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The Export Performance of the South African Automotive Industry. New Stimuli by the EU-South Africa Free Trade Agreement?

Mareike Meyn

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Table of contents

Table of contents i

I. Tables ii

II. Figures ii

III. Boxes ii

IV. List of Abbreviations iii

1 Introduction 1

2 Basic Features of the TDCA and Auto Industry's Liberalisation Schedule 2

3 Chances and Risks the Automotive Manufacturing Industry Faces due to the TDCA. Some Theoretical Considerations 4

3.1 Potential Gains and Losses from Trade Liberalisation 4

3.2 Theoretical Implications of North-South Trade Integration 6

4 Economic Performance, Value Addition and Prospects for the South African Automotive Manufacturing Industry 7

4.1 Changes in the Global Value-Added Chain: Challenges for the South African Automotive Industry 8

4.2 Economic Performance 12

5 Trade with the EU 16

6 Empirical Findings 17

6.1 Methodology and Firm Profiles and Characteristics 18

6.2 Exports to the EU and Development of Export Options 22

6.3 Europe's Relevance as Input Source 32

6.4 Competition in the Domestic and in International Markets 33

6.5 Value Chain and Added Value of Exports 34

6.6 Companies' Strategy 38

6.7 Summary of Empirical Findings hitherto 41

7 The South African Automotive Manufacturing Industry and the TDCA 44

7.1 Involvement of Automotive Industry Representatives in TDCA Negotiations 44

7.2 Proposed Future Liberalisation Schedule for the South African Automotive Manufacturing Industry 44

7.3 Surveyed Companies' Awareness and Appraisal of the TDCA 46

8 Conclusions and Policy Recommendations 50

9 References 52

V. Annex I 55

I. Tables

Table 1: Duty free market access for South African products to the EU and European goods to South Africa in 2010 and 2012 respectively 3
Table 2: Vehicle manufacturers' market access under the TDCA 4
Table 3: Basic features of the MIDP 11
Table 4: Total interviews in South Africa 19
Table 5: Summary of firms' characteristics of surveyed South African automotive manufacturing companies 22
Table 6: Summary of firms' exports/sales development, 1998-2003 26
Table 7: Summary of surveyed firms' main input source and development of input prices 32
Table 8: Summary of firms' profit development, 1999-2003 35
Table 9: Summary of firms' price development 37
Table 10: Summary of surveyed firms' strategies 41
Table 11: Vehicle manufacturers' market access under the TDCA 45
Table 12: Summary of surveyed firms' knowledge about the TDCA 47

II. Figures

Figure 1: Employment levels in the South African automotive manufacturing industry, 1997-2003 13
Figure 2: Trade balance and foreign exchange use in the South African automotive industry, 1995-2001 (in R billion) 14
Figure 3: Automotive trade with the EU by product group 17
Figure 4: Summary of surveyed firms' reasons to export to the EU (N = 18) 24
Figure 5: Summary of surveyed firms' hindrances to export to the EU (N = 18) 25
Figure 6: Summary of surveyed firms' reasons for increased exports to the EU (N = 12) 27
Figure 7: Summary of surveyed firms' strengths and weaknesses in exporting (N = 21) 28
Figure 8: Export business' contribution to surveyed firms economic performance (N = 20) 30
Figure 9: Summary of surveyed companies' export assistance (N = 22) 31
Figure 10: *"Where are your main competitors?"* (N=22) 33
Figure 11: "*Do you feel adversely affected because of European goods imported to the* 34
Figure 12: *"How did your general competition situation develop in the last five years?"* (N=21) 34
Figure 13: Surveyed firms' reasons for increased profits (N = 14) 36
Figure 14: Surveyed firms' reasons for decreased profits (N = 6) 36
Figure 15: Surveyed firms' expectations of development of exports (N = 22) 38
Figure 16: Surveyed companies' strategy for upgraded activities 39
Figure 17: Surveyed companies' need for export assistance (N = 20) 49

III. Boxes

Box 1: Definitions, Quality Requirements and Value Chains in the South African Automotive Industry 9
Box 2: The Mechanisms of the MIDP 11
Box 3: Options for Regional Integration in the South African Automotive Industry 21

IV. List of Abbreviations

AGOA	African Growth and Opportunity Act
AIDC	Automotive Industrial Development Council
AIEC	Automotive Industry Export Council
BLNS	Botswana, Lesotho, Namibia, Swaziland
CPI	Consumer Price Index
CSIR	Council for Scientific and Industrial Research
DPRU	Development Policy Research Unit
DTI	The Department of Trade and Industry South Africa
ECDPM	European Centre for Development Policy Management
EFTA	European Free Trade Area
EMIA	Export Marketing and Investment Assistance Scheme
EPA	Economic Partnership Agreement
EU	European Union
FDI	Foreign Direct Investment
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GSP	General System of Preferences
HIV/AIDS	Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome
IDC	Industrial Development Corporation
IDS	Institute for Development Studies, University of Oxford
IRCC	Import Rebate Credit Certificate
MERCOSUR	Mercado Común del Sur (Common Market of the South)
MIDP	Motor Industrial 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 Agreement
NUMSA	National Union of Metalworkers of South Africa
OES	Original Equipment Supply
OEM	Original Equipment Manufacturer
R	South African Rand
R&D	Research and Development
SACOB	South African Chamber of Commerce and Business
SACU	Southern African Customs Union
SADC	Southern African Development Community
SME	Small and Medium Enterprise
SMEDP	Small and Medium Enterprise Development Programme
TDCA	Trade, Development and Co-operation Agreement
TIDP	Trade and Investment Development Programme
TIPS	Trade and Industrial Policy Strategies
TISA	Trade and Investment South Africa (Division of the DTI)
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
USA	United States of America
WTO	World Trade Organization

1 Introduction

The EU – South Africa Free Trade Agreement (FTA), the so-called "Trade, Development and Co-operation Agreement" (TDCA) created a new trade and development relationship between the EU and South Africa. Negotiated over a period that lasted almost four years and finally concluded in late 1999, it entered into force on a provisional basis in January 2000. South Africa was the first developing country that entered into an FTA with the EU. The TDCA can be seen as multipurpose novelty that had an announcement effect for future trade relations among industrialised and developing countries, as it meant the farewell of EU's one-sided preferential trade vis-à-vis African countries and the start into reciprocal trade relations.[1]

Entering into an FTA with its major trading partner implies manifold challenges for South Africa. The requisites for industrial restructuring the country faces since the economy opened up in 1994 have amplified, as competition from EU products is increasing. In addition to increased competition in most sectors, the signing of the TDCA has also resulted in a loss in customs revenue and has implications for neighbouring countries and South Africa's integration into the region.[2] On the other hand, the TDCA offers South Africa preferred market access to the huge EU market as well as the chance to strengthen trade relations with European firms and to benefit from competitive European inputs.

Whether an FTA is more beneficial or harmful for a country, i.e. in determining whether the positive or the negative effects are more prevalent, depends on various internal and external factors and is already controversially discussed in a theoretical framework, as section 3 shows. It is not feasible to give a "real life analysis" of the impact of an FTA, as economic, social and political processes act simultaneously, which makes it impossible to regard influences from a free trade agreement in an isolated way.[3] The following study, which is based on relevant literature and face-to-face interviews with representatives from the South African automotive industry, government officials, trade experts and private sector support institutions does thus not claim to quantify the impact of the TDCA on the automotive manufacturing industry. The analysis shall, however, give evidence about TDCA's chances and risks for the South African automotive manufacturing industry, clarify how well the surveyed companies are aware of these options, analyse further influential factors for the industry's economic performance and discuss government's and private sector support institutions' strategy to promote intra-industrial trade with the EU.

The automotive manufacturing industry has been chosen for analysis in this paper, as it is one of the fastest growing and most dynamic sectors in the South African economy with considerable further growth potential. At present, where it becomes more and more difficult for developing countries to compete successfully in the global market, which is highly

[1] The 71 members embracing group of African, Caribbean and Pacific (ACP) states that has received trade preferences under the Lomé and Cotonou Agreement is currently negotiating "Economic Partnership Agreements" (EPAs) with the EU. The EPAs include an asymmetrical FTA and are projected to enter into force from 2008 on. The EU-South Africa FTA can be seen as predecessor of the EPAs.

[2] As the average tariff for European imports was already low before the TDCA entered into force (10%) and as South Africa gets the bulk of its revenue by collection of taxes and not custom duties, the effects on government expenditures are judged rather low (Eurostep 2000). However, for Botswana, Lesotho, Namibia and Swaziland (BLNS) there are to some extent considerable revenue losses. Furthermore the BLNS countries are concerned of increased competition for their domestic markets and their exports to the EU. Compare Goodison (1999) and Meyn (2003) for an analysis of the impact of the TDCA on BLNS and the SACU integration process.

[3] To analyse the possible impact of the TDCA several studies (e.g. by UNCTAD and the World Bank) have been concluded. They are based on static equilibrium models and operate under strict ceteris paribus conditions. Dynamic processes, such as parallel trade liberalisation processes, are not taken into account. It is noteworthy that the outcomes of these static studies regarding TDCA's proposed impact on the South African economy differentiate considerably.

dominated by trans-national companies from industrialised countries, there must be a stern examination how, if at all, developing countries can be integrated into the global value-added chain. The TDCA claims to integrate South Africa into the world economy and to help the country to manage the restructuring of its economy. How the TDCA aims to contribute to this goal and whether an FTA can manage this should be investigated on the example of the South African automotive industry.

The paper is structured as follows. After the introduction, section 2 presents basic features of the TDCA and the hitherto agreed liberalisation schedule for the automotive industry. Section 3 gives a survey of theoretical gains and losses resulting from trade liberalisation in general and from North-South trade integration in particular. To give the reader a more profound knowledge of the South African automotive manufacturing industry, a classification of the industry into the global value chain is given in section 4. Furthermore, its economic performance, its contribution to socio-economic developments, its reliance on public export assistance and its options for upgraded activities are discussed. Section 5 analyses the sector's trade with its European counterpart and explains the linkages between South African and European firms. The core of the study lies in section 6, which presents in detail the empirical findings and verifies them with sector-specific research results. To get an idea about the individual situation of the surveyed companies', about their position in the value chain, and their connections to European firms and the European market, the question relates, amongst others, to companies' trade relations with the EU, their strengths and weaknesses in the export business and the relevance of exporting for surveyed companies' all-embracing economic performance. Sub-section 6.7 summarises the empirical findings, with exception of those related to the EU-South Africa FTA. These are presented in section 7, which also discusses how auto sector representatives were involved in TDCA negotiations and how the further liberalisation schedule between the EU and South Africa, which is still controversially discussed, looks like. The final section concludes the main findings of the paper and draws policy recommendations.

2 Basic Features of the TDCA and Auto Industry's Liberalisation Schedule

After the lifting of sanctions in 1994, South Africa applied to become part of the Lomé Convention, which would have guaranteed South Africa non-reciprocal market access to the EU and facilitated intra-regional trade, as South African would have been accorded the same market access to the EU as the other members of the Southern African Development Community (SADC). However, South Africa's request was rejected by the EU because it was argued that first of all, South Africa's degree of development is not comparable with those of Europe's former colonies, the group of ACP countries; second, that one-sided preferences are not compatible with the WTO provisions of most-favourite nations and non-discrimination; thirdly, that South Africa's accession to Lomé would erode ACP countries' preferences, and finally, that the non-reciprocal Lomé trade regime would be likely to expire. However, not only from in the EU but also in South Africa, there were voices, most of all from the private sector, that advocated for an equal trade relationship on a reciprocal basis. It was argued that only a strong, self-confident South Africa would attract foreign direct investment (FDI) and stimulate trade and thus economic growth. The government finally agreed to negotiate an FTA with the EU but also expressed its concerns, as the South African economy had to go under a massive restructuring process. The EU agreed to take these concerns into consideration and proposed an asymmetric liberalisation schedule both, in terms of time frame and content. The parties agreed that 95% of all South African exports will enter the European market duty free after a transitional period of 12 years, while 86% of all European

exports will enter the South African market duty free after a transitional period of 10 years (see Table 1). In 2010 the EU will have reduced its average tariffs for South African products from 2.7 to 1.5%, while South Africa will have decreased its average tariffs for European products from 10 to 4.3% in 2012 (Eurostep 2000:10).[4] However, to improve its market access for industrialised products into the EU, South Africa agreed to open its agricultural market to a larger extent than the EU (81% vs. 62%). Thus, the principle of asymmetry was reversed regarding liberalisation for agricultural products.[5] Taking further into account that the EU is South Africa's major trading partner and accounts for around 37% of South Africa's imports and 40% of its exports, whereas the EU's trade volume with South Africa was 1.4% in 2001 (European Parliament 2002:22), the adjustment costs for South Africa can expected to be much higher.

Table 1: Duty free market access for South African products to the EU and European goods to South Africa in 2010 and 2012 respectively

Duty Free market access for	**Cumulative Coverage**
South Africa	***In 2010***
Industrial goods	99.98%
Agricultural goods	62% (plus 11.5% partial liberalization)
EU	***In 2012***
Industrial goods	86% (plus 3% partial liberalization)
Agricultural goods	81%

Source: Council of the European Union 1999, Annex II, list 1-8, Eurostep 2000.

Regarding the liberalisation schedule for vehicles and automotive components, the South African government attempted to exclude the industry largely, as Table 2 shows. Because of the TDCA, light commercial sales from the EU qualify for a 5% duty preference. Thus, the current South African duty for cars imported from the EU is 31% compared to 36% from the rest of the world. Heavy vehicles are subject to a 20% *ad valorem* duty but components for these products can be imported duty free (DTI 2003a:9).[6] However, parts of the automotive component industry that do not fall under the export promotion scheme "Motor Industrial Development Programme" (MIDP) are included into the TDCA. The component industry is divided into assembly (parts) and aftermarket industry (services and repairs), of which both account for around 50%. As only the assembly industry is part of the MIDP, the aftermarket industry is likely to face increasing competition (NAACAM 2003b).

South African vehicle exporters currently face only a 6.5% import duty when entering the EU market and can export many components duty free to the EU (DTI 2003a:53).[7] However, this implies that South Africa receives only a 3.5% preference compared to auto manufacturers from non-EU industrialised countries. The South African vehicle and

[4] The parties agreed to place sensitive products on a "reserve list". Products on the reserve list are excluded from "substantially all trade" as stipulated in Art. XXIV, GATT (1994).

[5] Although the EU excluded almost 40% of its agricultural trade from the TDCA the offer is WTO compatible, as the WTO Agreement on Agriculture did not force industrialised countries to liberalise effectively (Gibb 2003:900).

[6] With exception of tyres where European exporters face a tariff of 10% *ad valorem* compared to 15% for the rest of the world (DTI 2003a:9). The import of motorcycles to South Africa attracts an *ad valorem* duty of 5-10% (Ibid:19).

[7] This preferential import duty is granted under the GSP (DTI 2003a:53).

component industry calls on the EU to abolish its import duties before 2010.[8] The USA, e.g. which shows a regular import duty of 2.5% for passenger cars and 0% for South African vehicle exporters (due to AGOA) offers a much better market access (NAAMSA 2003e).

Table 2: Vehicle manufacturers' market access under the TDCA

	For South Africa to the EU	**For the EU to South Africa**
Current market access	Light commercial vehicles: 3.5% duty preference, i.e. 6.5% import duty	Light commercial vehicles: 5% duty preference, i.e. duty peak of 31% in 2004. Components: 5% duty preference , i.e. duty peak of 23% in 2004. *Plus: Import duty reduction under the MIDP*

Source: DTI (2003a:9).

At first glance, it appears as if the South African automotive manufacturing industry can hardly be affected from the TDCA, as South Africa agreed only on a 5% tariff cut hitherto. However, as section 4 shows in detail, South Africa's effective tariff against EU imports is much lower due to the import/export complementation scheme. Furthermore, the TDCA might offer chances for technical cooperation, know-how transfer and increased capacities, thus facilitating South Africa's integration into the global economy.

3 Chances and Risks the Automotive Manufacturing Industry Faces due to the TDCA. Some Theoretical Considerations.

3.1 Potential Gains and Losses from Trade Liberalisation

The standard theory assumes that openness helps poor countries to grow faster as they are able to import capital and modern technologies from advanced economies. Increased volumes of imports lead to increased competition, allowing the country to increase the efficient use of existing resources, thus resulting in optimal factor allocation. This again encourages specialisation on those activities that reflect a country's comparative advantages. Increased imports of capital- and technologically intensive goods further stimulate the processing of innovations and new technologies through which the productivity of labour and the utilisation of capital equipment will be increased and economies of scale can successfully be exploited. Finally, the income gap between poor and rich economies will close over the time and economic convergence between poor and rich countries will be reached. Accordingly, developing countries should open their markets, also unilaterally, for foreign trade and investment, thus, benefiting from cheap imported goods, competitive technology and know-how (Sachs and Warner 1996, Piazolo 2001). However, the direct relation between trade liberalisation and economic growth has been criticised (Rodrik 1999, UNCTAD 2000, Winters *et al.* 2003).[9] It is argued that an open trade regime and reasonably convertible

[8] The EU agreed in the TDCA to abolish its tariffs on vehicles and components until 2010 at the latest (Council of the EU 1999: Art. 11.5).

[9] Another, more general, question must be posed concerning the causality between an open trade regime and economic growth: Do countries grow because they export so much or are they able to export because they

currencies are not sufficient for economic growth and do moreover, not necessarily lead to macroeconomic stability. *"A useful starting point is to acknowledge that openness is part of a development strategy; it does not substitute for it."* (Rodrik 1999:2). Receipt of FDI, technology, know-how and competitive inputs are only potential gains of trade liberalisation but need complementary policies on the macro-, meso-, and micro-level to "make openness work" (Ibid.). Therefore, a new policy orientation towards developing countries is recommended that addresses the structural constraints and institutional barriers and promotes investment in production, infrastructure and institutions, which is key for successful economic development.

Whilst on the topic of the potential gains of trade liberalisation it is also noteworthy that the scope of domestic price reduction depends on the level of competition and product diversity in the world market. Thus, trade liberalisation is likely to have only a limited price effect if the market structure is oligopolistic and/or the products are strongly differentiated (Winters *et al.* 2003:19). This is exactly the case in the automotive industry where few global vehicle manufacturers produce particular models. However, the industry might gain from openness through endogenous growth factors, such as greater availability of high technology inputs and cooperation with foreign firms that allow to build-up networks, to profit from technical assistance and know-how, to reduce transaction costs and to increase capacities (Winters *et al*. 2003:21-6).

Aside from possible gains from trade liberalisation there are also potential losses, such as increased vulnerability to external shocks, firms' closure and increased unemployment due to increased competition, and a decrease in government's revenue because of tariff cuts. Two other important risks are the decline of the export-import ratio, resulting in an increased trade deficit and the risk of decreased domestic value addition, leading to de-industrialisation. This can be the case because of increased imports and insufficient competitiveness of the local industry. Empirical findings confirm this thesis,[10] giving evidence that an open economy and increasing participation of developing countries in international production chains does not necessarily imply a correspondent increase in the value addition of domestic production and in country's income (Wohlmuth 2003:15, 48).[11]

In general, countries are only ready to liberalise their markets towards other countries if they are also granted improved market access. The readiness to liberalise unilaterally is only weakly pronounced since countries fear the dominance of negative effects, e.g. that increased competition harms local industries. Trade liberalisation on a multilateral level as stipulated in the WTO framework is also seen as problematic, as countries can only find the least common denominator. All over the world, bilateral trade agreements do therefore increasingly substitute multilateral efforts.[12] While bilateral trade negotiations have the

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grew? Rodrik (1999) points out that the causality between open trade and economic growth has not been proven so far: developed and developing countries have shown in the past that there are different ways to reach economic growth and welfare; patent prescriptions do not exist.

[10] See UNCTAD (1999). The study found out that, with exception of few fast growing East Asian countries, developing countries show an increasing income divergence towards industrialised countries and were not able to diversify their export base sufficiently and to increase the domestic value addition of products.

[11] It should be borne in mind that developing countries' comparative advantages are mainly primary and basic manufactured goods, which offer only limited potential for productivity growth and are highly vulnerable to external shocks (volatility of terms of trade, droughts etc.) so that the expansion of production and exploitation of increasing returns from larger markets is limited (Yeats 1998). Moreover, the international constellation of supply and demand might result in new imbalances if many developing countries that show a similar factor endowment (like cheap labour) enter into the market with the same product, resulting in worsening terms of trade (UNCTAD 2002). This "Fallacy of Composition" argument has i.e. been proved for the AGOA initiative where almost all African countries are manufacturing the same commodity, namely garments.

[12] In 2002, 250 FTAs were negotiated worldwide; currently another 50 FTAs are under negotiation (Frankfurter Rundschau, 28/07/03).

advantage that country specific issues can be adequately taken into account, they carry not only the risk of excessive demands of negotiation capacities but also that of decreasing power vis-à-vis the most powerful trading bloc. This is most of all problematic for developing countries.

3.2 Theoretical Implications of North-South Trade Integration

When countries enter into an FTA, trade flows become altered owing to changed conditions of competition. Viner (1950) classifies these processes as trade creation and trade diversion. Trade creation occurs if more competitive regional products replace domestic products. This results in the increased consumption of cheaper substitutes, at the expense of local production. Trade diversion means the directional change of trade: products which were formerly imported from the rest of the world are now imported from regional producers as their production costs are lower than those of the rest of the world plus customs duty. Thus, the producer surplus of the regional supplier increases. Viner describes trade creation as positive and desirable, as it shifts production towards the more competitive regional producers, resulting in an optimal factor allocation within the region. On the contrary, trade diversion is described as 'welfare decreasing', as it promotes inefficient production. According to these assumptions, whether an FTA is globally beneficial or not, depends on the dominance of trade creation over trade diversion. The dominance of trade creation is, according to Viner, more likely the more the countries were trading with each other before entering into an FTA. In this case, regional producers replace ineffective domestic producers (trade creation), and regional producers will only relatively little replace trade from the rest of the world (trade diversion). Furthermore, a substituting production structure should dominate; i.e. the two countries should stand in direct competition to each other. This means that successful economic integration requires a similar level of industrial development, competitive industrial sectors and the potential for complementary development of industrial sectors.

Although Viner's model has received criticism,[13] it is still used when explaining the static effects of regional trade integration. However, alongside the static effects of regional integration, there are also several dynamic effects that can occur. Unlike with static effects, dynamic effects of regional integration can regenerate. This is the case when economies of scale are exploited that occur due to increased market size. Companies are able to expand their production and fully load their capacities. In addition to this, the increased competition of the FTA results in an efficient factor allocation and thereby, *ceteris paribus*, to price reductions. This again increases the demand for goods and results in growth effects. Further dynamic effects of regional integration are learning and technology effects, both resulting from the close cooperation with other members of the FTA, and through investors from third countries. This is in turn stimulated by an increased market and increased economies of scale (Hoeller *et al.* 2000, Krugman 1991).

So, what happens if a developing and an industrialised country enter into an FTA? According to the classical considerations of Viner, trade diversion effects vis-à-vis third countries are likely to dominate due to the complementary production and trade structure that generally determines North-South trade. This appraisal was criticised by some authors (see for example Piazolo 2001, Collier and Gunning, 2000) who argued that developing countries would benefit from an FTA with an industrialised country due to their different factor endowment. As a result, the FTA would enable them to import cheap, capital-intensive inputs and export labour-intensive manufactures, thus stimulating the division of labour. However,

[13] E.g. by Balassa (1965) who criticises the assumptions of functional markets and a functional infrastructure, as well as the neglect of transaction costs and the assumption of factor substitution. All this would not be guaranteed in a developing country's context.

this argument ignores the relevance of proximity in trade (Krugman 1991). Empirical evidence from the EU-South African automotive trade supports the assumption that industrialised countries use their periphery for the outsourcing of production. Eastern European countries also offer cheap labour costs but face lower transport costs which South Africa is not able to compete successfully with (DTI 2002a). On the other hand it must be noted that, as far as the automotive industry is concerned, intra-industrial trade takes place between South African and the EU. Intra-industrial trade, i.e. trade within one sector, which is generally much more valuable than trade between different industries (inter-industry trade), might be stimulated by the TDCA, thus offering the industry significant growth potential.

For developing countries, regional integration with industrialised countries offers another positive aspect, as it can help them to develop their industrial capacities due to protected access to a larger market and strong cooperation (Kreinin and Plummer 2002:30). In addition to these economic dynamics, regional trade agreements might also offer political dynamics, such as an advanced relevance in bilateral and multilateral trade negotiations due to the bundling of interests. Furthermore, the contractual agreement with an industrialised country could increase the economic and political reputation of the respective developing country and help to attract FDI (Padoan 2001, Collier and Gunning 2000).

4 Economic Performance, Value Addition and Prospects for the South African Automotive Manufacturing Industry

The automotive sector is one of the most vibrant, rapidly growing sectors in world trade. Developing countries all over the world – from Brazil to South Africa – tried to achieve its expansion with an import substituting strategy. With the exception of a few producers from South East Asia no developing country has been able to establish its own competitive automobile production. This is due to the limited size of domestic markets as well because of increased competition since the 1990s when developing countries opened their markets to imports and producers moved towards global sourcing (UNCTAD 2002: 107-11). For South Africa, the automotive manufacturing industry, which comprises vehicle manufacturers (Original Equipment Manufacturers - OEMs) and component manufacturers, is becoming more and more important. In 2002, the automotive manufacturing industry contributed 6.3% to the country's GDP and is currently the third largest economic sector (after mining and agriculture) in addition to being the largest manufacturing sector (DTI 2003a). The contribution to exports has almost doubled in the period 1997-2001 to 9.75% (DTI 2002a:18) and the sector receives high inflows of FDI.[14] Nowadays, South Africa is the 19th largest automotive supplier worldwide and manufactures 0.7% of the world's automotive production (Tralac News, 09/10/2003). In 2002, the automotive sector exported vehicles with a value of around R 40 billion (NZZ, 13/01/03). This increase is even better when taking the strengthening of the Rand against the US-Dollar into account. The component industry is responsible for over 60% of the exporting success of the automotive industry (DTI 2002a:9). In total, the country was able to increase its exports for components from R 5,115 million in 1997 to R 12,640 million in 2000 (NZZ, 13/01/03). The expansion of the component industry as well as the new creation of service stations created new jobs and expanded government's income. Moreover, the automotive industry stimulated product expansion in supply industries, such as steel, paint, rubber, textile, plastic and petro-chemical industries (Economist 14/02/04).

[14] VW produces meanwhile its Golf 4, destined for the European market, in South Africa, while DaimlerChrysler produces the C-class for Great Britain and Australia and BMW its 3-series for the EU. In order to modernize production, these three producers invested around US$ 1 billion (NZZ, 13/01/03). Also Toyota wants to increase its production in South Africa and plans to invest around R 3.5 billion (Economist.com, 12/02/04).

4.1 Changes in the Global Value-Added Chain: Challenges for the South African Automotive Industry

"…the automotive component industry receives only negligible government protection and is currently faced with a huge competitiveness challenge on two fronts. First, it needs to improve its competitiveness in order to keep foreign imports out of the domestic market and secondly, it needs to reposition itself in new value chains in order to consolidate relationships with OEMs and facilitate exports." (Barnes 1999:408).

When the South African automotive industry emerged in the 1960s it was highly inward looking and not internationally competitive.[15] Though demands stagnated since the 1980s, also as a result of international sanctions that were imposed since the late 1970s, this import substituting policy was maintained. It was government's goal to establish an autonomous national vehicle and component industry, which was necessary because of increasing isolation as a result of South Africa's apartheid policy. Few affiliated groups concentrated the South African economy.[16] Kaplinsky *et al.* (2002:1169-72) argue that the conglomerate structure of the South African economy affects the upgrading capacity of firms negatively till present times. This would be due to their large, non-specialised product range, as a heritage of South Africa's import-substituting strategy.[17] The reliance on standardised products made many companies inflexible so that they failed to develop their product and service portfolio towards more dynamic products and services. In the past, it was the main competition advantage of the automotive sub-sector to offer cheap components, for which the depreciation of the Rand signed responsible.

After the first democratic elections were held in 1994 and international sanctions were lifted, the South African economy opened up. This implied massive challenges for the automotive industry. Due to increasing worldwide liberalisation, the former models of import substitution, quantitative restrictions and local content requirements were not feasible anymore. Furthermore, South Africa became a WTO member in 1995 and agreed to phase out GATT-inconsistent trade and investment measures, to which quantitative restrictions and local content requirements belong.

The production system in the automotive manufacturing industry has become increasingly globalised, showing a changed value chain relationship between Original Equipment Manufactures (OEMs), the name given to international vehicle assemblers, and component suppliers, as summarised in Box 1. Since the 1980s, western companies have lost their international competitiveness to Japanese suppliers and have started to outsource more and more parts of vehicle production. During the 1990s subcontracting companies that were formerly producing in accordance to specific OEMs requirements have started, in conjunction with the OEMs, to create their own design solution by using their own technology. Thus, vehicles and automotive components became much more complex and sophisticated and also much more difficult to produce. In addition to this, OEMs' demand shifted from individual components to complete function units and systems (UNIDO 2002:20). The increased demand for sophisticated component solutions at a world-wide standardised quality forced

[15] The first automotive assembly plants in South Africa were established in the 1920ies (compare Barnes 1999 for a brief historical overview).

[16] Kaplinsky et al. (2002 :1169) indicated that it were only five large firms that controlled more than 80% of all companies listed at the South African stock exchange in the early 1980ies.

[17] Theoretically, import substitution policies are justified with the infant industry argument, assuming that the industry will be able to become internationally competitive when it has time to learn the business and to achieve economies of scale under protection. However, the import substitution strategy failed not only to be successful in South Africa but also in many other developing countries because of missing competition that resulted in inefficient production and high cost imports and also due to the fact that the industries failed to build-up backward- and forward-linkages to local suppliers (Todaro/Smith 2002:562-71).

South African component manufacturers to restructure their production plants drastically. While South African OEMs as well as component suppliers used to produce many models but only in small quantities during the apartheid era, demand of production was now directly opposed: the variety of models had to be reduced and quantities had to be increased. The OEMs wanted to reduce development costs, benefit from the economies of scale and to be able to source flexibly from any of their assemblers around the world. The transformation from a "broad" to a "specialised" supplier was a huge challenge for the South African automotive manufacturing industry, most of all, for the component manufacturers, and not all of them survived the restructuring process.[18] However, if manufacturers want to avoid becoming exchangeable they have to be able to compete in prices and to upgrade production (including design and technological know-how). To comply with global standards is only possible if local firms show international linkages (Kaplinsky 2000:137).

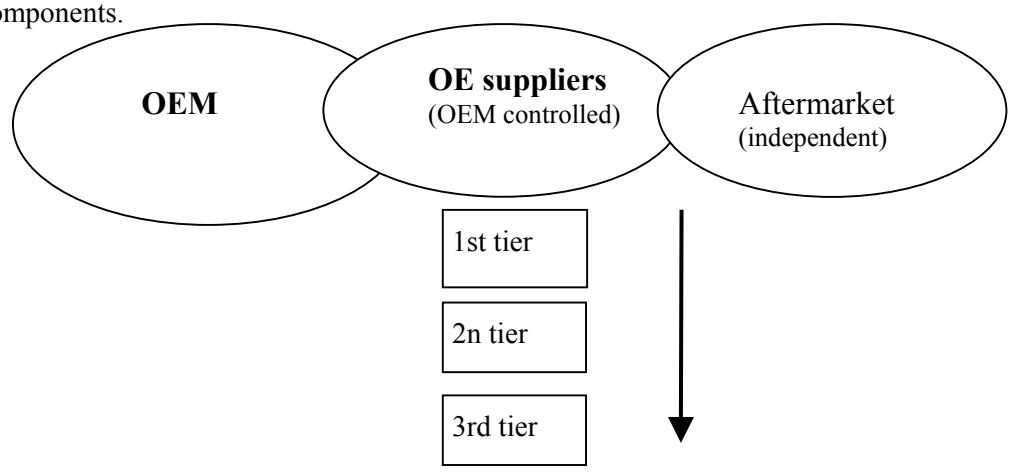
Box 1: Definitions, Quality Requirements and Value Chains in the South African Automotive Industry

Original Equipment Manufacturers (OEMs): Automotive assemblers. Innovation and design is critical to enter new market sections, increasing sales are necessary to reduce designs cost per unit.

First-Tier suppliers: Supply directly to the OEMs. Require design and innovation capabilities and do thus often show international linkages. "Inclusion in the global supply network becomes essential for survival as a first-tier supplier." (UNIDO 2002b:26). Negotiation power vis-à-vis OEMs is generally limited but depends on the level of product sophistication.

Second-Tier suppliers: Work to designs provided by OEMs or first-tier suppliers. Show only limited international linkages but are also forced to comply with international standards (e.g. ISO 9000).

Aftermarket: Market for replacement parts. Is in developing countries often supplied by small component manufacturers before they move to the assembly sector. Competition in this sector is predominantly on price. Innovation is not required, as designs are copied from existing components.



Source: UNIDO (2002b:22), Meyn (2004). Figure retained from Barnes (1999:403).

[18] The OEMs rationalised the models manufactured in South Africa substantially. However, despite this rationalisation, only five of the 27 models manufactured in South Africa show substantial volumes (they represent more than 45% of total production), which indicates the need for further rationalisation of models. (Barnes and Black 2003:13-4, 36).

To cope with these manifold challenges and bring down tariffs to a level accepted by the GATT, the government introduced, after consultations with all stakeholders involved,[19] the "Motor Industry Development Programme" (MIDP) in 1995. Support of the automotive industry has been justified because of the massive challenges the industry was facing and also because automotives as well as components are highly sophisticated, non-traditional export products. The development of new trade and investment markets is seen as necessary to improve South Africa's international competitiveness, to increase the local value addition of production and to participate successfully in a global network (Kaplan 2003:36, TISA 2003a).

The MIDP had and still has the objectives to

1. Improve the international competitiveness of the South African automotive industry;
2. Encourage economic growth, in particular through export promotion;
3. Create new employment or at least to stabilise the employment level in the industry;
4. Improve the trade balance; and
5. Improve the affordability of vehicles in the South African market (DTI 1999:1).

With introduction of the MIDP South Africa switched from its infant industry protection that secluded the automotive industry with quantitative restrictions, tariffs up to 115% and minimum local content requirements of 50% (Barnes 1999) to an import/export complementation scheme that benefits local production but reduces external tariffs. In 2004, motor vehicle duties show peak tariff rates of 36% and component suppliers of 28% (see Table 3 in Box 2). However, the real protection for both, motor vehicles and components is much lower due to the duty payback system of the MIDP. Because of the MIDP, the average import tariff rate for vehicles was 12.5% and for components 15% in 2002 (WTO 2003:A4-276). Judging the effective protection rate, Barnes and Black (2003:25) states: *"South African duty levels are extremely low considering the size of the domestic markets… (and) are similar to the Mercosur rates…"* Altogether, the MIDP envisages to reduce import tariffs drastically, to advantage domestic produced vehicles and to stimulate investment. Though the programme does not determine a local content value, it gives the incentive to source from South Africa, as the export credit granted equals the local content value of the product.[20] The programme runs for the light and commercial vehicles as well as for medium and heavy commercial vehicles (see Box 2 for an explanation of the mechanisms of the MIDP). The efforts under the MIDP were supported by internal advantages: cheap electricity, comparable cheap labour, natural resource, like platinum and expertise in component manufacturing and after-sales support. Moreover, South Africa has a favourable strategic location to supply countries in Far East, Africa and the Australian continent (Trade Partners 2002). Another benefit for the automotive sector in South Africa is the AGOA initiative, which allows South African producers to enter the US-market duty free for a broad range of automotive products. Transport equipment is currently South Africa's most important exporting sector under AGOA. Currently South Africa is the only AGOA beneficiary country that exports a comparable diversified export range (DTI 2003a:54).[21] The Automotive Industry Export Council (AIEC) does even see a bride planning and investment perspective due to AGOA (NAACAM 2003b).[22]

[19] NAAMSA, NAACAM and the trade union NUMSA have been involved in MIDP formulation (Barnes 1999:407).

[20] Because of the MIDP Nissan South Africa, the leading exporter that holds a market share of 50%, exports around 4,600 units of its Hardbody Pickup Truck to Europe, Singapore, Australia and New Zealand and can thus benefit from import rebates for its model 350Z (Japan Corporate News Network, 25/02/04).

[21] BMW South Africa started to export its left-hand-drive 3-series models to the USA and DaimlerChrysler South Africa is exploring the idea to export its left-hand-drive C-class models to the USA (DTI 2003a:22).

[22] The AIEC consists out of NAAMSA and NAACAM and is part of government's strategy to promote exports of automotive component suppliers (NAACAM 2003b).

Box 2: The Mechanisms of the MIDP

Companies that register within the MIDP can reduce the payable duty through three mechanisms:

1. The *Duty Free Allowance* that grants OEMs a duty-free allowance of 27% of vehicles' wholesale value;
2. The *Import/Export Complementation* scheme that allows producers for reduction of import duties according to the value exported. Producers that are registered receive Import Rebate Credit Certificates (IRCCs) that can also be traded between registered exporters and importers. For automotives, R 1 exports (calculated on South African value added) allow to buy R 1 import duty free. The value of export performance started with 94% in 2003 and declines by 4% p.a. until it has reached 70% in 2009. Thus, in 2009, R 1 exports that have a 100% local value buy only R 0.70 duty-free imports. For components R 1 exports buys 75% of the value of export performance (thus: 75% of 94% in 2003 and 75% of 70% in 2009) or 0.6 times of this value of automotives.
3. *Productive Asset Allowance* that grants investors in new plants and equipment a credit certificate up to 20% of their investment value over a five-year period.[23]

Table 3 gives and overview about MIDP's duty reduction and its basic features.

Table 3: Basic features of the MIDP

	Cars/ light commercial vehicles	Medium and heavy commercial vehicles (> 3.5 tons)	Original equipment components
Import Duties	1995: 65% 2002: 40% 2007: 30% } progressive reduction by 2% p.a. 2012: 25% (reduction by 1% p.a.)	1995: 40% } progressive 2000: 20% reduction by 4% p.a. *Still to be evaluated (were not included in the 2002 MIDP Review)*	1995: 45% 2002: 30% 2007: 25% 2012: 20%
Duties on complementary industries	Duty free allowance of 27% of manufacturers´ factory turnover	Drive-train components are duty free. Tyres still face a duty of 6% from the EU and 10% from other countries	Import controls on pneumatic tyres
Import/Export Complementation	Every Rand exported, a percentage determined by the value of export performance of automotives may be imported duty free	Every Rand exported, a percentage determined by the value of export performance of automotives may be imported duty free	Every Rand exported, a percentage determined by the value of export performance of components or 06% of this value for automotives may be imported duty free
Further provisions	To benefit from the programme it is required that the components are fully disassembled by the domestic industry (only to		

[23] Furthermore, the DTI runs incentives for SME investment, grants support for new investment, supports training costs and promotes black businesses in the automotive component industry (See DTI 2003b). The Productive Asset Allowance is only judged as limited beneficial for component suppliers, as qualifying investments need to be linked to OEMs requirements. The Small and Medium Enterprise Development Programme (SMEDP) is seen as more attractive alternative (Barnes and Black 2003:30).

	70% by 2009). No minimum local content required		

Source: Author's presentation based on Tradepartners (2002:3), WTO (2003:A4-276), and NAACAM (2003a).

With exception of harnesses all major exporting automotive sub-sectors have substantial domestic raw material bases (DTI 2002:35-6). This means that they benefit significantly from the MIDP, as the raw materials are included as local value added and are therefore duty rebate qualifiable. As input prices would further increase without the MIDP, the programme is essential for the vast majority of automotive sub-contractors (DTI 2002a:35-8).

4.2 Economic Performance

The automotive industry has developed promisingly since the introduction of the MIDP and performed better than the manufacturing average in South Africa. The manufacturing value added in the automotive industry is around three times higher than in the overall manufacturing industry and increased by 52.1% from 1993-2001 (DTI 2002a:17).[24] The number of domestically produced cars increased from 389,400 in 1995 to 404,400 in 2002. This increase was exclusively export driven while the number of domestically produced local sales sank by 94,000 cars. As a result, the share of exports as percentage of domestic production increased from 4% in 1995 to 31% in 2002 (NAAMSA 2003a:3). However, total vehicle exports have also increased from around 20,000 to 126,000 p.a. and are expected to increase further to 170,000 in 2005 (NAAMSA as cited in Economist 14/02/04). Also the automotive component industry experienced an impressive upward trend and showed an average export growth rate of 100% p.a. in the period 1995-2001 (DTI as cited in Barnes and Black 2003:10).[25]

In addition to increased exports, the automotive as well as the automotive component industry showed increased capital investments.[26] The high capital inflows lead to an increased automatisation degree and helped to improve the labour productivity and international competitiveness of the sector. Moreover, the manufacturing value added of the auto industry was raised by more than 50% in the period 1993-2001, compared with an increase of 19% by the average of the manufacturing sector (Barnes and Black 2003:16). However, the increased capital investment and automatisation level was two-edged, as it also led to a decrease in employment. Though automotive sales increased in the period 1994-2000 by R 30 billion (to R 42 billion), absolute employment in the vehicle and component industry declined from 115,000 in 1997 to 87,700 in 2003, as Figure 1 shows.[27] However, this must also be seen in the light of the enormous restructuring process and the high increase of labour productivity (38% in the period 1993-2001).[28] Taking the general employment losses in the manufacturing

[24] However, this raise reflects also price increases in inputs and a switch towards higher value inputs in some sub-sectors (DTI 2002a:29).

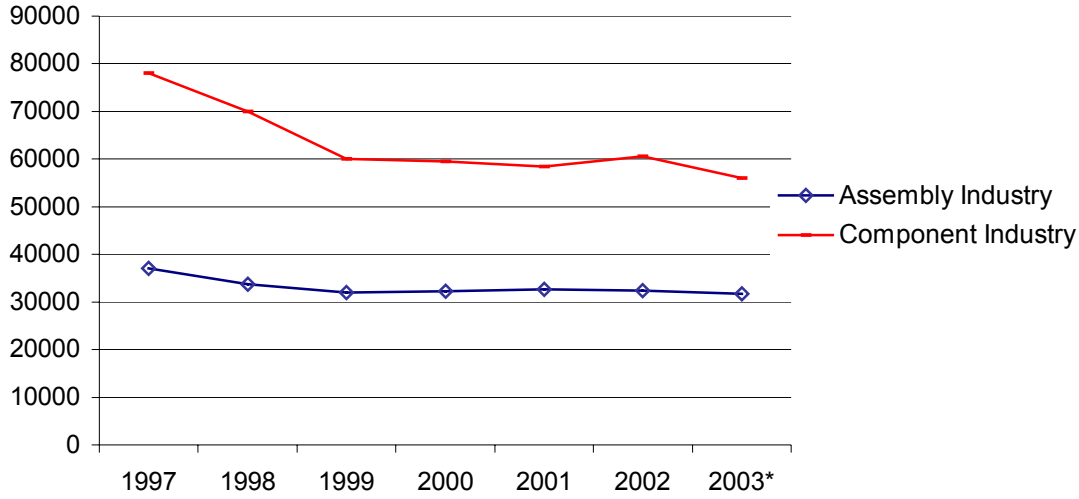
[25] Catalytic converters, which grew more than 380% p.a. contributed significantly to this trend. However, automotive tooling, which showed the lowest growth rate, still increased by 28% p.a. (DTI as cited in Barnes and Black 2003:10).

[26] Capital investments for the eight OEMs that are based in South Africa did more than double in the period 1996-2002, showing a total capital investment volume of R 2.72 billion in 2002 (NAAMSA 2003:5).

[27] In total, there are around 270,000 people directly and indirectly employed by the auto and the auto component industry (AIDC 2003).

sector into account, the automotive manufacturing industry performed above average,[29] though there were considerable employment losses, most of all in the component industry where employment decreased by almost 40% in the period 1997-2003 to 56,000 employees (NAACAM 2003).

Figure 1: Employment levels in the South African automotive manufacturing industry, 1997-2003



* projected figures.

Source: Assembly Industry: DTI (2002a51), DTI (2003a:47), Component Industry: NAACAM (2004d).

The automotive industry was able to increase its exports drastically (see Figure 2) but shows still a considerable import deficit (R 8 billion in 2001). From 2000 to 2002, imports of passenger cars increased by more than 20% (DTI 2003:17). Reasons for this development are the reduction of external tariffs combined with the export/import complementation model of the MIDP and the vehicle model rationalisation process. Thus, models, which are no longer produced in South Africa, are imported (Barnes and Black 2003:32). As already mentioned, the automotive industry shows only a low effective protection level, which leads to increased imports of vehicles and inputs used for domestic production. The local content of production sank from 58.1% in 1997 to 50% in 2001 (Barnes and Black 2003:12). This development seems to be alarming if one takes the devaluation of the Rand, which was around 20% during this period, into account. On the other hand, the industry showed an artificially high local content before 1995 as a result of the local content requirements (Barnes 1999:404). Decreased local content usage is thus a direct result of the industry's opening up. Moreover, one has to differentiate between vehicle exporters and component exporters. While vehicle

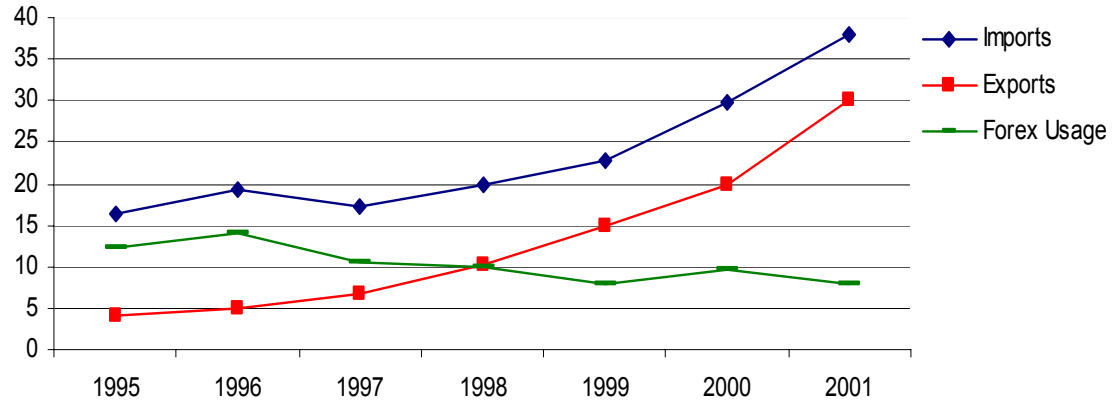
[28] Labour productivity increased by 37.8% in the period 1993-2001, which was well above the manufacturing sector's average (Barnes and Black 2003:19). The stronger productivity increase in the automotive industry can spread over the whole economy and help South Africa to gain comparative advantage in catching up sectors. However, prerequisite is that productivity gains are not compensated by wages increases (UNCTAD 2003: 107).

[29] As a result of South Africa's overall employment losses in the manufacturing industry, the share of the automotive industry employment in total manufacturing employment increased from 5.01% in 1993 to 6.21% in 2001 (DTI 2002a:1, 15).

exports contain in average around 50% local content, component exports contain about 90% (NAACAM 2004c).

In fact, the automotive industry was able to decrease its trade deficit from R 10.2 billion in 1995 to R 8 billion in 2001. Experts go so far as to project a trade surplus of around R 730 million by 2012 because of export expansion and increased usage of local contents (Barnes and Black 2003:36,42).[30]

Figure 2: Trade balance and foreign exchange use in the South African automotive industry, 1995-2001 (in R billion)



Source: DTI (2003:29).

Summarising the performance of the automotive manufacturing industry since 1995, it can be stated that the industry was very successful in exporting, creating new value addition, improving its international competitiveness and stabilising employment. For 2004 it is expected for the first time, that auto industry's export earnings will equal those of gold, which strengthens the position of the automotive industry as the backbone of the South African economy (Tralac news, 09/10/2003). Because of the MIDP, international car producers like DaimlerChrysler, BMW, Hyundai, VW, Ford and Toyota who were formerly thinking of leaving South Africa, not only kept their production but expanded it significantly. Toyota, for instance, plans to double its production to 200,000 cars per annum by 2007 (Economist.com 14/02/04) and BMW, which with 8.6% enjoys the highest market share of any BMW plant in the world, is also the fastest growing BMW plant worldwide (DTI 2003a:13). It is fair to conclude that the goal, to improve the international competitiveness of the South African vehicle and component industry, to attract investment and to encourage exports has been reached with the MIDP.[31] The MIDP also ensures investment security and planning reliability for the auto sector until 2012.[32] Furthermore, the MIDP has positively contributed to productivity increases to the extent that prices for vehicles have been decreased by around 30% since 1994 (NAAMSA 2003a). However, whether this has improved the affordability of vehicles remains controversial.[33] Another achievement of the MIDP is that intra-industry

[30] The usage of local contents is expected to increase because of the reduced export performance value under the import/export complementation scheme, shrinking to 70% in 2009 (see Box 2).

[31] Compare Barnes (1999) and Barnes and Black (2003) for examples of MIDP's positive impact on exports and investment. Kaplan (2003) contradicts Barnes' and Black's positive appraisal and states that the South African auto industry is still uncompetitive in international terms (Kaplan 2003:21).

[32] The MIDP was reviewed in 1998, where it was extended through to 2007 and again in late 2001, where a recommendation was made to extend the MIDP until 2012 (Barnes and Black 2003:5).

[33] NAAMSA (2003b) states that the average annual vehicle price increases were, with exception of 1999 and 2000, under the Consumer Price Index (CPI) average. Barnes *et al.* (2002 as cited in Kaplan 2003:21) who

trade has not been limited to trans-national OEMs but also included local component manufacturers. However, it is criticised that the component industry has not been sufficiently integrated into the export business of the automotive industry mainly because of limited local content use (Barnes and Black 2003:35).

It is often argued that the still high import bias would be a negative aspect of the industry's performance (Kaplan 2003). However, the trade deficit should not be overestimated, considering the abolishment of local content requirements and the enormous restructuring process the industry successfully went through (reduced models, increased quantities). Furthermore, the achievements that have been reached so far and the prospects the industry faces regarding the development of exports and the cutback of the import surpluses have to be taken into account. It can therefore rather be judged as a competitive advantage of the South African automotive industry that it was able to reduce its import bias despite facing increasing worldwide competition. However, this advantage was of course decisive supported by the MIDP due to which automotive exporters are able to offer cheap prices.

In this context, it might be argued that the MIDP induced price advantage holds the risks of negligence of quality. This assumption is confirmed by findings of the UNIDO (2003) but contradicted by the DTI (2002b).[34] The presented firm-level data in section 6 of this paper supports the theory that quality is becoming more and more important in the automotive component industry. Surveyed first-tier suppliers stated that the quality is pre-determined by OEMs and globally standardised. However, lower tiers suppliers have often problems in meeting the required product quality (UNIDO 2003).

It is furthermore argued that the MIDP is not in conformity with the WTO, as it discriminates against imported components as compared with local components and subsidises exports via input rebates. OEMs can buy duty credits from component manufacturers that are exporting to the aftermarket. Since the trade of Import Rebate Credit Certificates (IRCCS) between component manufacturers and OEMs favours domestic produced vehicles and discriminates OEMs that do not have manufacturing plants in South Africa, those feel disadvantaged. That is why the EU claims reduced import duties on totally built-up vehicles (Business Day, 17/10/2003).

According to Kaplan (2003) the IRCCs are essential for the competitiveness of many component suppliers but also for pure importers so that also companies that are not exporting benefit from the IRCCs. Kaplan (2003:25) comments: *"This considerably dilutes the support obtained by the independent, smaller, locally owned, component exporters from the IRCC – precisely those firms that, it could be contended, should receive the highest level of support."* It is thus claimed that the MIDP does not benefit smaller companies (third- and fourth-tier suppliers) but only first- and second tier-suppliers, as only these companies are linked to OEMs and the export business.[35]

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compared retail car prices in South Africa with those in the EU agree with NAAMSA. They found out that South African consumers were confronted with lower product prices than their European counterparts. Kaplan 2003:22) contradicts this appraisal and claims that auto producers were not able to increase prices enough to get compensated for currency declines. He expects further price increases in the near future. Moreover, Kaplan criticises that the benefits of the IRCC are not passed on to consumers but are used to subsidise local component exporters (Kaplan 2003:23-4).

[34] However, the database was very small (18 firms). These firms indicated that they improved their functional capability development in the last five years and improved their quality and their manufacturing operations. A value chain movement has not been experienced, nor is it expected (DTI 2002:54-6).

[35] According to Kaplan (2003:24) there is a large overhang of unused IRCCs. In 2002, only 2.6% of the total worth of R 21 billion of IRCCs were sold and a further 10-15% were traded. Thus, around 80% of IRCCs issued are not used. NAACAM (2004c) counters that this statement " is completely wrong". The overhang between issued and used IRCCs was about R 1 billion in the period 2003-2004. *"With the time lag between an export being made and the IRCC being issued of about 6 months, this represents, "Working capital" rather*

The major concern regarding the MIDP is the fear that automotive exports decrease sharply after its expiration in 2012, worsening the import/export bias in the industry. It is therefore seen as essential that upgrading activities in the automotive component industry continue. Confronted with increasing domestic and international competition, South African producers can only maintain their position in the value chain when they are ready to upgrade their processes (e.g. towards logistic services) and to further improve the quality of products. The DTI plans to support upgrading activities of the sector and thinks of entering into consultation with single sector representatives to identify weaknesses and implement a suitable support programme (DTI 2002a:59-61). The main goals of DTI's policy towards the auto industry are to build stronger linkages between OEMs and local suppliers, to decrease the trade deficit, to reach a higher diversification degree of component manufacturers and to increase the employment level in the industry (Barnes and Black 2003:43-4).

Regarding future support of the automotive manufacturing industry after the final expiration of the MIDP in 2012, the South African government faces a dilemma. Due to reduced import duties, which are 25% for vehicles and 20% for components in 2012, MIDP's import rebate scheme is no longer feasible hereafter. This again raises the question how the industry can be supported in a WTO compatible way. A major review of the MIDP and a suitable strategy for industry's future support is going to be discussed from 2005 on, involving all interest groups (NAACAM 2003b).

5 Trade with the EU

So far it has been mainly BMW, VW, DCSA and Toyota that have expanded their overall exports significantly since 1995 (NAACAM 2003a). While the first three firms produce nearly completely for the overseas market, Toyota is still producing predominantly for the African market.[36] The other Japanese producers Nissan, Mazda and Mitsubishi have the same strategy. The main export destination for vehicles produced in South Africa is the EU, which receives around 30% of total vehicle exports and 70% of component exports (DTI 2003a:23, NAACAM 2003a).

Components account for more than 75% of South Africa's total automotive trade. In 2002, the automotive component industry exported goods of a total value of R 22.88 million of which 70.8% were destined for the EU market (TISA 2003b). The structure of trade is shown in Figure 3. The main export components are catalytic converters and seat parts, which make together, 44% of total automotive exports to the EU in 2002 (TISA 2003b).

Although the EU is South Africa's main recipient for automotives, South Africa is, with exception of catalyst converters, only a marginal supplier for the EU and comprised only 2.01% of total European automotive imports in 2000.[37] South Africa cannot keep pace with East European countries, such as the Czech Republic, Hungary and Poland (DTI 2000a:29). This indicates that, next to low production costs, proximity is a relevant factor for intra-industry trade and receipt of FDI. As the neighbouring countries of the EU (15) faced lower transport costs and were able to deliver goods faster, South Africa was not able to compete with them successfully. Furthermore, the EU has, for political reasons, adopted a strategy to integrate many of its eastern neighbours into its production system and has expanded to EU

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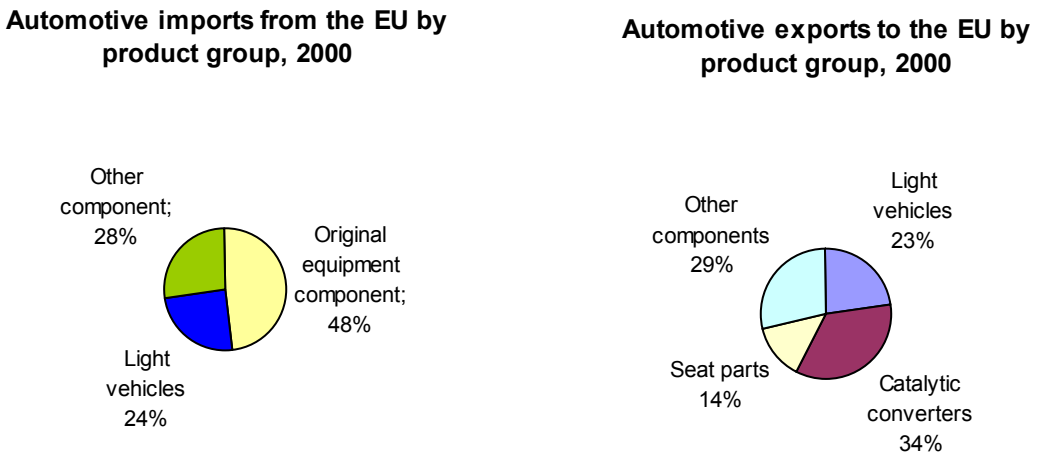
than, "Excess stock" (NAACAM 2004c). The increasing value of currently unused IRCCs is also because of the considerable appreciation of the Rand (NAACAM 2004c).

[36] This is due to export restrictions by the Japanese mother firm (compare Barnes 1999:412). However, the company plans to expand its exports to the EU due to the TDCA (NAAMSA 2003e).

[37] However, considering that EU's trade with South Africa accounts for around 1.4% of its total trade volume (European Parliament 2002:22), intra-industrial automotive trade is notedly high.

25 since May 2004.[38] The restructuring and integration of the Eastern European automotive industry was achieved by massive investment and reduced trade and non-trade barriers to the West-European market (UNIDO 2002b:33). Regarding the chances of the South African automotive industry becoming a major supplier for the EU, the DTI (2002a:34) states pessimistically: *"...there is no indication that South Africa is emerging as a source destination leader amongst countries economies. Eastern European countries are clearly occupying this leading position."*

Figure 3: Automotive trade with the EU by product group



Source: DTI 2002c

Another hindrance for the South African automotive industry to compete successfully against Eastern European manufacturers is its comparably low labour productivity, which is further struggling because of the high HIV/AIDS prevalence (DTI 1999:16).[39] On the other hand, the automotive component industry in Czech or Hungary shows almost the same productivity as in Western Europe at much lower wages (UNIDO 2002b:35).

6 Empirical Findings

The purpose of the field study was to investigate automotive component manufacturers' trade relations with European companies, to get insights into their export performance and their international competitiveness, to analyse the awareness of the TDCA and to prove whether firms see new export chances due to the TDCA.

The key research questions that are followed up are:

1. How important is exporting for the livelihood of companies and how have exports to the EU developed over the past years?
2. How important is the EU as a source for inputs?

[38] The new member states of the EU are Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia.

[39] In 2003, the Automotive Industrial Development Council (AIDC) has initiated a baseline study in Gauteng how to deal with HIV/AIDS at the workplace in terms of awareness, prevention, care and support, policy promotion and community outreach and monitoring (NAACAM 2003).

3. How did domestic and international competition develop in the past years and how is companies' performance (e.g. regarding price and profit development)?
4. Do the companies have a strategy to cope with international challenges?
5. How much do the companies know about the TDCA and where do they see chances and risks for their businesses?

While the first two question blocks relate to companies' trade relations with the EU and evaluate the EU's relevance as export and import market, question block three and four investigate the position of the South African automotive component industry in the international value added chain. Findings will be compared with those of Barnes (1999, 2001), Barnes and Black (2003) and Kaplan (2003) who did accordant firm level research as well as with sector specific data published by DTI (1999, 2002a, 2002b, 2003a), NAACAM (2003a) and NAAMSA (2003a, 2003b).[40]

The last question block analyses companies' knowledge and active approach towards the TDCA. These findings are only evaluated in section 7, after having clarified to what extent automotive industry representatives were involved in TDCA negotiations and how the envisaged further liberalisation schedule for the industry looks like.

Combined with findings from face-to-face interviews with representatives from NAACAM, NAAMSA, DTI, and CSIR/AIDC it shall hereafter be evaluated whether the TDCA offers new chances for automotive component suppliers, to what extent these are used and whether there are also risks (6.3). Furthermore, DTI's, NAACAM's and NAAMSA's information policy regarding the TDCA and to what extent the information provided have been used by the companies is discussed.[41]

The study does not claim to be representative and to mirror the economic performance and awareness towards the TDCA of all enterprises in the automotive component industry. However, as the following discussion shows, the findings of the sample are for the most parts in accordance to recent research done in this sector and also do reflect NAACAM's appraisal of the current situation in the component industry (NAACAM 2004c).

6.1 Methodology and Firm Profiles and Characteristics

The companies were selected using the "National Association of Automotive Component and Allied Manufacturers (NAACAM) 2003 Directory.[42] NAACAM represents the interests of around 30% of all companies, acting in the automotive component industry. In total, there are more than 600 companies that participate in the auto industry in South Africa. However, some of them have only small parts of their turnover in the auto industry and many supply only the aftermarket (NAACAM 2004e). NAACAM incorporates 175 member companies that represent 210 factory sites and employ 49,301 people (NAACAM 2004b). Thus, NAACAM

[40] According to Barnes (1998, 2001) the manufacturing performance of the South African automotive component industry can be measured by means of the following criteria: 1) Cost, 2) Quality, 3) Lead Time, 4) Flexibility, 5) Capacity to Change and 6) New Product Development. The market demands a low cost base, a world wide standardised quality, the flexible adaptation to different batch sizes, the capability to respond to market changes and manage resources, such as human capital, effectively, and the ability to develop new products. Further criteria that give us an idea about the international competitiveness of the automotive component industry and that are incorporated in this analysis are 7) the Development of Exports, 8) the Use of the MIDP, the Dependency on Exchange Rate Developments for Exporting, 9) Turnover and Profit developments, and 10) the Domestic and International Competition Situation.

[41] NAAMSA represents the interests of all vehicle producers manufacturing in South Africa (NAAMSA 2003a:16-7).

[42] With exception of one company, which is a vehicle manufacturer.

member companies, which are mainly first- and second-tier suppliers, employ around 65% of the total employees in the automotive component sector in South Africa.[43]

In total, 25 companies were interviewed. With exception of two, all companies are located in the Gauteng Province where 47% of NAACAM members' factory sites are located and which represents the largest auto component supplier cluster in South Africa.

The interviews were concluded personally, on the basis of a standardised questionnaire (see Annex I). Two companies, located in Durban and Port Elizabeth, were interviewed by telephone. According to NAACAM (2004c) the sample of this study is well chosen, as it covers small, medium and large companies in a range of products that is geographically spread. All interviews were conducted with the management of the companies. The job position of interview partners was as follows: Managing Director/General Manager (10), Project or Technical Manager (7), Marketing Manager (4) and Plant/Operational Manager (3). With exception of one, all interview partners were male and white. This is in line with the national ratio: black South Africans control currently only 5% of the companies in the automotive component industry (CSIR/AIDC 2003).[44]

In the quantitative breakdown there are only 22 interviews that are analysed, namely 19 interviews from first-tier-suppliers, one from a second-tier-supplier and two from OEMs (see Table 4). The remaining three interviews are either incomplete or non-comparable[45] and are only used to verify and question results and to broaden the analysis. For this purpose it is also the interviews with the two automotive industry representatives (NAACAM and NAAMSA), representatives from the DTI, TISA, and CSIR/AIDC that are incorporated.[46] The interviews were preliminarily taken from first-tier suppliers (19), since these suppliers are directly or indirectly involved in exporting activities, while suppliers that are acting in a lower division of value-added chain (2^{nd} – 4^{th}-tier suppliers) are predominantly domestically engaged. However, it must be emphasised that there is no record of what companies are first-, second-, etc. tier. Though it is known that there are in total 278 first-tier suppliers in South Africa, many of these companies are also acting as second- or third-tier suppliers (NAACAM 2004e).

Table 4: Total interviews in South Africa

$1^{st}/2^{nd}$-tier supplier	OEMs	Other companies	Private sector support institutions	Ministries/ Scientists/ Experts	*Total*
20	3	2	4	11	*40*

Foundation: With exception of one, all companies existed already during the era of apartheid.[47] It is conspicuous that the majority of companies are old and well-established with

[43] According to 75,000 employees in the sub-sector in 2003 (DTI 2003:47).

[44] It is the goal of government's "Employment Equity Programme" to increase this share to 30% in 2012. However, due to the lack of human capital in the automotive industry and as the process to qualify people to become company shareholder is a long one, this goal is unlikely to be reached in time. The government proves to increase the funding to support the goal of employment equity (CSIR/AIDC 2003).

[45] One of the companies interviewed sold only 10% of its total production to the automotive industry, one was a service and logistic provider and one company (a vehicle manufacturer) dropped out of the interview.

[46] As the analysis of the South African automotive industry's export performance and its chances and risks by the EU-South Africa FTA is part of a broader analysis for the author's PhD thesis, additional nine interviews with representatives from the Ministry of Agriculture, the Institute of Development Studies in Oxford, the World Bank Group, an expert who was formerly working for the DTI, SACOB, the South Africa Foundation, the Faculty of Economics at the University of Stellenbosch, the Advisory Service Private Business, and the Trade Law Centre (Tralac) were concluded. However, these findings are not part of the following analysis.

[47] The remaining company was established after 1994 but had a predecessor.

eight of 22 companies that were founded before 1960 and further 12 that were created before 1980. This finding is confirmed by Barnes (1999) who states that companies in the automotive manufacturing industry are long-living and have a long tradition in South Africa.

Ownership: The majority of the surveyed companies (13) are domestically-owned, seven are foreign-owned and two companies have joint-ventures. Though five companies have changed their ownership structure after 1993, there is no evidence of the dominance of foreign ownership.[48] This finding is in contradiction to UNIDO (2002b) and Kaplinksy (2000:138) who state that the ownership shifts from South African companies that have technical agreements with global component manufacturers towards joint-venture or wholly owned subsidiaries of global automotive component suppliers. NAACAM (2004c) supports this thesis, stating that there is a definite trend towards international ownership in the auto component industry. However, as discussed later on, the surveyed companies show other forms of international linkages, such as technical or license agreements.

Number of manufacturing plants: Most of the companies (18) have less than five plants Only one firm owns more than eight plants. 19 of the 22 surveyed firms have their plants exclusively in South Africa; only three companies have also plants overseas. None of them has a branch in the BLNS countries or another African country.[49] This answer shows that the surveyed South African component manufacturers act, despite their international linkages, still predominantly domestically and that the majority of surveyed companies are rather small in international comparison. The fact that there are no manufacturing branches or sales offices in other African countries implies that there are neither production facilities nor a big after-sale market in Africa, which is also confirmed by NAACAM (2003c). The empirical findings for the options of establishing a regional supplier network in the auto industry are discussed in Box 3.

Employment and Turnover: The surveyed companies show high disparities regarding their number of employees and their turnover: ten companies have up to 200 employees, six 200-500, two 800-1000 and four more than 1000 employees. The average NAACAM member employs 250 people (NAACAM 2003b). The employees in the interviewed companies are mainly men: 21 companies indicate that at least 50% of their employees are male; more than half of the surveyed companies employ more than 70% men. The surveyed companies present a good example of the average NAACAM member, which employs almost exclusively men (around 90% of the workforce). Men work above all in capital-intensive fabric processes, while women work in labour intensive fields, as they rather pass the qualification process (NAACAM 2003b). Regarding the turnover, the companies can be split in four different categories: seven generated less than R 60 million in 2002, nine earned R 100 to 350 million per annum, three made R 400 to 550 million p.a. and two companies realised a turnover of more than R 1 billion in 2002. Considering the common definition to classify companies, taking the number of employees and the volume of turnover into account, the surveyed companies can be classified as small and medium sized companies.[50] However, in a South African context, these companies can be regarded as large. In sum, it can be stated that the companies represent the main unit of NAACAM members very well (NAACAM 2004c).

[48] Of the five companies that have changed their ownership structure after 1993, three have become foreign-owned, one became a joint venture and one changed from foreign- to domestic-owned.

[49] Botswana, Lesotho, Namibia and Swaziland (BLNS) are together with South Africa members of the Southern African Customs Union (SACU).

[50] Companies with 0-250 employees and a turnover up to US$ 50 million are internationally classified as SMEs (Ayyagari *et al.* 2003:3)

Box 3: Options for Regional Integration in the South African Automotive Industry

South Africa produced 83% of Africa's vehicle output in 2002 (DTI 2003a:12). Vehicle exports to African countries are declining: while the SADC region received 46% of South African passenger cars exports in 1997, this figure shrank to 9% in 2001. In the same period exports to the EU and NAFTA raised sharply: from 7 to 38% and from zero to 18% respectively (DTI 2003a:24).

Around 70% of South African automotive components are destined for the EU market but less than 10% are exported to African countries. The share of South African component exports to the SADC has more than halved in the period 1997-2001, from 12.7% to 5.8% (DTI 2002b:30).

The 22 companies that were interviewed largely confirmed that there is neither an expandable demand in the component aftermarket nor demand by manufacturers. Only nine of the surveyed companies are currently exporting to other African countries and only seven of them intend to expand their exports to Africa. Africa seems to be an almost negligible market for the surveyed companies: four of the seven manufacturers that intend to expand their exports to Africa stated that they serve the aftermarket exclusively and deliver only small quantities. The companies deliver all over Africa, to southern Africa (Botswana, Namibia, Zimbabwe, Angola, Zambia, Malawi, Mozambique), West Africa (Nigeria, Ghana), East Africa (Kenya, Tanzania, Uganda), and North Africa (Tunisia, Morocco, Algeria, Egypt, Mauritania). The most important reason for the companies surveyed to export to Africa is the high demand for products, followed by low tariffs and non-tariff barriers, the high price of sale (as a result of the low volumes), proximity, and low competition. However, the result concerning the tariffs and non-tariff barriers must be cut down, as the majority of companies sell *ex works*. The product requirements seem to be largely the same for Africa and the rest of the world: five companies state that there is no difference and only one company stated that it supplies lower quality products to the African market. The main reason for *not exporting* to other African countries is simply that there are no OEMs and thus a low demand for products. The supply of the aftermarket, where the African demand lies, is often not companies' business. Furthermore, the companies quote political and economical instability, bribery and payment problems as hindrances to more business. Surveyed companies that export to Africa do generally only export if payment has been received in advance or if a confirmed letter of credit has been issued.

In sum, surveyed component manufactures stated that there is only a very limited demand for automotive components in the aftermarket. Consumers would favour buying used vehicles and components because of widespread poverty. Also the options of establishing an integrated regional network in the automotive industry seem to be very limited. Within SADC, it is only South Africa (and to a much lesser extent Zimbabwe and Mauritius) that shows an industrial base. Botswana used to have a Hyundai vehicle assembly plant, which closed in 2000 after the tax holiday granted by the government expired. Hyundai faced the problem of very high transport and inputs costs and could not be competitive after expiration of the tax break (NAACAM 2003c). The SADC Secretariat commissioned a study led by Dr. Frank Flatters to investigate options and limits to build up a regional supply chain in the automotive manufacturing industry. A conceivable idea in this regard would be for instance the building up of tanneries for car leather seats. This very high value product could be flown out so that countries' lacks in infrastructure services would not be a problem (NAACAM 2003c). However, the SADC regional supply chain study, which was supposed to be published at TIPS in late 2003, has not been released yet. Currently the South African automotive industry imports only little of its leather required for seat manufacturing from Namibia and Botswana (NAACAM 2003c).

Market Focus: The SACU market, or better South Africa, is the main selling market for 20 of 22 companies surveyed. The remaining two said that the EU is their first delivery area. Asked for their main export market, nine of 22 companies state that this is the EU. However, it can be expected that the EU is the most important export market for more companies: eight interview partners stated that they do not know for which export market their products are mainly destined, as they supply above all OEMs. In fact, only four of the interviewed firms export exclusively themselves, while nine companies export only through OEMs and six firms export directly as well as through OEMs. As the EU received around 70% of South Africa's automotive components (NAACAM 2003) and 30% of totally-built up vehicles in 2002 (DTI 2003a:23), it can be expected that the vast majority of surveyed companies are

indirectly dependent on the EU market. The fact that 15 of 22 companies (also) export through OEMs is symptomatic for South African automotive component exporters. Barnes (1999:402,409) states that the vast majority of component suppliers in South Africa rely on OEMs for their economic survival. To export successfully, component manufacturers use either OEMs as export channels or they create connections to international companies. Domestic producers that are not linked to international producers are often not linked to the production process, too (DTI 1999:5).

Table 5 summarises the characteristics and profiles of the firms surveyed.

Table 5: Summary of firms' characteristics of surveyed South African automotive manufacturing companies

Foundation	*N =22*	
	> 1960:	36.4%
	1960-80:	54.6%
	1991-93:	4.5%
	> 1993:	4.5%
Ownership	*N = 22*	
	Domestic company:	59.0%
	Foreign company:	31.8%
	Joint-venture:	9.2%
Market position	*N = 22*	
	OEMs:	2
	First-tier supplier:	19
	Second-tier supplier:	1
Number of manufacturing plants	*N = 22*	
	1 plant:	9
	2-4 plants:	9
	5-8 plants:	3
	> 8 plants:	1
Employment	*N = 22*	
	< 100:	18.2%
	100-200:	27.3%
	201-300:	13.6%
	301-500:	13.6%
	800-1000:	9.1%
	> 1000:	18.2%
Turnover (2002)	*N = 21*	
	R 15-60 Million	33.3%
	R 100-170 Million	23.8%
	R 200-350 Million	19.0%
	R 400-550 Million	14.3%
	> R 1000 Million	9.6%
Market focus	*N = 22*	
	South Africa:	90.9%
	EU:	9.1%

6.2 Exports to the EU and Development of Export Options

The majority of surveyed companies (12) started to export to the EU only after the end of the apartheid era, thus, after the end of sanctions. Three companies exported already before

international sanctions entered into force.[51] Three firms do not export to the EU and four export only through OEMs and are not aware of which markets their products are destined to be exported to.

Market Advantages of the EU: Only 18 of the 22 surveyed companies know the EU market well enough that they were able to name advantages and disadvantages of the EU as an export destination for their products. Six companies mentioned stable prices and quantities as important factor, whereas seven firms judged this a partly relevant factor and five companies said that the European market does not show stable prices and quantities. This negative appraisal relates most of all to the price development. The EU market is seen as interesting because of high volumes but it is claimed that it shows only a low profit margin (said by 13 of 22 companies). The majority of companies are thus only able to increase their profits when delivering high volumes. The firms are not only price- but also quality-takers, i.e. they have to fulfil the quality and to accept the prices that are given by the OEMs. Although only eight companies see the high quality requirements of the EU as an advantage, 15 companies refer to it as a very important factor. Statements like "We have to strive for quality all the time" or "The quality is the same world-wide" confirm the thesis of a globally determined quality. All companies as well as NAACAM confirm that high quality is a precondition and competition only pertains to the price. Barnes (1999:405-6) agrees: *"Poor performance is no longer tolerated by the OEMs, with the net result being ongoing operation pressure on the component firms by the OEMs. Failure to conform to specified performance targets results quite simply in the transfer of business from the South African company to a foreign supplier."*

Only six interview partners named preferential market access to the EU as a (very) relevant factor, while nine judged it as irrelevant. However, only one company referred to the TDCA in this respect. The vast majority of firms sell through European partners (licensers, OEMs) so that their market access has not changed because of the TDCA. Though South Africa gets better market access to the European market than Brazil or China, Eastern European countries enter the EU market duty free and create substantial competition (UNIDO 2003, DTI 2002a).

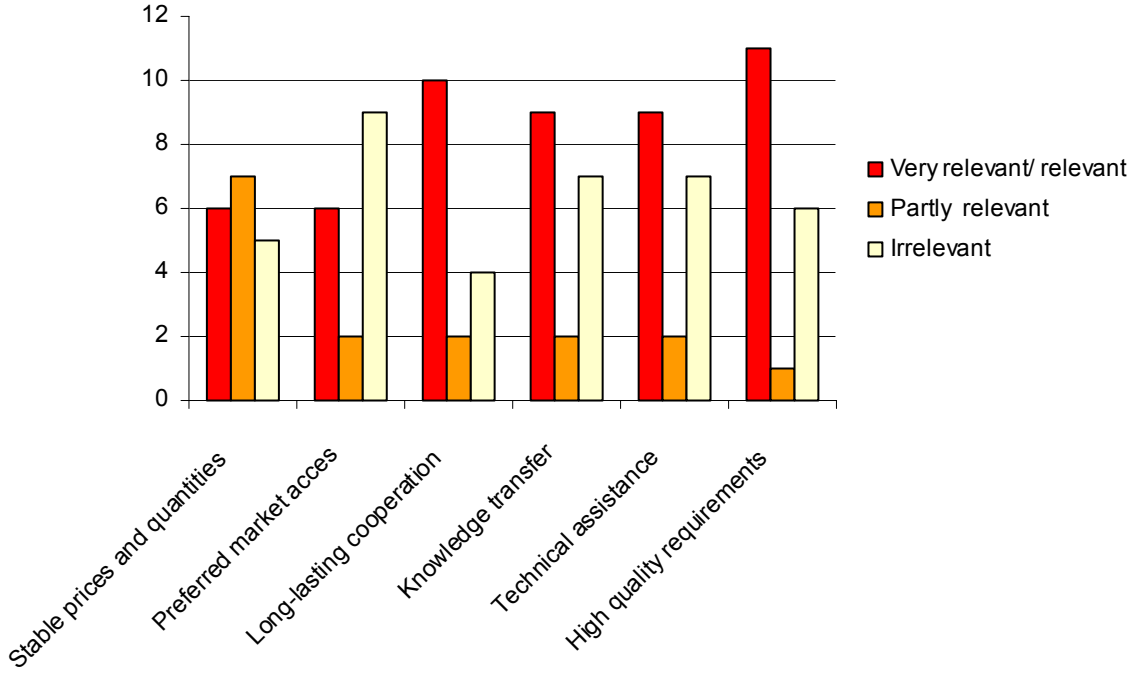
Long lasting cooperation, knowledge transfer and technical assistance are named as important factors, too (10 and nine votes respectively). Around half of the companies indicated that they benefit from cooperation with their European counterparts or with OEMs and get technical assistance if required. However, seven companies said that they receive neither knowledge nor other assistance from their partners and have to perform their activities on their own. According to NAACAM it is rather contacts than knowledge transfer or technical assistance that are relevant for component exporters. Because of the MIDP international OEMs have expanded their production and formed links with component manufacturers. Furthermore, the change of the international supply chain and the increasing trend of outsourcing manufacturing activities to developing countries would be important (NAACAM 2003b).

When asking for other factors that promote their exports to the EU, the companies highlighted large quantities (13), the option to export standardised products (2), the usage of the MIDP (3), the delivery into a stable, hard-currency market (3) and the facilitation of business through cultural similarities (1).[52] Figure 4 summarises surveyed companies' statements regarding the attractiveness of the EU as an export destination.

[51] To deal with the sanctions, international OEMs established locally owned producers of their products in South Africa or operated through wholly owned subsidiaries (Barnes 1999:404).

[52] ACP inputs are not used in manufacturing process at all. South Africa is the only ACP country that has an automotive industry. See Box 3.

Figure 4: Summary of surveyed firms' reasons to export to the EU (N = 18)



Market Disadvantages of the EU: As expected, it is not a problem for the manufacturers to fulfil the rules of origin (16 firms said they are not a hindrance to enter the EU market), as the whole manufacturing, value-adding process does generally take place in South Africa. To fulfil environmental standards and safety regulations is not a problem either: 15 of 18 companies do not have any problems in this respect; two judged it as partly relevant and only one firm has great problems to meet EU standards. However, some of the interview partners emphasised the increasing importance most of all of environmental standards get and the rising expenditures that are necessary to comply. With exception of one, all surveyed companies are certified by ISO 14000 and meet international product quality standards.

To meet the high volumes of the European market is not a problem for 11 companies, while seven firms have or had difficulties to comply. To fulfil the quantitative requirements the companies had to adapt new technologies or run extra shifts.

14 companies stated that access to finance is not a problem, while four named it as a serious hindrance for their exports to the EU. These four companies are all domestically owned, while only five of the 14 companies for which finance is not a problem, are local firms. However, four of these five companies show international linkages, which the other four local firms do not have. This finding might support the thesis that international connections guarantee appropriate access to finance and are thus an important competition advantage when exporting.

Only six companies see tariffs and customs procedures as a "partial" hindrance; the other 12 do not face any tariff or non-tariff barriers when exporting to the EU. However, six of these 12 companies export only via OEMs and do not have any first-hand experience. According to NAACAM duties are in parts still a problem when entering the EU market, though some duties for automotive components have shrunk over the last years.

12 firms indicated that they do not face any problems to meet international technological requirements. Three companies have partly problems to comply and three companies show a lack of technology. Difficulties to meet the mechanical demands seem to be independent from ownership but include various other reasons. One foreign-owned company stated that it has problems to get good quality inputs, one joint-venture company stressed the point that it cannot benefit from its foreign counterpart, as the companies show a

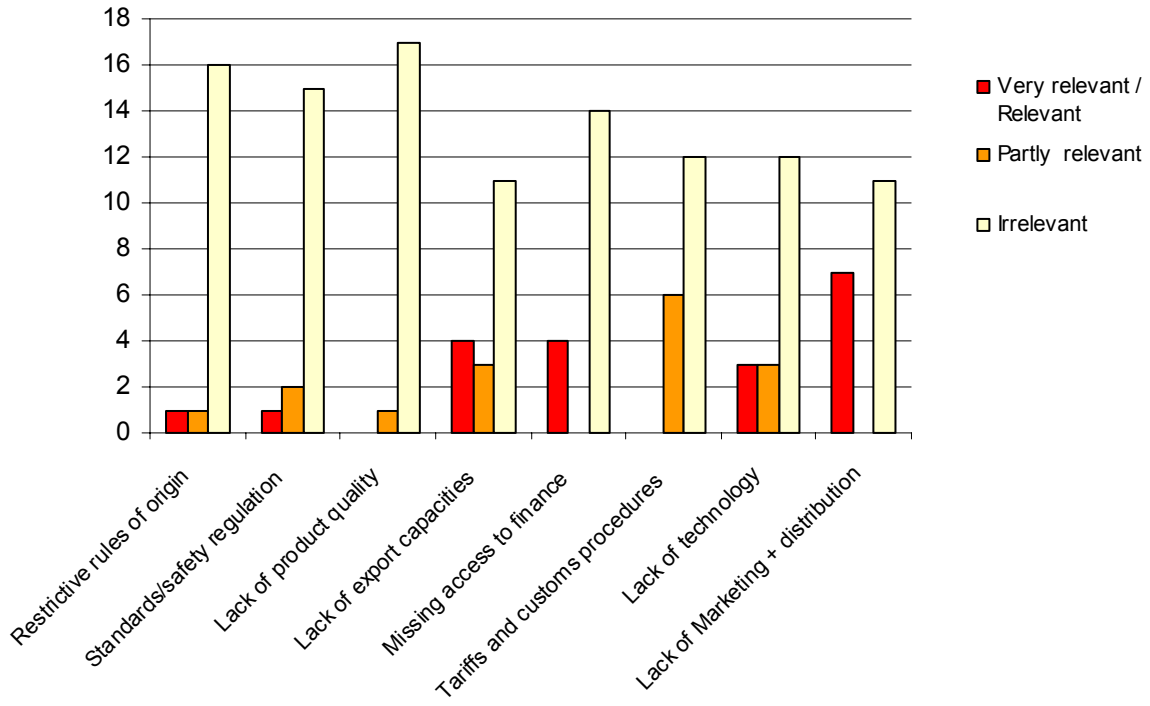
partly different product range, and two domestically-owned companies cite a lack of financial resources to realise necessary investments.

To market and distribute their products in an appropriate way is not a problem for 11 companies. Six of them deliver their products to an EU licenser or cooperate with a foreign logistics company, three have set up their own distribution channel or warehouse and two deliver only to regular customers within South Africa. There are seven companies that have (partial) problems to distribute and market their products and cite a lack of foreign warehouses and distributors or a license to market and distribute their products in the EU as the stumbling blocks. In general, the value creating distribution and marketing activities still occur outside South Africa, in developed countries (UNIDO 2003, NAACAM 2003b).

Further constraints to exporting into the EU market are high transport costs and time constraints (named by six companies), exchange rate problems (4), not having a license to supply the European market, as this is already done by a subsidiary company (3), the unattractiveness of the EU market because of low prices and high competition (2), and not having access to market information (2). NAACAM names further OEMs high reliability of brand names for assembly products and the low credibility of South African manufacturers as constraints. People would not differentiate between single African countries and could not believe that South Africa manufactures high quality automotive products (NAACAM 2003b).

Figure 5 summarises surveyed companies' restraints to export to the EU.

Figure 5: Summary of surveyed firms' hindrances to export to the EU (N = 18)



Summarising surveyed companies' statements regarding the advantages and disadvantages of the EU as export destination, it can be stated that high quality requirements, long-lasting cooperation, knowledge-transfer and technical assistance are seen as the most important advantages, suggesting that it is above all companies' connections to their European counterparts that are of relevance for them. Issues that do often restrict African companies' exports to the EU, such as restrictive rules of origin and standards, limited capacities, lack of technology, and customs procedure are on the other hand not a handicap for the companies

surveyed. This finding indicates that the companies surveyed are already part of international production networks and perform according to international requirements.

Development of Exports to the EU / Sales to OEMs: Asked for the development of their exports to the EU and sales to OEMs in the last five years, 13 companies declared an increase, one a decrease, seven indicated that their exports/sales remained stable and one company did not answer the question. In sum, a rather positive outlook can be drawn, with more than half of the companies showing an increase in exports/sales. Eight companies raised their exports/sales by more than 50% (and three of them by more than 100%) in the last five years (see Table 6). Furthermore, four companies expect an additional increase of OEMs' demand in future. Reasons for the boom of suppliers' exports/sales to OEMs are mainly increased demand (11) and expanded production (11). Five companies judged an improved market access and cooperation with a foreign firm as important factors, while eight firms did not weigh this as relevant. Immaterial aspects for companies' increased exports/sales were improved technical assistance, more generous regulations regarding quality and environmental standards and cheaper inputs (see Figure 6).

Further positive factors for boosted exports/sales to OEMs include the introduction of new products and an increased product range (2), an improved product quality (2), the influence of the MIDP (2) and the devaluation of the Rand (1).

According to the companies surveyed tariffs are only a minimum constraint to export to the EU and are more attached importance by NAACAM. Only three companies said that they pay tariffs to enter the EU market.[53] Four companies were not aware of any duties that have to be paid and 15 companies do not pay any duties when exporting to the EU. However, since only eight of these 15 firms export directly to the EU market while the remaining seven export via OEMs, the number of companies that is subject to tariffs might be higher.

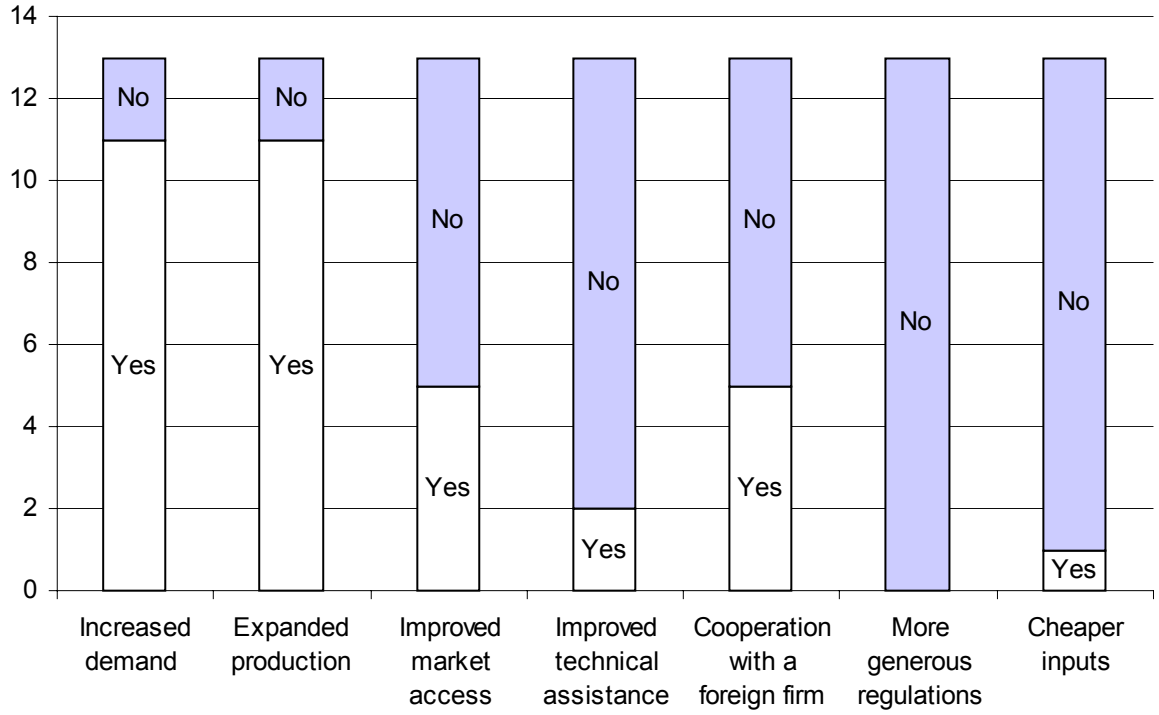
Altogether it can be stated that surveyed companies' exports have largely developed positively and are expected to increase further. This is mainly because of OEMs increased demand and thus an expanded production. These findings are in accordance with NAACAM (2003b), which noticed a great increase in its members' exports (40% per annum.) due to increased demand from OEMs.

Table 6: Summary of firms' exports/sales development, 1998-2003

	N = 20
Increased	60.0%
Decreased	5.0%
Remained Stable	35.0%
	N = 12
Increased by <10-20%	3
30-40%	1
50-75%	4
76-100%	1
>100%	3

[53] Two companies pay only very small tariffs (1.4 and 2.2% respectively), and the one OEM surveyed is charged a 6.5% tariff for bringing his light vehicle into the EU market.

Figure 6: Summary of surveyed firms' reasons for increased exports to the EU (N = 12)



Strengths and weaknesses in exporting: It is striking that quality is seen as main strength (20 companies out of 21).[54] As already mentioned it is obligatory to comply with the quality determined by the OEM to be competitive. Nine companies judge the price setting of their products as an advantage; six saw it as disadvantage and six considered their prices "neutral". The scope of price negotiation towards OEMs is generally limited. *"If you do not have the lowest price in the world, you do not get the business."* (NAACAM 2003b) The price is predominantly determined by OEMS, so that the competitiveness of component suppliers depends highly on the exchange rate. Therefore, producers that depend on a high level of imported inputs can often not offer a competitive price. Since the companies often have to purchase raw materials in accordance to OEMs determination, they might not be able to source the cheapest inputs. However, the supply of local sourced inputs can also be expensive, as it is for instance the case with aluminium and steel that are monopolised in South Africa.[55] Thus, 15 companies see their raw material base as a weakness, while only four perceive it as strength.

The degree of capital utilisation is very different among the surveyed companies: while 10 companies stated that it is as strength, eight judged it as weakness and three as neutral. The comparably low level of automatisation in the South African automotive industry is seen as a heritage of apartheid, when capital was substituted by (cheap) labour. The majority of component manufacturers were thus forced to engage in massive investment and to restructure their production process when the South African economy opened up (Kaplan 2003).

Most of the companies surveyed (14) think that the productivity of their workforce is too low; only five firms are satisfied with the labour productivity. Labour costs are seen as

[54] As already mentioned 10 of the 22 interview partners (also) export directly to the EU, nine exclusively through OEMs and three companies do not serve the EU as an export destination. However, 21 of 22 companies interviewed were able to state their strengths and weaknesses in exporting.

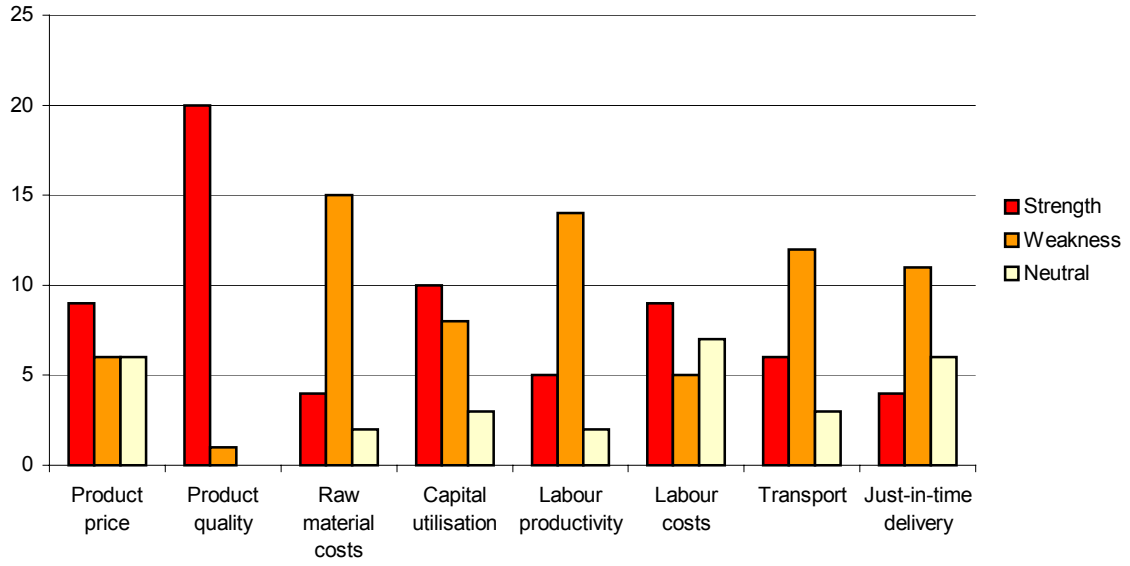
[55] This finding is in contradiction to NAACAM's appraisal that South Africa is a low cost base for raw materials (NAACAM 2003b).

strength by nine of 21 companies. Seven judged it neutral in comparison to labour productivity and five companies said that the wages are too high.[56] As many companies do still rely on labour-intensive production processes, the wage/productivity ratio is an important competition factor for them. It is emphasised that a well-trained workforce becomes more and more important for the industry (Barnes 1998:4, TISA 2003a). According to Barnes (1998) it is predominantly the low level of trust between management and workers that hinders effective working models, such as team-working and self-directed working teams, which in turn contributes to the low level of labour productivity in the South African automotive industry. As the majority of management is still white, while most of the workers are black, this problem is also a heritage of apartheid. The surveyed companies that are satisfied with the productivity level of their workforce agree that for them, workers' productivity depend highly on the performance of the management.

The majority of interview partners (12) said that the transport of goods is a weakness. Only those companies that deliver ex works or to South African based OEMs (6) see transport as an advantageous factor. Just-in-time delivery is either an "impossible" or a "negligible" factor. 11 companies said that they are not able to deliver just-in-time and six stated that this is not important for them. Only four companies are strong in just-in-time delivery but only one meets the requirements made by an OEM based in the EU, the other three companies supply only to OEMs in South Africa. Figure 7 summarises surveyed companies' strengths and weaknesses.

Further strengths of the surveyed companies are the low cost base in South Africa regarding land and energy (named by 4 companies as further strength), the MIDP (3), the capability to manufacture small batches (2), the flexibility with regards to manufacturing processes (2), and a high capacity and technology potential that meets the European requirements (2). Further weaknesses are the long distance to the European market (named as further disadvantage by five companies) and the lack of an agent/distributor in the EU (2).

Figure 7: Summary of surveyed firms' strengths and weaknesses in exporting (N = 21)



[56] The wages paid in the automotive component industry are high in comparison to other manufacturing sectors. However, due to the insufficient product quality and the insufficient upgrading activities, in addition to increased global competition, an increased pressure on wages is expected (Kaplinsky 2000:139).

As can be obtained from Figure 7, product quality and product prices are surveyed companies' main strengths, while the costs for raw materials, the labour productivity and transport costs are their main weaknesses.

Surveyed companies' appraisal about a too expensive raw material base cannot be generalised. The majority of South African auto component manufacturers have substantial domestic raw material bases and do benefit significantly from the MIDP, as the raw materials are included as local value added and are therefore duty rebate qualifiable (DTI 2002a:35-8). NAACAM (2003b) confirms that South Africa is a low cost base for raw materials.

Surveyed companies' assessment regarding low labour productivity and high transport costs whereas seems to be a general problem of the South African auto sector. Though the labour productivity in the automotive industry rose well above the manufacturing average in the last 10 years, it is still judged as too low in international comparison (Barnes and Black 2003:19). The high transport costs occur mainly due to South Africa's unfavourable geographic location to supply its main market, the EU. However, South Africa has a comparably favourable location to supply South East Asian countries and Australia (DTI 2002a). Thus, BMW and Mercedes have invested almost R 7 million in South Africa and plan further expansion investment to serve the right-hand-drive market in the Far East (Economist 14/02/04).

Importance of exporting for companies' all-embracing performance: For the majority of surveyed companies (16) exporting is (very) important to raise their economies of scale.[57] Increased profitability and productivity due to exporting are also judged as a (very) important factor by most of the companies (13 and 17 respectively). Those companies that have not been able to increase their profitability due to exporting yet (7), claim that it is very costly to "get a foot into the door" and become a reliable OEM supplier. Furthermore, the unstable exchange rate influences the profitability of their exports negatively.

Exporting has helped 14 and 15 companies respectively to increase their technology and manufacturing competences. Three of those companies that do not agree with this statement said that it is not the export business but their integration into an international company that has helped them to improve their manufacturing competences.

An improved product quality due to exporting is confirmed by 14 of 20 interview partners. Price competitiveness, on the other hand, has only improved for 11 companies, while eight companies judged the influence of export business on their price competitiveness as limited or insignificant.

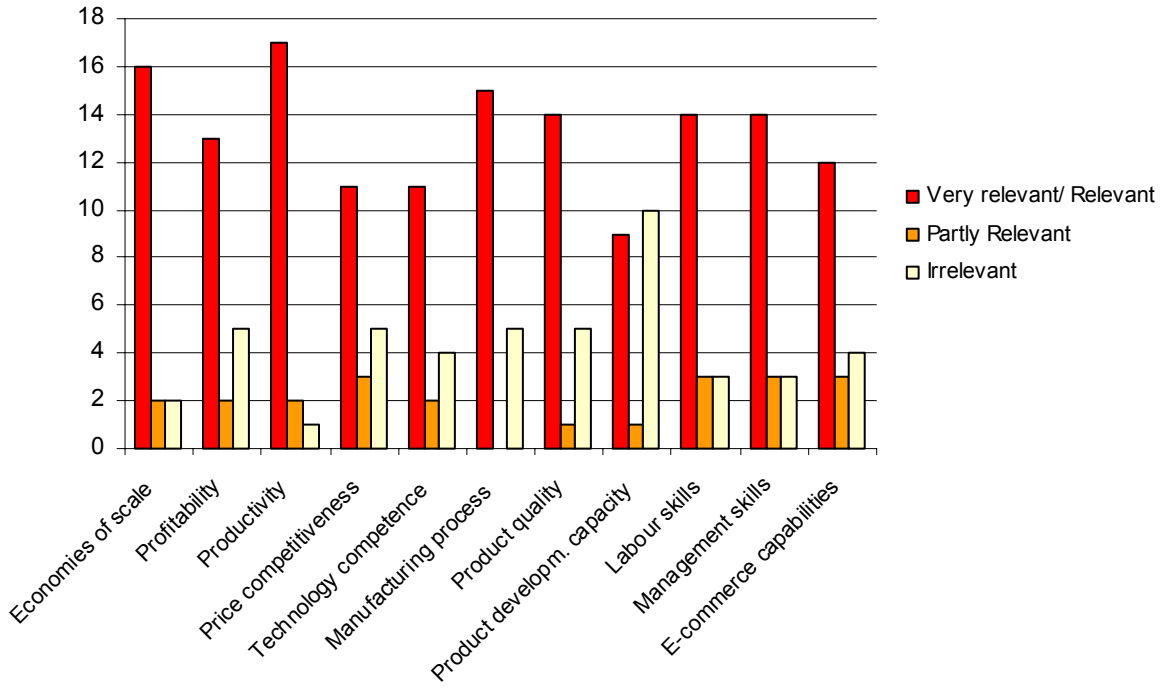
The majority of companies (14) confirmed that their labour and management skill have improved because of the export business. Furthermore, exporting seems to improve the e-commerce capabilities of surveyed firms, with 12 companies indicating so. Price quotations, biddings, invoicing and payments via Internet as well as international inquiries are the main activities in this respect.

However, the ability to develop new products, which is seen as important factor to become internationally competitive (Barnes 1998), is not even fulfilled by half of the companies. Only nine firms were able to improve their product development capacity while 10 were not. This result is confirmed by sector analysis's from Barnes (1998) and UNIDO (2003) as well as by NAACAM (2003b), all stating that the South African automotive industry is, as part of a global network, more and more shepherded into pure manufacturing, while high-valuable parts of the product chain, such as product development, design and marketing are almost exclusively done in OEMs headquarters in industrialised countries. However, the fact that the surveyed companies act successfully in an international

[57] Only 20 of 22 companies were able to answer this question. The remaining two stated that their direct exports are currently too small to give a conclusive answer.

environment implies already that they are able to develop new products and processes. Though these new products and processes are no "radical innovations", they are nevertheless innovative in the sense of Schumpeter (Sell 2000:10). New forms of organisation, improved product quality, improved labour and management skills and the introduction of new shift systems might be judged as only marginally innovative by the companies themselves but show that the surveyed companies are permanently improving their performance to stay competitive.

Figure 8: Export business' contribution to surveyed firms economic performance (N = 20)



Export assistance: With exception of four, all companies make use of the MIDP. Of the four that do not, one company is a second-tier-supplier that sources exclusively local inputs and the other three companies deliver exclusively to domestic OEMs and do not export themselves. However, the OEMs can still rebate the local content under the MIDP. It is therefore very likely that all three suppliers benefit indirectly from the MIDP. From the 18 companies that confirm that they benefit from the MIDP, 12 pass it on to OEMs to become/stay competitive, one company passes the MIDP only partly further to OEMs but also uses it itself and five companies use the MIDP predominantly to rebate inputs for their own exports. Altogether, the finding shows that the companies surveyed largely use the MIDP, either for direct or indirect exports. This confirms the well-established theory that the MIDP is an important feature for first-tier-suppliers and OEMs competitiveness (Barnes and Black 2003, Kaplan 2003, UNIDO 2003).[58]

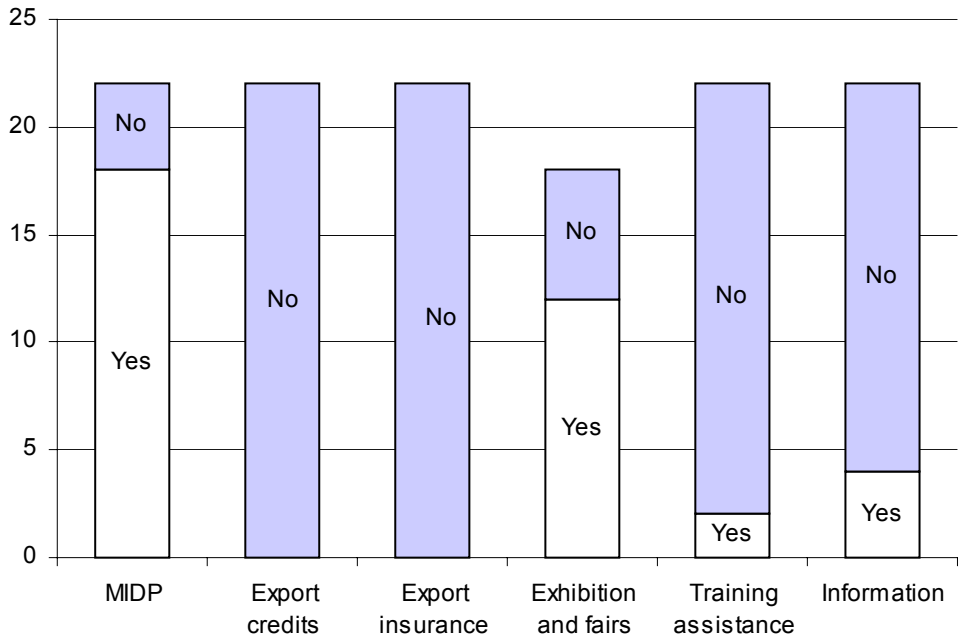
However, "classical" instruments of export promotion, such as export credits or export insurance, seem hardly to exist in the South African auto component industry (see Figure 9). Though the Industrial Development Corporation (IDC) offers credits for SMEs, none of the companies surveyed uses them, as the interest rates of these credits are not judged as attractive. The same applies to the export insurance offered by the IDC, which is regarded as too expensive (NAACAM 2003b). Moreover, the DTI offers assistance to participate at

[58] Firm-level data of the DTI (2002:50) also support the thesis of manufacturers' dependency on the MIDP. In a survey, 13 of 18 firms indicated that the MIDP is central to their export performance and none of the firms stated that it would be able to maintain its current success without the MIDP.

international fairs by the "Export Marketing and Investment Assistance Scheme" (EMIA).[59] 12 companies stated that they know about this programme but only five companies use it; the other seven said DTI's export assistance is not interesting for them because of too much bureaucracy. Four companies are not interested in exhibiting their products and six companies do not qualify for EMIA or are not aware of the programme. However, according to NAACAM (2003b) the programme is very helpful in creating a good image for the South African automotive industry.

20 companies stated that they do not get any assistance to train their staff. However, though the government does not grant additional training assistance, all manufacturing industries are able to claim 1.5% of their salary expenditures as deductible for training costs (which was judged as assistance by one company).[60] NAACAM (2003b) states that public training schemes are not sufficiently promoted by the government. Most small auto component firms would make hardly use of programmes offered. Only four of 22 companies said that they receive information, which is important for exporting, though all of the companies are NAACAM or NAAMSA members. This can either mean that NAACAM/NAAMSA does not provide the companies surveyed with relevant information or that the interview partners are not sufficiently aware about the information they receive.

Figure 9: Summary of surveyed companies' export assistance (N = 22)



Summarising it can be stated that the MIDP is an important export assistance scheme for the companies surveyed. Further export promotion assistance is hardly used. Since the vast majority of surveyed companies are linked to international suppliers they do not face financial constraints for their export business. However, the MIDP is an important feature for exporting, as it improves the attractiveness of South African component suppliers for OEMs in comparison to non-South African component manufacturers.

[59] EMIA is an export assistance programme run by the DTI. It is supposed to assist exporters in market and investment research and in inward and outward selling of products as well as in the participation of exhibitions. For further information see http://www.thedti.gov.za/exporting/exportincentives.htm.

[60] Another company is participating in a 3-years AIDC/UNIDO model project to improve human capital skill in the automotive component industry

6.3 Europe's Relevance as Input Source

Main source of inputs: The data suggest that South Africa is still the main source of inputs, despite the appreciated exchange rate since 2002. 13 companies source the majority of their inputs from South Africa, with 10 of them showing a domestic content of 71-100%.[61] These results are in contradiction to the findings of Barnes and Black (2003:12) who noticed that fewer inputs have been sourced locally since the expiration of local content requirements and the introduction of the MIDP. However, a new trend of domestic input sourcing might emerge. As discussed in sub-section 4.2, the import bias in the automotive industry is steadily declining. The surveyed firms pointed out that imported inputs are not attractive due to high transport, packaging and warehousing costs, import duties and the volatile exchange rate. Thus, companies that rely on a high level of imported inputs would have problems to stay competitive; an appraisal, which is confirmed by NAACAM (2003b).

The EU is the major source of inputs for four companies but only one obtains more than 70% of its total inputs from the EU (see Table 7).[62] Nationwide, the EU accounts for around 75% of all imports for the auto component industry (NAACAM 2003b).

Development of input prices: 20 of 22 companies said that their prices for inputs have increased. 14 of them faced price increases of more than 40% in the last five years (and 10 of more than 50%). One company registered a small price decrease for inputs (of less than 10%) and one stated that input prices remained stable. However, the price increases were highly exchange rate driven. 12 of 20 companies that faced increased prices said that prices remained stable in €/US$ terms or even shrunk (this was the case for two companies). Only two firms noticed significant price increases in €/US$ terms due to a shortage of input materials.

This finding indicates that it is above all monetary instabilities (inflation, exchange rate) that lead to price increases for inputs until 2001. The companies did further claim that the appreciation of the Rand since 2002 has not resulted in price decreases for domestic inputs.

Table 7: Summary of surveyed firms' main input source and development of input prices

Main input Source	*N = 21*	
	South Africa:	62.0%
	EU:	19.0%
	Far East:	9.5%
	Other:	9.5%
Price Development	*N = 22*	
Increased		91.0%
Decreased		4.5%
Remained Stable		4.5%
Price Development	*N = 20*	
Increased by 1–20%		10%
31-40%		20%
41-50%		20%
>50%		50%

As summarised in Table 7, around 2/3 of the companies surveyed source their inputs from South Africa. The price increases were mainly exchange rate driven.

[61] One company states that it sources globally.

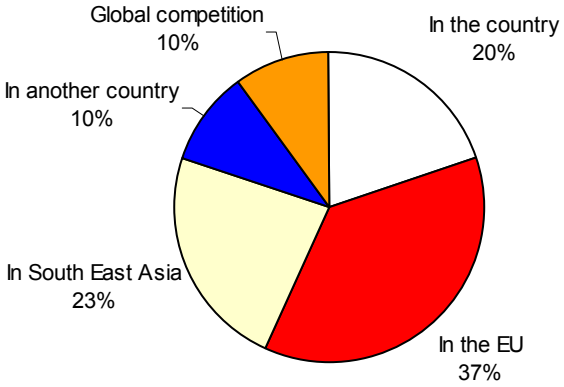
[62] Two companies source their main inputs from the Far East and two from Brazil and Australia. No company interviewed receives the majority of inputs from the USA.

6.4 Competition in the Domestic and in International Markets

Main competitors and competition within the EU: When answering this question, eight companies gave multiple answers, stating that they face high competition from more than only one country. Companies from the EU are the main competitors for 11 companies surveyed, seven firms face above all increased competition from South East Asian companies and six companies compete mainly with South African firms. For three companies the main competitor is (also) in another country (USA, Brazil) and three companies stated that they face global competition (see Figure 10). In sum, the EU seems to be the most relevant competitor for the component industry. However, this relates above all to the competition situation in the EU market but not to the South African market. Only seven of 22 companies feel adversely affected from European imports in the South African market; mainly because of high volumes (see Figure 11). However, the risk of replacement by EU suppliers in the South African market is judged as limited. *"The EU is too expensive"* (NAACAM 2003b). Currently 15 of the 22 surveyed companies do not feel threatened by European competition. However, this situation is likely to change with the EU enlargement to 25 member countries. The new EU members also offer world-class products but show a higher labour productivity and lower transport costs than their South African counterparts.[63]

General competitive situation: According to 11 companies competition has increased over the last five years. While three companies have noticed a decrease in competition, seven said that their competition situation has remained unchanged (see Figure 12).[64] However, those companies that registered a decreased competition, point out that this is only the case because they have become more competitive.

Figure 10: *"Where are your main competitors?"* (N=22)[65]



[63] The DTI (2000a:29) stated already in 2000 that South African automotive component suppliers cannot successfully compete with East European companies and that this situation is likely to worsen after the EU east enlargement.

[64] One company could not state whether its competitiveness has increased, as it does not have any insight in the competition situation of its mother company and is totally dependent on the business it gets.

[65] Multiple answers possible. Eight companies said that they have more than one main competitor.

Figure 11: "*Do you feel adversely affected because of European goods imported to the country?*" (N=22)

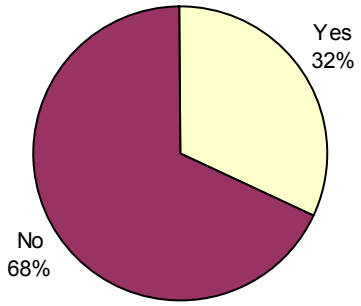
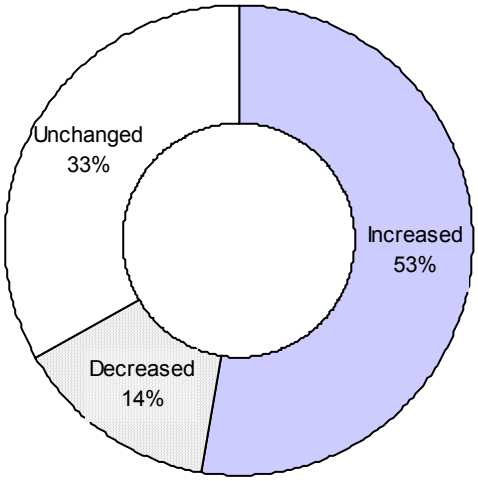


Figure 12: *"How did your general competition situation develop in the last five years?"* (N=21)



In sum, the answers indicate that domestic and international competition has increased for South African auto component manufacturers. As OEMs have decreased their models and increased the volumes, the chances for component manufacturers to receive a contract have decreased and the competition among component manufacturers has been raised. According to NAACAM this rationalisation process is going to continue and a further increase in competition can be expected (NAACAM 2003b), which indicates the necessity for companies in the component sector to upgrade their activities to stay competitive.

6.5 Value Chain and Added Value of Exports

Profit trend: Only 14 of 22 companies answered this question in detail. However, all companies were ready to indicate whether their profits have increased or decreased. Regarding the general development of profits, it can be stated that the majority of companies (in average 14) experienced a growth in profits during the period 1999-2003, while an

average number of six companies faced declining profits.[66] In average, two companies showed stable profits from 1999-2003. The increase in profits was generally moderate, with seven companies showing an enhancement of less than 10%. Only two companies were able to increase their profits by more than 41% (see Table 8). In sum, the majority of companies surveyed experienced a small profit increase, which is in line with the average NAACAM member that was able to raise its profits by 2-3% per annum from 1999-2003 (NAACAM 2003b).

Table 8: Summary of firms' profit development, 1999-2003

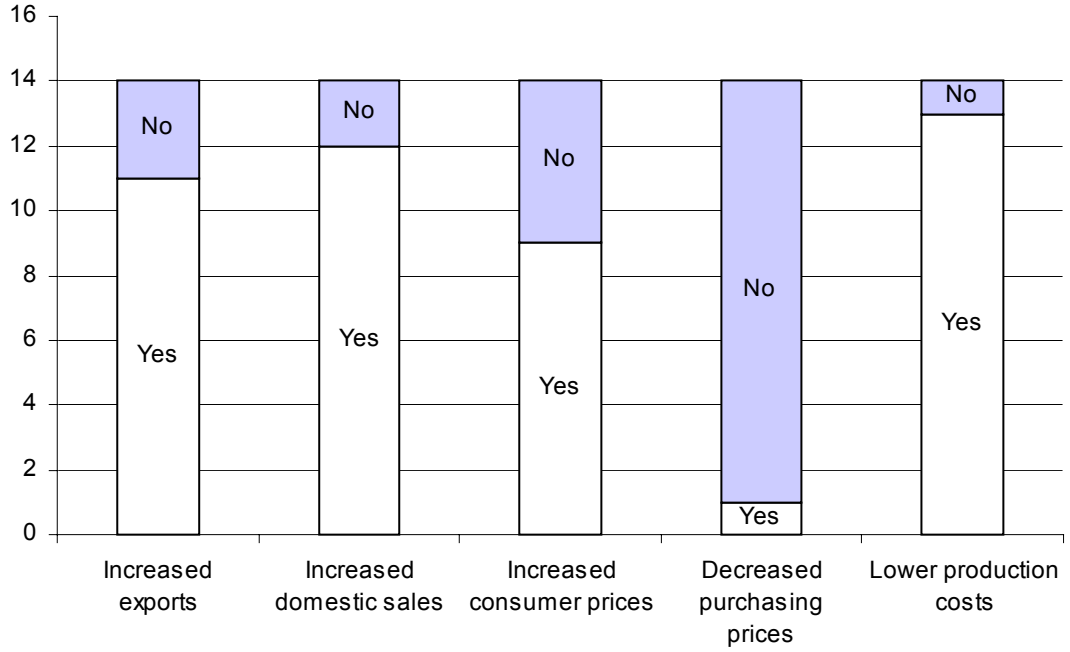
		N = 22
Increased		63.6% = 14 companies
Decreased		27.3% = 6 companies
Remained Stable		9.1% = 2 companies
		Detailed breakdown: N = 14
		N = 11
Increased by	<10%	63.6%
	10-20%	9.1%
	31-40%	9.1%
	41-50%	9.1%
	>50%	9.1%
		N = 3
Decreased by	<10%	66.7%
	10-20%	33.3%

Relevant factors for profit increase/decrease: The main reasons for increased profits are lower production costs (as stated by 13 of 14 companies that showed increased profits in the period 1999-2003), increased domestic sales (12), increased exports (11), and higher consumer prices (9). However, four companies emphasised that consumer prices rose only in accordance to their costs. Decreased purchasing prices, whereas, were not a reason for increased profits; only one of 14 companies was able to receive inputs at cheaper prices. It seems that the development of profits is highly driven by increased volumes and the exploitation of economies of scale. When asked for further reasons that were important for increased profits, seven companies named higher volumes. Other reasons are a better-cost management (4), a high return of investment (2) and the change in ownership (2).[67] Furthermore, the MIDP and the constant improvement of production processes can be seen as relevant factors for increased profits (NAACAM 2003b). Figure 13 summarises the causes the companies named as responsible for profit increases.

[66] The decreases in profits have been moderate with less than 10% for 2 companies and only one company showing a profit decrease of 10-20%. On average one company showed stagnating profits in the period 1999-2003.

[67] One company became South African again and one entered into a joint-venture with a foreign firm.

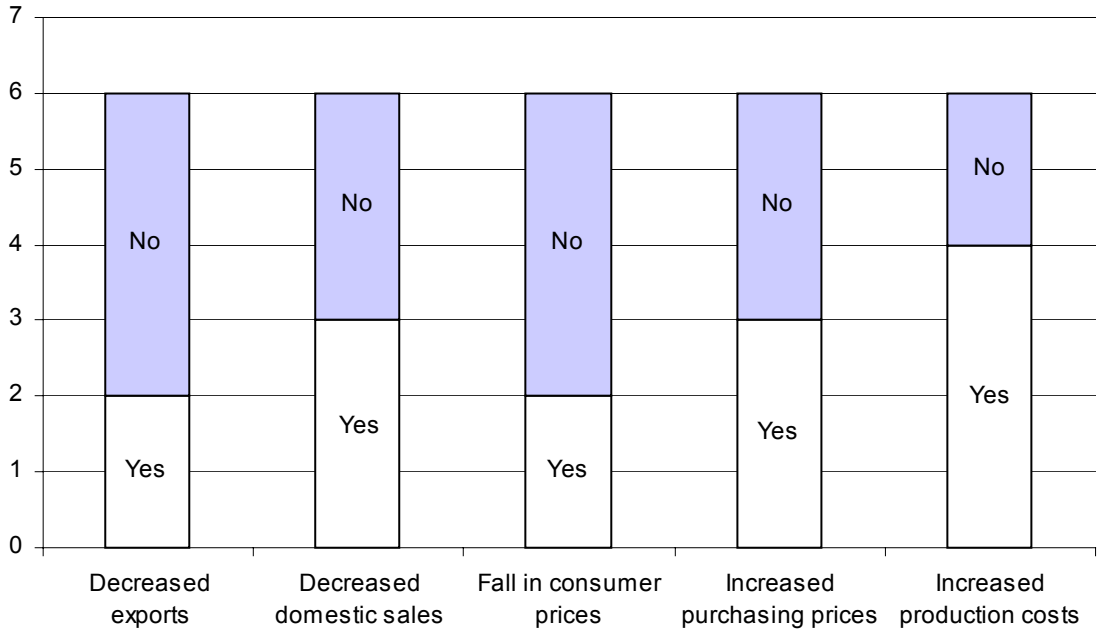
Figure 13: Surveyed firms' reasons for increased profits (N = 14)



The reasons for the decreased profits as experienced by six firms are mainly increased production costs (4), decreased domestic sales (3) and increased purchasing prices (3) (multiple answers possible). The companies also named internal management constraints (2) and foreign exchange problems (2) as reasons for profit losses (See Figure 14). Two companies said that high expenditures of investment are the main reason for decreased profits from 1999-2003 and that they expect rising profits in the near future.

NAACAM (2003b) confirmed that component manufacturers' profits are highly volume driven. As prices are to a large extend determined by the OEMs, high volumes are component suppliers' only chance to increase their profits.

Figure 14: Surveyed firms' reasons for decreased profits (N = 6)



Change in unit price: Asked for changes in unit prices, 12 of 22 companies cited slight price increases for their main products in the period 1999-2003, six companies faced slight price decreases and four indicated that their prices remained unchanged. When analysing product groups, 40 product groups showed slight declines in sales price[68], 31 showed slight price increases[69] and 16 product groups remained stable. The price decreases were mainly forced by OEMs but compensated or even overcompensated by increased volumes. However, the high inflation rate in 2000/2001 created problems to pass the cost increases to the customers (OEMs). Furthermore, component manufacturers that produce products with a high imported content, faced increased costs due to the unfavourable exchange rate until 2002, which they were often not able to incorporate fully into their prices. Moreover, six of those companies that were able to increase their real prices faced higher cost increases, too (see Table 9).

Table 9: Summary of firms' price development

Change in Unit Prices, 1999-2003 *(in real terms, inflation adjusted)*	*Per company* *N = 22*	*Per product group* *N = 87*
	Prices increased: 54.5%	Price increased: 35.6%
	Prices decreased: 27.3%	Price decreased: 46.0%
	Prices remained stable: 18.2%	Price remained stable: 18.4%
Price developments per product group, 1999-2003 *(in real terms, inflation adjusted)*	*Price increases per product group, N = 31*	*Price decreases per product group, N = 40*
	< 5%: 21	< 5%: 34
	5-10%: 10	5-10%: 1
	>10%: 0	>10%: 5

Altogether it can be stated that it is above all high (low) volumes that sign responsible for surveyed companies' profit increases (losses). Since OEMs put more and more pressure on prices, component manufacturers' profits depend highly on their ability to lower unit costs and increase their economies of scale.

Main export purchasing company: 18 of 22 companies export mainly to large trans-national retailers. Only two firms export to medium-sized buyers and two to small-scale retailers (after-market sales). This reflects the general structure in the South African automotive component industry where first-tier-suppliers supply above all OEMs.

Expectations of development of exports: The export prospects are generally judged positively. 17 of the 22 companies surveyed expect an increase in export volumes and only two firms expect their export volumes to decline. One company assumes the continuation of the status quo and two firms were not able to quote their future export developments. Regarding the extent of export gains, five companies expect a raise by more than 50% in the next five years and five firms anticipate only a slight increase of 10-20%.

The outlook for the development of prices is less positive. Though nine companies expect an increase in unit prices in the next five years, only five companies were able to determine the expected extent, which is rather moderate.[70] Six firms expect price declines, three think their prices are likely to remain stable and four companies were not able give information about anticipated price developments. The insecurity about future prices is

[68] Price declines were less than 5% for 34 product groups in the period 1999-2003.

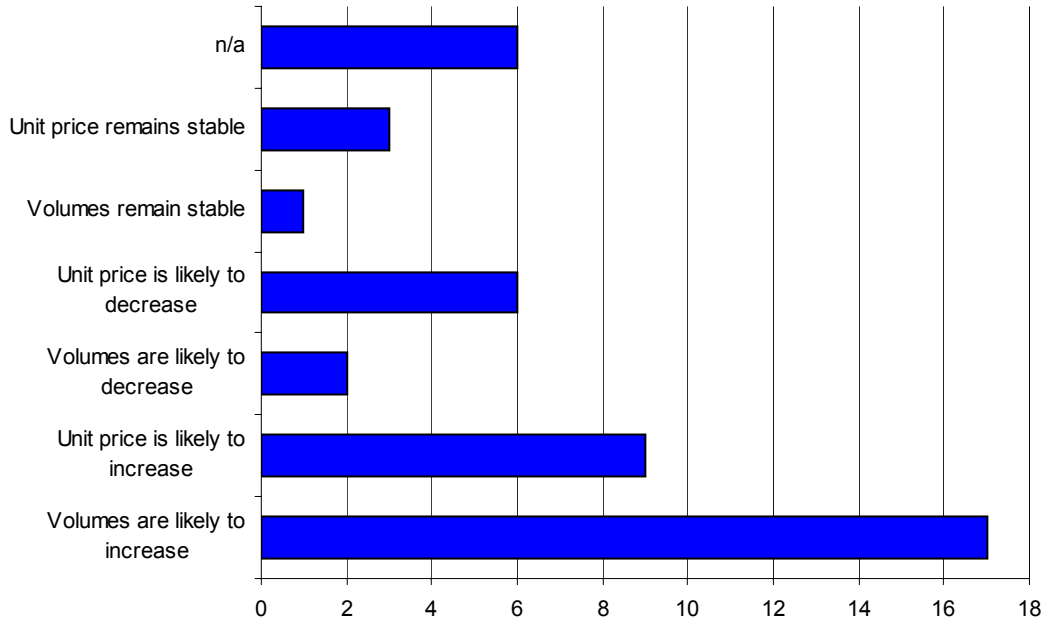
[69] Price increases were less than 5% for 21 product groups in the period 1999-2003.

[70] Three firms expect their prices to rise up to 20% until 2008, one firm expects prices increases of 31-41% and one company anticipates a price increase up to 100%.

mainly because of exchange rate problems. After the sharp depreciation of the Rand until 2001, which caused problems for importers but was advantageous for automotive exports, the component manufacturers now face the problem that the currency is too strong for their goals.

Surveyed companies' answers of this question, as summarised in Figure 15, reflect once again how dependent auto component manufacturers are on high volumes for their economic well-being. However, it also reflects that more than three-fourth of the companies surveyed forecast their exports positively. This positive appraisal is supported by NAACAM (2003b), which expects auto component exports to grow because of increased demand by South African based OEMs.

Figure 15: Surveyed firms' expectations of development of exports (N = 22)



6.6 Companies' Strategy

Budget for product research and development: Only 10 of the 22 interviewed companies have their own budget for product research and development (R&D), while R&D is predetermined in the foreign headquarters of local firms or given by OEMs for 12 companies.[71] This finding is in line with Barnes and Lorentzen (2003:4) who state that the vast majority of South African auto component companies, even in so-called high-tech hubs like the Gauteng province, are based on manufacturing activities. If at all, it would be large, domestic owned component manufacturers that do their own R&D.

Training of employees: All surveyed companies invest into the training of their employees. Unfortunately, the comparability of results is limited as 14 companies indicated a percentage figure of payroll and eight named the share of training expenditure on turnover. The bulk of companies spend 1-2% of their payroll (12) and turnover (6) respectively to train their employees. As already mentioned, companies in the manufacturing industry are allowed to claim 1.5% of salary expenditures for training costs. NAACAM (2003b) expects that the

[71] For those companies that have their own R&D, the budget is limited with six companies spending 0.5-1.5% of their turnover, three companies disbursing 1.6-2% and only one company expending more than 2% of its turnover on R&D.

general training expenditures are at least at that level. A cross-sectoral study in the South African manufacturing industry shows that the vehicle and auto component industry is the third most intensive skill sector that invests an average amount of R 50,000 per company into the training of its employees (Bhorat and Lundall 2001:11-2).[72] The findings seem to confirm the thesis that employees' skills acquirement is an important value for South African auto component manufacturers.

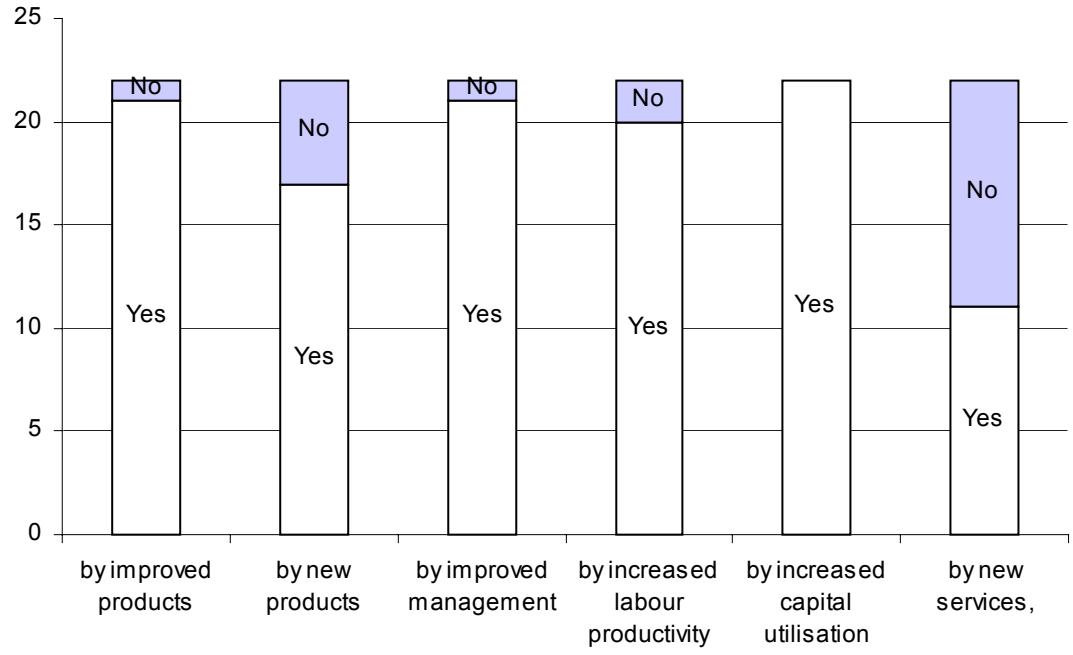
Investment in fixed assets: All companies surveyed do investments in fixed assets. However, the amount spent in 2002 differs considerably and varies between R 0.5 million and R 2 billion (spent by an OEM) per company. 18 of 22 companies invested up to R 40 million.

Upgrading of products and processes: The vast majority of companies plan to upgrade their products and processes. With exception of one, all companies stated that they improve their products continuously. Furthermore, 17 companies plan the introduction of new products, although seven of them cut down that they will only do so if required by OEMs. It is therefore above all OEMs' demands that lead to an upgrading of products by the companies surveyed.

Almost all companies want to improve their management processes and labour productivity. There are plans by all interview partners to increase company's capital utilisation. 11 firms plan further the introduction of new services and activities, such as marketing and distribution, while the other 11 firms stated that they are "pure manufacturers" and/or that their responsibilities are "determined" by OEMs or headquarters abroad.

However, though South African component manufacturers' competences are largely restricted to manufacturing, as they are generally sub-contractors to international acting OEMs (DTI 2002a:58), they are nevertheless engaged with the upgrading of products and activities, as Figure 16 shows. Further upgrading activities the companies surveyed undertake include improved processes (6), improved management training methods (5), increased investment (5), the introduction of a new agent or marketing concept (3) and improved labour training (2).

Figure 16: Surveyed companies' strategy for upgraded activities



[72] The study investigated in total 325 South African firms in eight different manufacturing sectors. 34 of these companies were acting in the vehicle and auto component industry (Bhorat and Lundall 2001:2-3).

Altogether it can be stated that the companies surveyed are improving their products, services and their operating procedures continuously to comply with OEMs demand. To guarantee increased product standards, quality management and delivery requirements, the companies are forced to "life-long upgrading" if they want to stay competitive. Barnes and Lorentzen (2003:13) comment: *"...to pursue global niche strategies or gain world mandate, firms must possess world-class technological capability without which car makers will not even talks to them."*

Encouragement of upgrading: 14 companies confirmed that their main purchasing company encourages them to upgrade activities, while seven firms do not get any support.[73] However, four of the 14 companies that are encouraged to upgrade activities said that the "support" is limited to OEMs pressure to fulfil determined action tasks. NAACAM confirms that the relationship between component suppliers and OEMs is still more abusive than cooperative. However, OEMs would have recently realised that a cooperative approach is more fruitful for a successful, long-term business relationship and have started to cooperate with their suppliers (NAACAM 2003b). The interview results show that currently only 10 of 22 companies receive real support to upgrade their activities: four companies get technical assistance, two receive assistance to train their staff, two get logistical and strategic support, one receives information and one company is financially supported. According to Barnes and Lorentzen (2003:15) it is above all those companies involved in a global network that receive support to upgrade their activities and have superior access to advanced technologies.

Strategic alliance: With exception of two, all companies indicated that they can imagine forming a strategic alliance with a foreign enterprise or that they are already involved in one. Asked for the advantages, 11 answered that being part of a global network is an important benefit. Their participation in networks for instance would allow them to stay competitive and ensure market access. Other advantages stated are access to the latest technology (listed by 9 companies), increased volumes (6), a wider product range (5), access to capital or financial assistance (4) and use of a global brand name (2).

However, the companies also see disadvantages of being in a strategic alliance with an international company. The most important weakness is the loss of flexibility and decision making authority (named by 9 companies). Further disadvantages include restrictions for the destination of exports (4), limited technical capabilities, such as the loss of R&D (2), competition against a sister company (1) and the loss of direct customer contact (1).

All in all, the advantages outweigh the disadvantages and the companies emphasised the importance of encouraging international linkages. This result is in line with empirical findings from Barnes and Lorentzen (2003) who state that subsidiary firms are rather able to copy technology, design, and new production processes from their international mother company than domestic-owned firms. Moreover, they have larger financial resources due to their international linkages, which enable them to do higher investments and thus to act more innovative. However, R&D is largely centralised in the company hub in Western Europe or North America, which determines subsidiaries' activities. It is therefore not the subsidiary company but the large, independent auto component manufacturer, who is able to invest in the capital-intensive activity of R&D (Barnes and Lorentzen 2003:10-1).[74]

New export markets: The majority of companies (14) are exploring new export markets, while eight companies are not interested in expanding their exports to new locations, partly

[73] One company did not answer the question.

[74] According to Barnes and Lorentzen (2003:8) there is evidence that OEMs prefer to source from wholly owned subsidiary companies and not from domestic companies with licensed technology. However, since the sample is very small (five companies) this finding might not represent the whole industry.

because they are exporting only via OEMs and partly because of limited capacities. The North American market seems to be the most attractive export destination, with four companies exploring it. The AGOA initiative might contribute to this attraction. Further potential export markets for the surveyed companies are the Far East (3), other African countries (3), South America (2), European countries (2) and the Middle East (1). This finding is in contradiction to NAACAM's appraisal according to which the EU (Germany) is currently the most interesting export market, followed by the USA and Japan (NAACAM 2003b).

Table 10: Summary of surveyed firms' strategies

Receipt of assistance to upgrade products and processes by OEMs	*N = 21*	
	Yes:	66.7%
	No:	33.3%
Intention to enter into a strategic alliance	*N = 22*	
	Yes:	90.9%
	No:	9.1%
Exploration of new export markets	*N = 22*	
	Yes:	63.6%
	No:	36.4%

In sum, the findings about surveyed companies' strategies as summarised in Table 10 show that the firms are constantly busy to improve their manufacturing and technology performance to stay competitive. The pressure put on by OEMs to perform to pre-determined quality standards are high. To comply with the ambitious requirements and to stay competitive it is seen as advantageous to have international linkages.

6.7 Summary of Empirical Findings hitherto

The 22 companies surveyed in this analysis are old, well-established companies that are predominantly South African owned (13). They focus mainly on the South African market and have hardly any plants overseas. However, although South Africa is the main selling market for 20 of them, the EU is an important (indirect) export market: all but two surveyed companies are first-tier suppliers that are directly linked to OEMs. This is confirmed by firm-level data according to which 70% of South African component exports are destined for the EU (NAACAM 2003a). The main advantages of the EU as an export market for South African component manufacturers are its high volumes, long-lasting cooperation and knowledge transfer. The development of manufacturers' selling prices again is rather volatile and highly exchange rate driven. Improved market access is also a negligible advantage, as the majority of companies export through OEMs and/or their European partners. The quality requirements for exports to the EU are the same the component manufacturers have to meet for any market, as the quality is globally determined. A pre-determined quality has to be met by any auto component manufacturer in the world to become considered as OEM supplier (Barnes 1999, Kaplinsky 2000).

The companies surveyed face hardly any hindrances when entering the EU market. Due to their size and market position they are not struggling to comply with environmental standards and safety regulations like other African companies often do. To meet the sophisticated technological requirements and the high volumes of the EU market and to get sufficient access to finance is only a problem for a minority of surveyed firms. If there are any problems to enter the European market, they occur because of a lack of marketing and distribution channels, high transport costs and not having a license to supply the EU market.

The companies surveyed are representative for South African first- and second-tier component suppliers, of which most are competitive in supplying OEMs but limited regarding the self-determination of their activities. Thus, value creating distribution and marketing activities are predominantly done by OEMs, while most companies in the South African component industry are still constricted to manufacturing activities (NAACAM 2003b). However, as the interviews showed, the companies are nevertheless constantly engaged to improve their products and processes and to stay competitive. The companies surveyed are aware of the fact that they face the risk of being exchangeable for OEMs. Since producers of simple automotive components become more and more exchangeable and are only able to compete in prices, it is important for auto component manufacturers to upgrade their production, including design and technological know-how to stay competitive. Once the component supplier is able to meet the required product quality at competitive prices it becomes unlikely that he is exchanged by another supplier since reliable key supplier becoming more and more important for the standardised automotive industry. (Kaplinsky 2000, UNIDO 2003, NAACAM 2003b).

The majority of companies (13) have increased their exports to the EU in the last five years and do generally rate the likelihood of future export increases to the EU as positive. This finding is consistent with macroeconomic projections, which estimate an increase in the export of components of 4% per annum from 2002-2012 (Barnes and Black 2003:42). However, the problems of declining export credits due to a reduction of the MIDP import/export complementation scheme should not be underestimated. If the MIDP ceases to compensate for the disadvantages of the South African market, such as high logistic costs and a small market, South Africa might become an unattractive production facility for globally operating OEMs (Barnes and Black 2003:31). In this respect it is also the re-negotiation of the EU-South Africa FTA liberalisation schedule for the auto industry that is likely to affect the MIDP (see section 7).

Concerning surveyed companies' strengths and weaknesses in the export business it can be concluded that it is only the product quality and to a lesser extent product price and capital utilisation that are judged as strengths, whereas, raw material costs, labour costs, labour productivity, and timely delivery are seen as weaknesses. This rather critical self-assessment indicates that companies are very well aware of their market and competition situation and seems to be for the most part in line with the general performance of South African auto component exporters. As stated by Kaplan (2003) and Barnes and Black (2003) capital utilisation and labour productivity are still too low in the South African auto industry.

Exporting is vital for surveyed companies' all-embracing performance and essential for them to stay competitive. The majority of surveyed firms stated that exporting helped them to improve their economies of scale and to increase their profitability and productivity. However, as the MIDP Review Report 2003 analyses, volumes in the vehicle and component industry are still too small compared to international standards (Barnes and Black 2003:28).[75] However, the export businesses has not only increased surveyed companies' economies of scale but also positively influenced their technological competences, product quality and prices, labour and management skills, as well as their e-commerce capabilities. These answers suggest that the companies surveyed were able to benefit from learning and technology effects since the South African economy opened up. However, only a minority of surveyed firms benefited from the upgrading of processes, such as R&D. This is in line with NAACAM (2003b) and Barnes and Lorentzen (2003), stating that R&D is largely centralised in the hub companies, which are mainly located in industrialised countries.

[75] The component manufacturers often produce different models for the domestic and the export market, which requires high outputs until unit costs are written off (Barnes and Black 2003:28).

With exception of one, all companies surveyed benefited either directly or indirectly from the MIDP. This finding supports the thesis that the MIDP is still an important factor for South African first-tier-suppliers' competitiveness (Kaplan 2003). It is, however, almost the only export assistance the companies receive: only very few get also assistance to participate at exhibitions and fairs, or to train their workforce.

Surveyed firms statements regarding local contents usage indicate that they use a high level of local content, which is an indicator for a high value adding of South African based sub-assemblers. The firms stated that the use of local contents is stimulated by the MIDP and the closeness to production facility. The current strength of the Rand does usually not outweigh high transport costs of imported inputs.

Competition is becoming stronger in the South African component manufacturing industry, according to the increasing global competition in this sector (NAAMSA 2003e, NAACAM 2003b). Surveyed companies' competitors come from all over the world, from developing and industrialised countries. In the EU market, South African component suppliers have to compete above all with eastern European manufacturers who produce higher volumes, have a better market access and who do not face the constraint of a far market distance. However, based on the development of profits, it can be stated that the companies surveyed have managed the increased competition very well: around 64% of them stated that they were able to increase their profits in the last five years. This was mainly due to higher volumes and thus lower production costs per unit, stimulated by increased domestic and foreign demand. Prices, on the other hand, could not have been increased in real terms with the result that rises in costs have often not been covered. The companies surveyed do therefore rely heavily on high volumes to operate profitably.

The majority of companies surveyed (17) judge their future export prospects positively regarding volumes but gloomy regarding the development of prices. This finding is in line with a sector analysis concluded by Barnes and Black (2003) as well as with the appraisal of NAACAM (2003b), stating that OEMs raise the volumes per model but put increasing pressure on prices.

Surveyed companies' strategy on how to deal with international challenges relate rather to the improvement of existing products and processes than to the introduction of new activities. The windows of opportunities for upgrading activities is very narrow, as the majority of component assemblers rely on OEMs, which determine duties and responsibilities for their economic well-being (Barnes 1999). The component manufacturers are in a difficult situation: if they do not enter into a strategic alliance with a foreign company they do not have a chance of becoming internationally competitive. But if they have agreed to be part of a global network they often lose their flexibility and decision making power (NAACAM 2003b).

In sum it can be stated that the companies of the sample represent a good average of South African first-tier component suppliers (NAACAM 2004c). Most of them act internationally competitive and show strong international linkages. They supply the EU market in most instances through OEMs and are therefore highly dependent on OEMs' economic performance.

The question that should be raised in the next section is how an FTA with the EU can support or constrain the South African automotive component industry. Before the companies' interviews are analysed in sub-section 7.3, NAAMSA's and NAACAM's involvement in TDCA negotiations and the EU's plan for future trade liberalisation of the auto industry are presented.

7 The South African Automotive Manufacturing Industry and the TDCA

7.1 Involvement of Automotive Industry Representatives in TDCA Negotiations

"During TDCA negotiations our trade consultants went into negotiations like lambs that were ready to be slaughtered. … they (…) gave too much away, e.g. tariff headings, which should not have been put in and tariff reductions that were too high and too fast. So we told them that we want to get involved. Our members produce 20,000 units p.a. and cannot compete with Europeans that produce 1 million pieces p.a." (NAACAM 2003b). [76]

NAAMSA and NAACAM contacted the government in 1997 to ensure that the interests of the automotive industry were taken into account in TDCA negotiations. They monitored the development and progress of TDCA negotiations, examined the agreement and its implications for their members and reported their interests to the DTI. Furthermore, NAAMSA dealt with its French counterpart and intervened through DaimlerChrysler and BMW in Brussels (NAAMSA 2003e). Because of active lobbying towards the government, the vehicle and the component industry reached agreement on fundamental interests and to become briefed after negotiation (NAACAM 2003b). NAAMSA and NAACAM developed a common position and negotiated it with the DTI. Once an agreement with the government had been reached, the South African trade consultant tried to push through this position in TDCA negotiations. According to NAAMSA (2003e) the South African automotive (component) industry followed a pragmatic approach: *"International trade is important but any FTA is in contradiction to the MIDP. ... Either you have national incentives or free trade. We are comparable small and cannot offer high volumes and do therefore need a national incentive programme to compete successfully, e.g. against Eastern European countries, which have huge automotive capacities."* Because of their active involvement, NAAMSA and NAACAM reached to exclude the MIDP and thus most parts the South African vehicle e and component industry. However, this outcome was only possible to be achieved because of OEMs intervention and because the South African government agreed to open its agricultural market to a larger extent than originally planned (Gibb 2003). Furthermore, the EU made quite clear that it is not happy with the liberalisation outcome for the vehicle and auto component industry and is pushing to get further concessions. Even before the TDCA Mid-Term Review, which will take place in 2005, it is likely that the industry will be forced to grant a more far-reaching liberalisation than what is currently existing (NAACAM 2004a).

7.2 Proposed Future Liberalisation Schedule for the South African Automotive Manufacturing Industry

As already discussed in section 2, neither the South African nor the EU automotive industry has noticeably opened up because of the TDCA. Thus, the current South African duty peak for cars imported from the EU is 31% compared to 36% from the rest of the world, while South African vehicle exporters face currently a 6.5% import duty (DTI 2003a:53).

However, both parties have committed themselves to investigate options for further liberalisation. South Africa agreed furthermore to review its tariff structure periodically, to identify products for liberalisation and inform the EU about its policy under the MIDP (Council of the EU 1999, Art. 12.7). Since the TDCA entered into force, the EU has been pressuring South Africa to make further concessions with regard to vehicle and component

[76] When discussing the TDCA negotiations it is also important to notice that negotiations took place when South Africa was in full transition (1996-99). There was a high imbalance between European and South African trade negotiators, both with regard to their numbers and their experience. Compare Bilal/Laporte (2003) for a detailed analysis of South Africa's experience when negotiating the TDCA.

tariffs. In 2003, South Africa offered an additional import duty preference for built-up cars of 1% per annum from 2008 to 2012. As a result, the EU vehicle exporters would face a 20% import duty in 2012. Moreover, the South African side offered duty reduction for a broad range of after-market products and tools (NAAMSA 2003c). However, the EU is not satisfied with this offer and seeks to secure a better deal for EU exporters who do not have a manufacturing presence in South Africa (Business Day 17/10/2003). The EU asks South Africa to liberalise its automotive sector more generously and would, in return, also accelerate the agreed tariff abolishment earlier than 2010. This again would be very interesting for South African automotive manufacturers, as the industry competes on very small margins so that a duty free market access to the EU would imply great competitive advantages (NAAMSA 2003e).

In more detail, the EU is requesting South Africa for improved tariff reductions for cars and components and for the introduction of a tariff quota for vehicles, which should be increased gradually (NAAMSA 2003d). However, at the time this article was written (April/May 2004) the parties have not agreed on a further liberalisation schedule (NAAMSA 2004, NAACAM 2004a).

Table 11: Vehicle manufacturers' market access under the TDCA

	For South Africa to the EU	**For the EU to South Africa**
Current market access	Light commercial vehicles: 3.5% duty preference, i.e. 6.5% import duty	- Light commercial vehicles: 5% duty preference, i.e. 31% import duty in 2004 - Components: 5% duty preference , i.e. duty peak of 23% *Plus: Import duty reduction under the MIDP*
South Africa's proposal	Earlier tariff abolishment than 2010.	Light commercial vehicles: additional preference to import tariff reduction agreed under the MIDP of 1% p.a. from 2008-12; i.e. 20% import duty in 2012.
EU's proposal	Abolishment of all tariffs by 2010 (agreement to earlier tariff abolishment depends on South Africa's liberalisation offer)	- Improved tariff reduction - Introduction of tariff quota, which should be increased

Source: Author's presentation as cited in the text.

From NAAMSA's and NAACAM's point of view, EU exporters do not have any reason to complain. If they had manufacturing bases in South Africa, their market access would be, due to the MIDP, much more favourable than those of South African manufacturers exporting to the EU. Also EU car manufacturers that do not have plants in South Africa, like Renault or Peugeot, could benefit from the MIDP if they exported enough car components. However, some EU car exporters argue that the MIDP discriminates against foreign producers, which is in contradiction to the WTO Non-Discrimination Clause that stipulates same regulations for domestic and foreign goods. South Africa, in turn, argues that its tariff reductions are already much lower than under WTO obligations, which determine a rate of 50% *ad valorem* on vehicles and 30% on components (DTI 2003a: 9), whereas South Africa shows an import duty of 36% and 28% respectively in 2004. Moreover, the effective tariff reduction of the South African automotive industry is much lower due to the MIDP. Another concern for the South African automotive industry is that, when granting the EU preferential

market access, the USA, Japan, Brazil and other countries are likely to ask for the same preferences (NAAMSA 2003e).

However, strictly speaking the MIDP is not in conformity to WTO, as it violates those from the WTO stipulated provisions of most favoured nation and non-discrimination (Art. 1 and 2, GATT). On the other hand, the majority of WTO member states have export promotion programmes that favour domestic production. Since the MIDP expires in 2012 and does neither protect domestic producers by a high import tariff nor stipulate local contents requirements, it is seen as very unlikely that the WTO Dispute Settlement Body will stop it. Nonetheless, the question remains whether the South African automotive industry will still be protected once the MIDP expires. Due to the industry's low effective tariffs, Barnes and Black (2003:38) recommend already today that South Africa should act very carefully when granting further duty reduction concessions to single trading partners.

7.3 Surveyed Companies' Awareness and Appraisal of the TDCA

General knowledge and source of information: Since the auto (component) industry has been largely excluded from the TDCA it might not take wonder that the companies surveyed are not well informed about its possible impact on their business. However, considering that the DTI as well as the private sector support institutions are continuously working on this issue and judge it as a relevant factor, which influences the future performance of the industry (NAACAM 2003b) the nescience of the companies surveyed is rather worrying.

17 of 22 companies have heard about the EU-SA FTA. However, four of the 17 companies that have heard about the TDCA stated that they have only very limited knowledge about it. Only upon asking in more detail whether the companies feel well informed about the TDCA does the picture become clearer: only six companies know about possible effects of the TDCA on their business, while the rest does not. Four companies indicated that they plan to inform themselves about the TDCA in the near future. Three companies said this would not be necessary since they export only via OEMs. Furthermore, they would rely on NAACAM or on being part of a global network to receive relevant information. However, this attitude seems to be problematic: all companies surveyed are either NAACAM or NAAMSA members and have thus received information about the TDCA. However, only 12 companies remember having received accordant material from NAACAM and/or NAAMSA and by far not all companies have used the information provided. In total, only eight of the 22 companies surveyed used the provided information to inform themselves about the possible impact of the TDCA. A further information source was the media (newspapers, business magazines), from which seven companies obtained knowledge of the TDCA.[77] However, this information source was of course not detailed enough to evaluate the options and risks for their own businesses. Six companies gained further information about the TDCA from DTI or TISA. Two of these six companies stated that they were highly interested in the TDCA and collected the agreement and additional information directly from the DTI. Another company received detailed information about the TDCA in summer 2003 from its main customer (OEM) who intends to expand his business to the EU because of the TDCA.

Surveyed automotive component manufacturers' limited knowledge of the TDCA might support the thesis that they are still focusing on the local market and are not ready to capture international markets. Since South African component manufacturers export predominantly through OEMs, they expect that OEMs are well aware of the agreement and inform them accordingly if necessary. The surveyed companies rely often on the principle "If it was important for me, I would have been informed". However, this attitude does not allow

[77] The questionnaire provides only the column "other institution". However, seven of the ten companies that received information from "other institutions" said that this was through the media.

for a pro-active approach, which would be necessary to explore options and risks and formulate business specific interests that could be taken into account by private sector support institutions to lobby towards the government and European interest groups. Members of both associations, NAAMSA and NAACAM, can participate at discussions in panels and contribute actively to the formulation of the auto industry's interests in trade agreements but only a very limited number of members are ready to be involved. Thus, government's and private sector support institutions' self-assessment that a sufficient awareness of TDCA's impact on the automotive manufacturing industry has been created (TISA 2003a, NAACAM 2003b, NAAMSA 2003e) cannot be confirmed. As the selected companies represent a good sample of South African auto component manufacturers (NAACAM 2004c), it can be expected that most South African component manufacturers are not sufficiently aware of the TDCA and its possible impact on their business.

Regarding companies' appraisal of government's awareness of the impact of the TDCA on the private sector, the results are quite mixed. Six of the 17 companies that know about the TDCA said that they do not feel qualified to answer this question. This answer indicates that they are not aware of all information provided and/or see shortcomings in their accomplishment to work through all information received. Five companies think that the government is highly aware of the TDCA's impact on the private sector. Six companies judge government's awareness rather moderate or low.

Table 12 summarises surveyed companies' awareness and knowledge about the TDCA.

Table 12: Summary of surveyed firms' knowledge about the TDCA

"Have you heard about the TDCA?"	*N = 22*	
	Yes:	77.3%
	No:	22.7%
"Do you feel well informed about the TDCA?"	*N = 22*	
	Yes:	27.3%
	No:	72.7%
Source of information *(multiple answers possible)*	*N = 17*	
	DTI, TISA	35.3% = 6 firms
	NAACAM, NAAMSA	70.6% = 12 firms
	Media	41.2% = 7 firms
Appraisal about government's awareness regarding the TDCA	*N = 17*	
	Very high / high:	29.4%
	Moderate:	17.6%
	Low.	17.6%
	Cannot say:	35.4%

Possible impact on automotive component manufacturers' business: Only 12 of the 17 companies that have heard of the TDCA were ready to answer this question. Unfortunately these answers do not give a clear picture. Thus, five companies expect increased competition in the domestic market, while six do not and one does not know. The same ambiguous picture comes out regarding the access to competitive inputs, which is expected by six companies and not expected by five. One company could not say whether its access to competitive inputs is likely to improve. These answers suggest that the companies are not sufficiently informed about the EU-South Africa FTA and to what extent the component industry has been included.

A similar picture applies to the question of input prices, which are expected to decrease by seven of 12 companies. However, taking into account that the EU is an expensive supplier (CSIR/AIDC 2003), it remains questionable whether the duty preference of 5% cheapens European inputs significantly. Again, the import duty rebate system of the MIDP

has a much higher influence in this respect (NAACAM 2003b). Asked to elaborate their answers on this question, it became evident that the companies referred more to the MIDP than to the TDCA. NAAMSA (2003e) confirms that, from an automotive perspective, it is above all, the MIDP, which provides an incentive for competitive imports and not the TDCA.

Also regarding the competition situation the MIDP seems to be at least as influential as the TDCA. Thus, competition from European companies is expected to increase with reduction of the duty allowance system of the MIDP (70% of the value of export performance in 2009). However, competition might increase already before since the EU emphasises its demand for reduced import duties on cars and components. Though the parties have not agreed on an improved TDCA liberalisation schedule yet, the perpetuation of the status quo is very unlikely. Thus, increased competition in the South African market and increased pressure on activity upgrading can be expected in the near future (NAAMSA 2003e). A higher competition level in the South African market is above all likely to affect third- and fourth-tier suppliers that are not part of a global network negatively. Around one fourth of NAACAM members (about 55 companies) are third- and fourth-tier suppliers (TISA 2003a, CSIR/AIDC 2003).

Seven of the companies surveyed stated that the TDCA would offer improved cooperation chances, e.g. due to increased demand. However, this statement was cut down since it would depend on a case-to-case basis whether a cooperation can be realised. Five companies think that there were already options for collaborations with EU companies before the TDCA entered into force. As the CSIR/AIDC (2003) states regarding the advantages of the TDCA for the private sector: *"The accessibility is given on a governmental level but to put it into practise depends often on companies' contacts."*

Asked whether it is likely that consumer prices for cars will decrease because of the TDCA, only five companies answered yes and explained this by increased competition. Five companies whereas said that the price for such a high valuable consumer good is very unlikely to fall.[78] One interview partner stated: *"This will never happen! Even if the EU has a recession we would not decrease the prices for cars. Cars have a very long product circle and we have committed ourselves too much to decrease the prices."* Than he constrains his judgement: *"However, services and technical equipment could improve so that you get a better deal for the same price."* This appraisal is supported by NAAMSA (2003e) and NAACAM (2003b). The influence of the TDCA on prices is thus more indirectly expected.

However, the TDCA would offer South Africa the option to promote the EU market as a "selling point" for non-EU OEMs. Toyota and Hyundai are currently exploring the idea of expanding their South African produced exports to the EU (NAACAM 2003b). In this respect, there might be also benefits from increased investment done by OEMs that trickle down to South African component manufactures. Generally, the South African auto sector is going to expand and expects increasing investment (Economist 14/02/04).[79]

A concern raised by the CSIR/AIDC (2003) is that bilateral trade agreements like the TDCA increase the complexity level of trade and make it more difficult for the private sector to export. Though the DTI endeavours to harmonise regulations of South Africa's bilateral trade agreements (DTI 2003c), this worry seems to be legitimate, considering South Africa's various obligations/intentions to enter into bilateral FTAs.[80]

[78] This appraisal is also confirmed by NAAMSA (2003e).

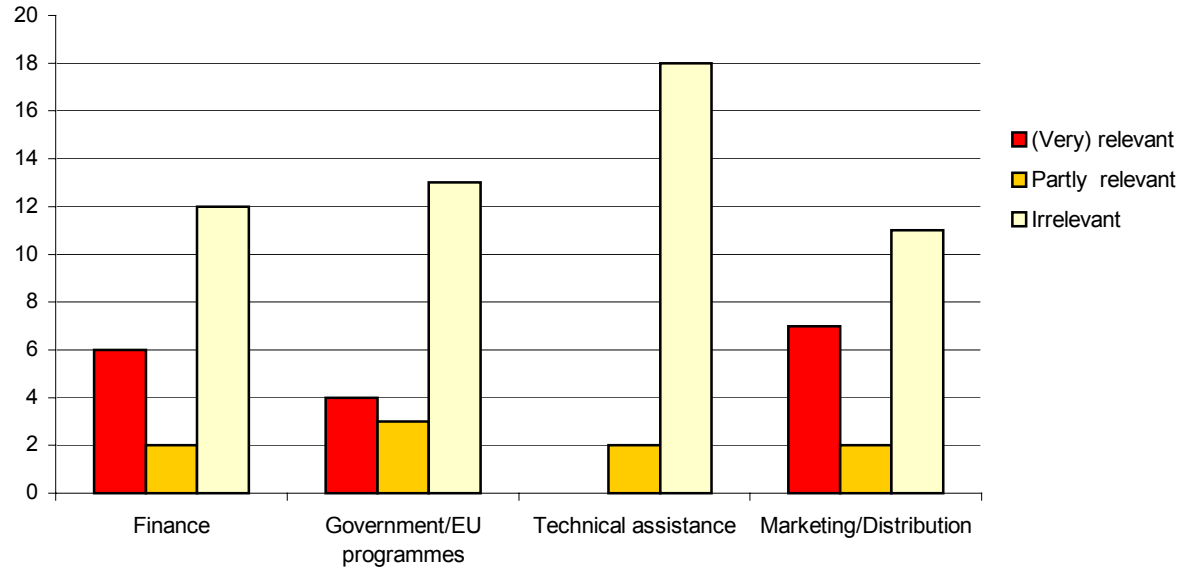
[79] However, according to the CSIR/AIDC (2003) investment in the automotive manufacturing industry is rather related to the MIDP than to the TDCA.

[80] South Africa is currently negotiating FTAs with the USA, EFTA, and MERCOSUR, and is exploring FTAs with China, Nigeria, Kenya, and India.

Required support to expand exports to the EU: Support to expand/start their exports the EU seems to be an almost negligible factor for the companies surveyed. The majority of them stated that financial support, information about government initiatives and EU programmes, technical assistance and support to distribute and marketing products are not necessary (with 12, 13, 18 and 11 companies respectively indicating so).[81]

If the companies surveyed need any support at all, it is assistance to distribute and marketing their products in the EU (named by seven of 22 companies). Furthermore, five companies are constrained by joint-venture restrictions or missing licenses to export to the EU. Four companies named a lack of exposure and missing contacts in the EU as hindrance. Furthermore, high logistical and transport cost hinder the exports of four surveyed companies to the EU market. In sum, surveyed companies' answers to this question are similar to those that were given when asking for companies' strengths and weaknesses in exporting (see Figure 17). Export constraints African businesses generally fight with, such as lack of finance, capacities and information, are non-relevant factors for the South African auto component industry. This indicates that being part of a global network facilitates the export business exceedingly.

Figure 17: Surveyed companies' need for export assistance (N = 20)



Altogether, most of the companies surveyed do not need any support to export to the EU. This is largely in line with findings from NAACAM (2003b), stating that most of their members are able to export competitively. However, there are also - mainly smaller - component manufacturers that need technical assistance to meet the environmental and safety standards of the EU.[82]

[81] Seven companies on the other hand judge information about government initiatives and EU programmes as helpful. The information required relates most of all to legislation and registration requests formulated by the EU.

[82] Thus, South African component suppliers had to change from powder coating towards water-based e-courting, which overextended some companies. Besides, more time to switch production process and know how would be required (NAACAM 2003b).

8 Conclusions and Policy Recommendations

The central question of this paper was whether the TDCA helps to integrate the South African automotive industry into the global economy and the global value added chain. From a theoretical point of view, an FTA with an industrialised country offers South Africa better access to competitive inputs and the latest technology, allows producers to exploit economies of scale due to a larger market, promotes cooperation with foreign firms and helps to attract FDI. Competitive regional producers replace domestic ones so that production is shifted towards the most competitive suppliers (trade creation) and resources are optimally allocated. Besides, protected access to a large market and cooperation with EU companies might offer South African producers the chance to improve their industrial capacities and increase their international competitiveness. On the other hand, European imports might substitute more competitive inputs from the rest of the world due to preferred market access (trade diversion) and increased competition in the South African market bears the risk of firms' closure and decreased domestic value addition.

However, as the discussion in the paper showed, the impact of the TDCA on the South African automotive industry is somehow different and cannot be analysed in an isolated way. Economic developments in the sector depend to a large extend on OEMs' strategic decisions for investment, which are determined by many factors, such as local demand for products, export options, the MIDP, and also the TDCA. The South African vehicle and component manufacturing industry is changing rapidly and is becoming more and more globalised. The transformation from broad to specialised suppliers in addition to increased competition in the domestic market and abroad has been successfully managed to a large extent. For component manufacturers international linkages either in the form of a foreign partner or a foreign client have been essential to increase their competitiveness. However, it remains doubtful whether the TDCA can help South African component manufacturers to build-up linkages to international companies. Why should free access to the South African market stimulate EU vehicle manufacturers to invest in the South African component industry if they are able to source from the cheapest supplier worldwide? Investment into the South African auto industry has not been attracted by free market access but by an attractive import duty reduction scheme for domestically manufactured vehicles and components. The MIDP has helped the South African automotive vehicle and component industry to cope with the enormous challenges they have faced since 1994 and to improve their competitiveness significantly. Since any free trade agreement will undermine the impact of the MIDP, auto industry's representatives but also governmental officials have great provisos concerning the TDCA. The current impact of the TDCA on the industry is comparably low, as neither South Africa, nor the EU was ready to grant substantial tariff preferences so that no party faces a significantly improved market access vis-à-vis its counterpart. Thus, neither an influence on the competition situation, nor on prices or technology transfer can be stated so far. However, whether the relationship between South African component manufacturers and their EU counterparts would have developed as theoretically assumed in case that the industry had been largely included into the TDCA remains doubtful. The majority of South African component manufacturers that are in the export business export through OEMs so that they would hardly benefit from improved market access. Also improved access to competitive, high technological inputs is a non-relevant factor for most NAACAM members due to their international connection.[83]

In fact it is above all OEMs' demand that determines component manufacturers' economic success or failure. The influence of the TDCA is rather supposed to have indirect

[83] However, third- and fourth-tier suppliers that lack of overseas relationship might have been able to benefit accordingly. On the other hand the third- and fourth-tier suppliers are also those companies that would have the greatest problems to compete against EU imports (UNIDO 2003).

positive effects on the South African auto industry, e.g. by promoting the EU as "selling point" for non-EU OEMs, thus offering the opportunity of increased FDI. However, the inclusion of the automotive industry into the TDCA would also imply additional costs due to increased competition and its contradiction to the MIDP. As the duty rebate system of the MIDP works only if a certain tariff level exists, any additional trade liberalisation agreed upon undermines the effectiveness of this incentive scheme. The South African auto lobby groups argue that only few European suppliers do not have vehicle or component manufacturing plants in South Africa and cannot benefit from the MIDP. Thus, the EU's economic interest in further import tariff reductions would be minimal. For South Africa though the risk of a further tariff concession is much higher, taking its small size, the level of international competition, and the already low effective protection rate into account. On the other hand, South Africa would be highly interested to receive duty free access to the European market before 2012. As the margins between profits and losses in the automotive business are very small, this competitive advantage would be very attractive, offering the chance to attract new investment by non-EU vehicle producers. However, the South African automotive manufacturing industry has not been able to make itself completely internationally competitive as yet. Though the industry opened up and is rapidly transforming, it still relies to a large extent on the MIDP for its economic well-being. It should be therefore carefully proved whether chances provided by the TDCA, such as attraction of FDI by non-EU vehicle producers and receipt of competitive inputs for third- and fourth-tier-suppliers can be used or whether the risks of further opening the industry are too high. Since South Africa is negotiating FTAs with the USA, Mercosur, and the EFTA countries, which are likely to claim the same market access as the EU, the inclusion of the automotive industry into the TDCA would imply the *de facto* abandonment of the MIDP.

Thus, a dedicated, controversial discussion about the pros and cons of the inclusion of the auto industry into the TDCA, involving all stakeholders, would be desirable. However, as the discussion in the paper showed, surveyed companies' knowledge about the TDCA as well as their general awareness of trade liberalising measures' impact on their business is rather low. The majority of firms surveyed rely on information provided by their clients (OEMs) or by private sector support institutions. However, taking into account that all companies are NAACAM/NAAMSA members and have received numerous information of the TDCA, it can be analysed that the companies surveyed are not adequately attentive to the changing global trading environment. Since bilateral trade agreements and government's global liberalisation policies are rather abstract, affect businesses only temporally delayed, and cannot be determined *ex ante*, it can be assumed that many companies ignore the chances and risks trade agreements offer. DTI, NAACAM and NAAMSA should therefore reconsider and revise their trade information policy towards the private sector. Chances and risks of trade agreements must be specified and applied to companies. What are the opportunities and risks the "typical" NAACAM member is likely to perceive from the EU-South Africa FTA? Can he expect increased competition and if yes, for which products? Which product groups are expected being further liberalised and how does the envisaged liberalisation schedule affect the benefits component manufacturers receive under the MIDP? These are the issues that interest and worry the companies surveyed and private sector support institutions should do their best to address their concerns adequately.

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Annex 1 : Companies Questionnaire

Company : _____

Date : _____

Name of Respondent: _____

Position in Company: _____

I. General questions

- When was your company established? _____
- How is the ownership structure of your company?
  a. Owner managed by domestic company _____
  b. Owner managed by foreign company (Subsidiary company) _____
  c. Joint venture with foreign company _____
- How many branches do you have in the SACU and where?

- What are the 5 major products (that) you are manufacturing and where are the main markets for these products? (Please indicate in % of total)

Product	SACU market	European market	US market	Other market _____	Other market _____
a)					
b)					
c)					
d)					
e)					

- What was your annual turnover in 2002? _____
- How many employees (including contractees on payroll) do you have in total? _____
  - Of which are men? _____
  - Of which are women? _____

II. Exports to the EU and development of export options

1. When did you start to export to the EU? _____

2a. What are the main advantages of the EU as an export destination for your products?
(Please mark 1) very relevant, 2) relevant, 3) partly relevant, 4) irrelevant)

a. Stable prices and quantities _____
b. Preferred market access _____
c. Long-lasting cooperation _____
d. Knowledge transfer _____
e. Technical assistance _____
f. High quality requirements _____
g. Usage of ACP inputs in production processes _____
h. Other, please name _____

2b. What are the main hindrances regarding export to the EU?
(Please mark 1) very relevant, 2) relevant, 3) partly relevant, 4) irrelevant)

a. Restrictive rules of origin _____
b. Environmental and safety regulations _____
c. Lack of product quality and standardisation (i.e. ISO) _____
d. Lack of export capacities _____
e. Missing access to finance _____
f. Tariff barriers and customs procedures _____
g. Lack of technology _____
h. Lack of marketing and distribution channels _____
i. Other, please name _____

3a. How did you exports to the EU /sales to OEMs develop in the last five years?
a. Increased by <10, 10-20, 21-30, 31-40, 41-50, 51-75, 76-100, >100%
b. Decreased by <10, 10-20, 21-30, 31-40, 41-50, 51-75, 76-100, >100%
c. Remained stable _____

3b. What were the relevant factors for this development?
(Please mark yes or no)

I. Increase: 1) Increased demand _____, 2) Expanded production _____, 3) Improved market access _____, 4) Improved technical assistance _____, 5) Cooperation with a foreign firm _____, 6) More generous regulations relating to quality and safety regulations _____, 7.) Cheaper inputs _____, 8) Other, please name _____

II. Decrease: 1) Factor(s) named in question 2b _____, 2) Increased competition in the EU market _____, 3) Increased competition in the SACU market _____, 4) Internal constraints _____, 5) Increase in input prices _____, 6) Other, please name _____

4. Do you face any tariffs or quantitative restriction for your exports to the EU?
   a. No _____
   b. Yes, which is _____ % of the product value.
   c. Yes, a quota, which is _____ p.a.

5. What are your strengths (+) and weaknesses (-) in exporting?
   a. Product price _____
   b. Product quality _____
   c. Raw material costs _____
   d. Capital utilisation _____
   e. Labour productivity _____
   f. Labour costs _____
   g. Transport _____
   h. Just-in-time delivery _____
   i. Other, please name _____

6. How important has exporting been for your firm over the last three years regarding the following issues?
   (Please mark 1) very relevant, 2) relevant, 3) partly relevant, 4) irrelevant)
   a. Improved economies of scale _____
   b. Increased profitability _____
   c. Increased productivity _____
   d. Improved price competitiveness _____
   e. Increased technology competence _____
   f. Improved manufacturing processes _____
   g. Improved product quality _____
   h. Increased product development capacity _____
   i. Enhanced labour skills _____
   j. Enhanced management skills _____
   k. Enhanced e-commerce capabilities _____

7. What kind of assistance do you receive for exporting?
   a. Duty drawbacks/exemptions on inputs (MIDP) _____
   b. Export credits _____
   c. Export insurance _____
   d. Exhibition and Fairs _____
   e. Training in the field of _____
   f. Information (Please specify by whom and kind of information)
      _____
   g. Other assistance, please name _____
   h. None _____

8a. Do you think of expanding your exports to other African countries?
   a. Yes, to _____
   b. No _____

8b. Please state the main reasons for exporting / not exporting to other African countries. *(Please indicate yes or no).*

a. Proximity / High transport costs _____
b. High / Low demand for products _____
c. High / Low price of sale _____
d. Low / High tariffs _____
e. Low / High non-tariff barriers _____
f. Low / High competition _____
g. Low / High product requirements _____
h. Other, please name _____

III. Usage of European inputs for production and development of competition situation

1a. From where do you source your main input materials needed for production? *(Please indicate the % of total volume)*

a. Domestically produced _____%
b. From the EU _____%
c. From the USA _____%
d. From Far East
e. From _____ _____%

1b. How did the prices of your inputs develop in the last five years?

a. Increased by <10, 10-20, 21-30, 31-40, 41-50, >50%
b. Decreased by <10, 10-20, 21-30, 31-40, 41-50, >50%
c. Remained stable _____

2. Where are your main competitors?

a. In the country _____
b. In the EU _____
c. In South East Asia _____
d. Global competition _____
e. In _____

3. Do you feel adversely affected because of European goods imported into the country?

a. Yes _____
b. No _____

4. How did your general competition situation develop in the last five years?

a. Competition increased _____
b. Competition decreased _____
c. Unchanged _____

IV. Value chain and added value of exports

1. Please indicate your real profit trends for the period 1999 to 2003.
(Please indicate: <10, 10-20, 21-30, 31-40, 41-50, >50%)

Year	Increased	Unchanged	Decreased
1999			
2000			
2001			
2002			
2003			

2. What were the relevant factors for this development?
(Please mark yes or no)

a. Increased: 1) Increase in exports_____, 2) Increased domestic sales _____, 3) Increased consumer prices _____, 4) Decreased purchasing prices _____, 5) Lower production costs_____, 6) Other, please name _____

b. Decreased: 1) Decrease in exports _____, 2) Decreased domestic sales ____ 3) Fall in consumer prices _____, 4) Increased purchasing prices _____, 5) Increased production costs _____, 6) Other, please name _____

3. Please indicated the change in unit prices for your main export products (in real terms, inflation adjusted. Base year 2000).

Product	**1999**	**2000**	**2001**	**2002**	**2003**
a)		100			
b)		100			
c)		100			
d)		100			
e)		100			

4. How would you classify your main export purchasing company?
a. Large, trans-national retailer _____
b. Specialised medium-sized buyer _____
c. Small-scale retailer _____

5. How do you expect the development of your exports in the next five years?
(Please indicate: <10, 10-20, 21-30, 31-40, 41-50, >50%)

a. Volume of exports is likely to increase by _____%
b. Unit price of exports is likely to increase by _____%
c. Volume of exports is likely to decrease by _____%

d. Unit price of exports is likely to decrease by _____%
e. Volume are likely to remain stable _____
f. Unit price is likely to remain stable _____

V. Companies strategies

1. Do you have a budget for new product research and development?
   a. Yes, which is around _____% of turnover.
   b. No _____

2. Do you invest into the training of your employees?
   a. Yes, which is around _____% of turnover/payroll.
   b. No _____

3. Do you invest in fixed assets?
   a) Yes, which was _____ in 2002.
   b) No _____

4. Do you plan to upgrade your products or processes?
   a. Yes, by improved products _____
   b. Yes, by the introduction of new products _____
   c. Yes, by increasing the efficiency of management processes _____
   d. Yes, by increasing labour productivity _____
   e. Yes, by increasing capital utilisation _____
   f. Yes, by increasing firms' services towards new activities (e.g. towards marketing, distribution) _____
   g. Yes, by _____

5. Do your main purchasers encourage you to upgrade activities?
   a. If yes, what kind of assistance do they grant?
      _____
   b. No _____

6a. Could you imagine to forming a strategic alliance (i.e. a joint-venture) with a foreign producer?
   a. Yes _____
   b. No _____

6b. If yes: what kind of benefits do you expect from such a cooperation and where do you see the disadvantages?

_____

7. Do you investigate new export markets?
   a. Yes, which are _____
   b. No _____

VI. Information / support

1. Have you heard about the EU-SA Free Trade Agreement? _____

2. From whom did you receive information about the EU-SA Free Trade Agreement?
   a. From government authorities _____
   b. From private sector support institutions _____
   c. From another institution, please specify _____
   d. I have not received any information about the EU-SA FTA _____

3. Do you feel well informed about the EU-SA FTA?
   a. Yes _____
   b. No _____

4. How would you judge the government's awareness of the impact of the EU-South Africa FTA on the private sector?
   a. Very high _____
   b. High _____
   c. Moderate _____
   d. Low _____
   e. Very low _____

5. How far do you think will the EU-SA FTA affect your business?
   (Please indicate yes or no)
   a. By increased competition in the European market _____
   b. By increased competition in the SACU market _____
   c. Access to competitive inputs will improve _____
   d. Prices for inputs will decrease _____
   e. Prices for consumer goods will decrease _____
   f. It offers cooperation chances with European firms _____
   g. Other, please specify _____

6. What kind of support would you need to expand your exports to the EU?
   (Please mark 1) very relevant, 2) relevant,3) partly relevant, 4) irrelevant)
   a. Financial support (credits, export credits) _____
   b. Information about government initiatives and European programmes _____
   c. Technical assistance to meet European standards _____
   d. Support regarding distribution and marketing of products _____
   e. Other, please specify _____

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