualitative responses to Question 20 relating to the qualitative views by the **component companies** on the value and relevance of the MIDP as a promotional tool for the specific company in particular in the global automotive environment*

- In spite of South Africa being a major producer of all the major raw materials, we do not have the research and development capabilities nor is the market big enough to sustain single plants of products such as catalytic converters. The catalytic converter industry produces in the order of 12% of the world market but only 2% of catalytic converters remain in South Africa for the local market. Although the industry is competitive with other manufacturers throughout the world, it is volume driven and still needs assistance in the form of the MIDP as logistical costs accounts for between 5% to 10% of the selling price and something extra to offer as an incentive to source from South Africa.
- The MIDP is making huge inroads to develop us.
- The MIDP is of vital importance to my company.
- The MIDP has facilitated inward investment and off-set the negative influence of distance to markets and inflated new material prices.
- The MIDP impacted on rationalising the industry and therefore contributed to longer and efficient production runs.
- As part of an international company we rely extensively on parent company competitiveness to win business and then transfer work to South Africa. The methodology of using low costs from South Africa to support bids is only now being realised and introduced. For this methodology to work the MIDP is of crucial importance.
- Since 1995 our company has grown at a very rapid pace. We have erected an additional factory including an additional plant to cope with incremental business, which in turn has created additional employment.



- The MIDP has been of exceptional value to us, without which our export drive would not have been nearly as successful.
- Until about 2001 the MIDP had value to our company but now the OEMs do not take the MIDP values into account in their calculations so we are competing directly against the ex-works price in Europe.
- The MIDP is critical while the rand is strong. Should the rand weaken, we would rely less on the MIDP.
- We have seen significant interest, investment and business growth as a result of being competitive.
- The MIDP deflates the perception that South Africa can never compete globally because of its distance from the market.
- The MIDP is essential to retain small profit margins with the current strength of the rand and the high cost of labour due to South African Labour laws.
- The MIDP is absolutely vital to our company.
- Our company does not use the MIDP but the MIDP however promotes the industry and creates opportunities for larger players, the tier 1 companies, who in turn offer opportunities for our company.
- Without the MIDP the tier 1 companies will probably move out of South Africa, which will be detrimental to our company.
- The MIDP allows us to be competitive particularly in terms of the exchange rate volatility we are facing at the moment.
- Increased competitiveness due to the MIDP has led to larger production runs and hence greater economies of scale which has allowed us to grow our capacity. Volumes then open up opportunities as we are able to produce cheaper products.
- The MIDP helped us to create competitiveness and cost advantages.
- The MIDP assist to make our products more competitive in the domestic and export markets.

- With the fluctuations and volatile currency as well as large steel price increases the MIDP is a buffer to take the knocks and keep our prices competitive.
- The MIDP opened up opportunities to quote on export contracts.
- The MIDP allowed us to off-set the high logistical costs on supplying export parts through the sale of IRCCs.
- We do very little exports but the value of the MIDP for us is derived from exports of vehicles and our penetration in these vehicles. The ability of local OEMs to remain competitive at low volumes is the relevant point.
- We do not see the MIDP as a promotional tool for our company.
- The need for local content creates a market for our company while the OEMs also export our product to overseas plants to earn IRCCs, which resulted in high volumes being produced.
- The MIDP is of huge importance for our company, not because of the monetary value of the rebates but rather because it creates markets.
- Any positive impact of the MIDP will be off-set by the strong exchange rate and I do not believe that it will have any significant promotional value for our company.
- The MIDP is of great importance as we now have to compete with cheap Chinese products.
- For my company the MIDP provides exposure of products, better endorsement and strong marketing advantages.
- The MIDP is an administrative burden to my company.
- The advantage that I receive is the participation through Pavilions and exhibitions.
- The MIDP creates an opportunity for my company as the credits received by the OEM from me means that it can import fully built up and semi knocked down kits and the parts we manufacture get used on these.
- We do not receive any principal support from the MIDP but experience the exposure impact.

- The MIDP allows our company to pass on extra discounts to reduce our selling prices.
- The future is not predictable but our goal is to expand our manufacturing operations, which is reliant on MIDP support for generating business and new projects to sustain our growth.

*Qualitative responses to Question 20 relating to the qualitative views by the **OEMs** on the value and relevance of the MIDP as a promotional tool for the specific company in particular in the global automotive environment*

- (i) Without the MIDP, at present, it would not be viable to produce vehicles in South Africa. Even later, when the industry will achieve higher production efficiency rates, it will remain imperative for South Africa to offer incentives. Most first world countries offer incentives and definitely so does Asia to support their industries. Note that often these incentives are not World Trade Organisation (WTO) friendly, but not being challenged as many countries apply these. South Africa should continue to offer incentives, to retain its automotive industry.
- (ii) With the South African rand at current levels against major foreign currencies, it is very difficult for export-oriented firms to produce cars in this country profitably. Facing various logistical, social and political challenges makes it even more difficult and challenging to convince foreign investors of the potential of the South African automotive industry. The MIDP cannot be used by this company as a direct tool for negotiating investment opportunities, but plays a vital role in the future existence of this facility.
- (iii) The MIDP assists to make the company more competitive and allow for expanding product range through the import of a greater variety of vehicles.
- (iv) The MIDP has been instrumental in promoting our company as a serious contender for component and vehicle export programmes. Without the MIDP, the possibility is that very few export orders would have been

secured at all. The MIDP has generated additional product lines being introduced into the local market which have added value in respect of market share, complete product portfolio and branding.

- (v) We cannot currently compete internationally without the MIDP and it is not expected that we will be in such a privilege position by 2012 either. The MIDP has allowed the company to make an industrial and commercial investment which would otherwise not have been possible.
- (vi) The company in South Africa survived under very difficult conditions as our parent company is going through a restructuring phase. Every possible support from South Africa is required to nurture it to convert from a contract assembler to a Greenfield assembler. A revised MIDP needs to take this into account. Tough competition is emerging from developing countries like Mercusor, India and China and free trade agreements could assist the company in the longer term strategy deployment and will create access to larger markets.
- (vii) For the company the MIDP gave the opportunity to obtain bigger export contracts. Especially with the strong rand at the moment we would not be able to export profitably without the MIDP. However, the strong Rand together with the MIDP incentives keep our vehicle prices stable, which promote domestic vehicle sales.