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RESEARCH REPORT
DOMESTIC MARKET PRESSURES FACING THE SOUTH AFRICAN
AUTOMOTIVE COMPONENTS INDUSTRY**

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Submitted by

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1. INTRODUCTION

In line with the rapid liberalisation of the South African trade regime, the domestic automotive assembly and components industry is rapidly being integrated into the global operating environment. As a result of this integration, domestic automotive market demands have become increasingly onerous. To follow the terminology of Terry Hill (1987), the previously order winning performance criteria of the South African automotive market are now simply order qualifying. If automotive component manufacturers wish to survive in the domestic market they need to meet ever more demanding performance requirements.

The huge competitiveness pressures being exerted on the automotive components industry in South Africa have been comprehensively documented in a number of previous Industrial Restructuring Project (IRP) studies, including Barnes and Kaplinsky (1998) and Barnes (1997, 1998, 1999a, 2000). The Barnes and Kaplinsky study (1998) focused on South African Original Equipment Manufacturers' (OEMs or assemblers) perceptions of domestic automotive component competitiveness, whilst the four Barnes studies (1997, 1998, 1999a, 2000) considered the firm-level competitiveness responses of the automotive component manufacturers over a longitudinal time frame. These studies highlighted that the domestic automotive components industry is rapidly improving its competitiveness, although off a very low base. Using an extensive set of lean production benchmarks, it was found that sustained improvements in performance were being experienced in almost all operational areas, including inventory control, internal and external quality performance, internal and external flexibility and human resource development.

The Barnes and Kaplinsky study (1998), on the other hand, highlighted that the majority of the South African-based OEMs are being rapidly assimilated into their parent company's global operations, with this leading to a systematic restructuring of their relationship with South African automotive component manufacturers. The argument that was presented by the OEMs was that they wanted their local component manufacturers to become part of Multinational Corporations (MNC). Alternatively they would either source their components internationally or facilitate the establishment of MNC operations in South Africa, thus displacing the local manufacturers. The South African OEMs viewed the performance of their domestically based suppliers as sub-optimal and believed there were significant gaps between all of their requirements and domestic supplier performance levels. The OEMs indicated that significant performance improvements were therefore required from their suppliers.

Given the importance and impact of the OEM views expressed in the Barnes and Kaplinsky (1998) study, as well as the continued integration of these OEMs into their parent company operations through to 2000, this study was undertaken as a mechanism for updating and further developing the 1998 findings. Importantly, however, it also represents a far more detailed exploration of domestic market perceptions of South Africa automotive component manufacturing performance. In addition to the detailed interrogation of OEM perceptions, a large number of domestic customer surveys were undertaken for a group of automotive component manufacturers. These customer surveys were sent to OEM, Original Equipment Supply (OES or Parts and Accessory), independent aftermarket and other component manufacturer buyers, thus providing an extensive overview of customer perceptions of component manufacturing capabilities relative to the demands of a number of different market segments. Critically, the updating and further development of the 1998 domestic market perception study fits in with the IRP's development of a longitudinal database on the firm-level competitiveness of the South African automotive components industry.

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Given the purpose of the study, its findings are presented in this report in three sections. In Section 1, a brief background is provided on the pressures facing the automotive components industry in South Africa. The impact of the Motor Industry Development Programme (MIDP) and the stagnation of the domestic retail market are explored, as are the ongoing economic difficulties of the automotive component manufacturers in spite of sustained firm-level competitiveness improvements. In Section 2, the perceptions of the OEMs are presented in some detail. Both the quantitative and the qualitative findings from the interviews undertaken with senior purchasing personnel at the seven OEMs is explored, and contrasted with the findings from the 1998 round of interviews. South African-based OEMs are the most important market for domestic automotive component manufacturers and generating an understanding of their views and their assessments of the capabilities of domestically based component manufacturers is therefore very important.

Section 3 constitutes another critically important part of the report, with the findings from the 58 customer perception surveys undertaken on behalf of 14 automotive component manufacturers that belong to the KwaZulu-Natal and Eastern Cape Benchmarking Clubs presented. The perception surveys were sent to buyers at each of the major customers of the Benchmarking Club members and cover the domestic OEM market, as well as the OES/independent aftermarket and supply into other automotive component manufacturers. In addition, each of the 14 Club members provided a self-assessment of their own performance relative to market requirements. This enabled us to ascertain the extent to which firms were “hearing their markets”. A conclusion drawing together the key findings presented in each of the three sections completes the report.

Before considering these findings, a detailed outline of the research methodology employed for the undertaking of the study is presented.

2. RESEARCH METHODOLOGY

A number of research tools were used in the four overlapping stages of the study. The first stage began in January 2000 with background research into the market pressures facing the domestic automotive components industry. Unstructured qualitative interviews were conducted with a number of Managing Directors/General Managers of automotive component manufacturers to gauge the extent to which domestic market changes were occurring, whilst secondary research was carried out into the changing nature of the domestic automotive market. This included an analysis of automotive market related articles in daily newspapers, weekly financial magazines and industry-specific publications. The research notes generated out of the Barnes and Kaplinsky study carried out in 1998 were also revisited, as were the academic publications that arose from that study (Barnes and Kaplinsky, 1998, 2000a, 2000b).

On the basis of the background research carried out in January and early February, an interview schedule was developed for the second stage of the research. This comprised semi-structured interviews with senior purchasing personnel at each of the seven South African based OEMs. The National Association of Automobile Manufacturers of South Africa (NAAMSA) facilitated contact with the OEMs, thus ensuring their participation¹. In addition, a short four page quantitatively based questionnaire was developed for completion by each of the OEMs. These questionnaires were not self-administered, but rather completed by the interviewees in their own time after the completion of the more open-ended interviews. The questionnaire was similar to the one used in 1998, although more detailed and specific questions were posed in the 2000 version. Four of the seven OEMs returned the questionnaires in time for the writing of this report. The interviews that were undertaken varied greatly in length, with the shortest interview completed in one hour and the longest in three hours. Most of the interviews were conducted in March, although one interview was conducted in early May. Professor Raphael Kaplinsky, one of the principal researchers involved in the 1998 study visited two of the OEMs with the IRP's automotive researcher and helped with the construction of the new questionnaire.

Concomitant with the second stage of research, the third stage of research was undertaken by accessing the customer survey databases of the KwaZulu-Natal and Eastern Cape Benchmarking Clubs. These two Clubs are formally linked to the IRP and we were as such able to use their extensive customer databases that were generated by undertaking customer perception surveys through the later part of 1999 and early 2000. Given the strong institutional link between the IRP and the two Benchmarking Clubs and the cross-pollination of intellectual inputs, the databases of the two Clubs contained extremely useful and directly useable buyer perception information. This is because the methodology followed at the Clubs for the undertaking of customer benchmarks is identical to the methodology used by the IRP in previous academic perception surveys (Barnes 1997, 1999a, Harrison 1996). The one to 10 rating scale used in the perception surveys was developed over a number of years by the IRP and then further developed for the customer surveys in collaboration with the member firms of the two Clubs. The accuracy and relevance of the perception scales as a research tool has therefore been widely workshopped and analysed.

The KwaZulu-Natal and Eastern Cape Benchmarking Club databases were generated by sending buyer perception questionnaires to 70 of the 14 automotive component

¹ NAAMSA also facilitated contact with the OEMs for the 1998 study.

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manufacturers' major domestic customers. Of these, 58 were returned. The perception measurement system used in the short two-page customer questionnaire was the same used for the OEM study, thereby ensuring data complementarity between the various components of the research. In addition, each of the 14 automotive component manufacturers provided the IRP with an assessment of the requirements of the markets they supply into, as well as a self-assessment of their performance relative to these requirements. These assessments were based on exactly the same perception scales used in the customer surveys and in the OEM component of the study. The activities of the third stage of the research were largely completed during the course of March and April 2000.

For the purposes of statistical analysis, the two Clubs' customer survey databases were merged into one SPSS database. The 14 firms' market perceptions and performance self-assessments were captured in another SPSS database, with the smaller set of OEM findings also punched into SPSS. All the statistical findings presented in this report were therefore generated using SPSS.

Despite their different research processes, and the fact that the customer surveys were not directly undertaken by the IRP, the second and third stages of the research therefore dovetailed together. Both stages led to the generation of a comprehensive quantitative data set that highlights the extent to which South African automotive component manufacturers are presently meeting their markets' performance requirements. The fourth stage of the research, which comprised the analysis and writing up of the research findings, was therefore reliant on the successful completion of all three of the previous research stages. The fourth stage was completed in late May 2000.

Importantly, as with all IRP research studies, the research methodology followed was distinctly action-based in orientation. All the automotive component firms and OEMs who participated in the study were promised an outline of the findings in return for their participation. In addition the firms were promised formal presentations of the findings, with these due to take place towards the latter part of 2000.

3. DOMESTIC MARKET PRESSURES FACING THE AUTO COMPONENTS INDUSTRY

The three key defining features of the operating environment for automotive component manufacturers in South Africa since 1995 are the rapid liberalisation of the automotive industry, the reintegration of the domestic industry into the global operating environment, and the ongoing stagnation of the domestic automotive market. Each of these three key defining features has been explored in-depth in previous IRP automotive research reports/working papers written for the Department of Trade and Industry Policy Support Programme (DTI-PSP). An analysis of the rapid liberalisation of the automotive industry under the MIDP was the focus of Barnes and Morris (2000), whilst the reintegration of the domestic industry into the global operating environment was covered in Barnes (1999b and 1999c). Issues pertaining to the stagnation of the domestic automotive market were also covered in Barnes (1999b) and Barnes and Morris (2000).

Given the detailed explorations of each of the defining features of the South African automotive components industry in these papers, this section does not attempt to cover the whole ambit of “background” issues impacting on the domestic automotive industry. The intent is to rather present a brief outline of each of these three factors only insofar as they create new market pressures for the automotive components industry in South Africa.

3.1. MARKET LIBERALISATION

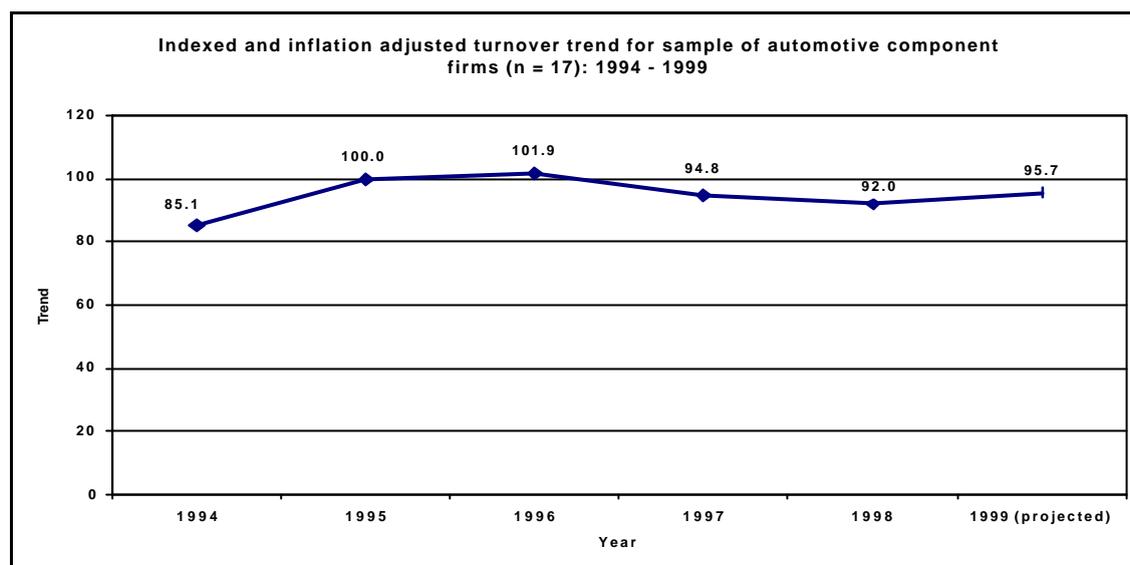
The phased liberalisation of the South African automotive market under the Motor Industry Development Programme (MIDP) since 1995 has placed huge competitiveness pressures on the South African automotive components industry. The domestic OEMs are no longer forced to purchase from local component manufacturers. Given the proliferation of duty credits being generated through the Import Export Complementation (IEC) component of the MIDP at least two of the seven OEMs now have an excess of duty credits². These OEMs are therefore able to bring in their foreign sourced components duty-free. In certain instances, then, the automotive components industry is operating in a completely open economy with no trade barriers to provide artificial levels of competitive advantage.

As argued in Barnes (2000), automotive component manufacturers would appear to have suffered enormous economic difficulties as a result of their rapid exposure to international competition through market liberalisation. This is clearly highlighted in Figures 1 and 2. Figure 1 illustrates the stagnant average output levels of a sample of automotive component firms through the mid to latter part of the 1990s, whilst Figure 2 reveals the aggregated employment losses in the automotive assembly and components industries over the same period.

Figure 1.

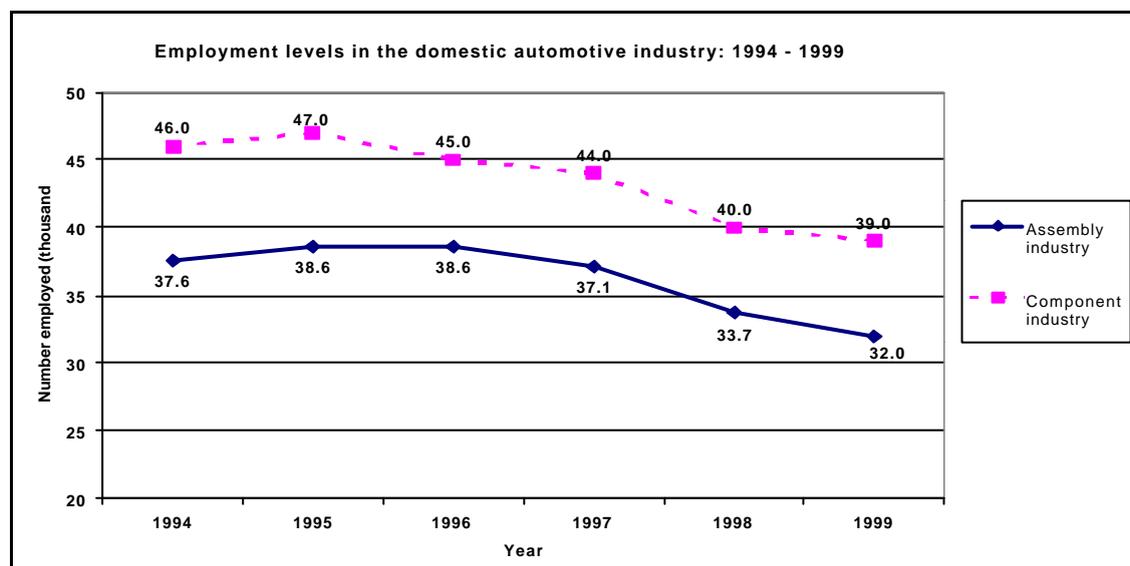
² This was highlighted during the course of interviews with the OEM purchasing personnel.

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Source: Barnes (2000)

Figure 2.



Source: DTI (1999)

Importantly, this poor economic performance has occurred despite the significant fact that the domestic automotive components industry has rapidly responded to the competitiveness pressures being placed on it as a result of the industry's liberalisation. Using a range of "lean production" benchmarks to gauge the competitiveness trajectory of the automotive components industry, a number of IRP research studies have found that automotive component manufacturers are significantly improving their firm-level competitiveness.

Some of these improvements are summarised in Table 1. As revealed in the table, automotive component manufacturers have rapidly improved their competitiveness between 1995 and 1999 in terms of all the lean production benchmarks used. The only exception is finished goods inventory holding and this is hardly an indication of deteriorating performance, relating as it does to the increased levels of exporting from the sampled automotive component manufacturers.

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Table 1: Key operational competitiveness measures for a sample of automotive component manufacturers and their performance trajectory since 1995

Measure	Performance 1995	Performance 1999	Change: 1995 to 1999 (%)
Raw material stock holding (days)	33.1	28.0	15.4
Work in Progress stock holding (days)	11.2	10.2	8.9
Finished goods stock holding (days)	17.9	23.1	-29.1
Customer return rate (parts per million)	6,148	3,585	41.7
Labour turnover rate (%)	8.5	3.7	56.5
Absenteeism rate (%)	5.5	4.0	27.2

Source: Barnes and Morris (2000)

The reasons underpinning the economic difficulties of the automotive component manufacturers despite their significantly improved levels of competitiveness relate to the even greater levels of competitiveness of their international competitors. Using the same “lean production” benchmarks, this performance gap is clearly highlighted in Table 2. With protection levels radically reduced, domestic component manufacturers are now expected to meet the operating standards of their international competitors. Competitiveness improvements in themselves are no longer adequate – competitiveness performance levels of an international standard are. This is, moreover, not only the standard being set for component manufacturers that supply the OEMs. Independent aftermarket (IAM) focused component manufacturers are also facing enormous pressure from direct imports, especially from South East Asia.

Table 2: Average operational competitiveness levels of a group of surveyed SA firms (1999) versus a group of international automotive component firms (1997)

Measure	Surveyed SA firms 1999	International firms 1997	SA vs. internat. firms (%)
Raw material stock holding (days)	28.0	20.8	-25.7
Work in Progress stock holding (days)	10.2	7.2	-29.4
Finished goods stock holding (days)	23.1	9.1	-60.6
Customer return rate (ppm)	3,585	260	-92.7
Labour turnover rate (%)	3.7	7.7	+108.1
Absenteeism rate (%)	4.0	4.6	+15

Source: Barnes and Morris (2000)

3.2. REINTEGRATION INTO THE GLOBAL OPERATING ENVIRONMENT

The issues pertaining to rapid market liberalisation are further compounded by the reintegration of the domestic industry into the global operating environment. The post-1995 period has not only been impacted on by the liberalisation of the South African automotive trade regime. It has also been directly impacted upon by the reincorporation of the South

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African-based OEMs into their global families. Prior to the 1990s the majority of domestic based OEMs were South African owned operating under licensing agreements with Multinational Corporations (MNCs). This has changed with all seven of the OEMs now either fully or partly owned by MNC parent companies. This has had huge implications for the domestic components supply base of the OEMs. In line with the homologation tendencies of the MNCs, domestic component suppliers are now expected to meet internationally set performance standards. Failure to comply with these standards results quite simply in the transfer of business to foreign component manufacturers, either directly or through Completely Knocked Down (CKD) kits. The rapid liberalisation of the industry and the consequent ability of OEMs to bring in components duty-free facilitate this.

The changing nature of the ownership patterns of the South African based OEMs is highlighted in Table 3 on the next page. As revealed, only two of the seven OEMs have the same ownership structures that they had in 1990. Given the fact that important changes have occurred in the last two years, there is moreover little indication that the pace of the reintegration of the OEMs into their global families is abating.

Table 3: The changing ownership structure of the South African based OEMs³

South African OEM	Ownership: 1990	Ownership: 1998	Ownership: 2000	Ownership status: 1990 to 2000
Toyota	100% local (listed on Johannesburg Stock Exchange)	72.2% local (JSE listed), 27.8% Toyota (Japan)	72.2% (JSE listed), Toyota (Japan): 27.8%	<i>South African to Joint Venture</i>
Volkswagen	Volkswagen AG: 100%	Volkswagen AG: 100%	Volkswagen AG: 100%	<i>MNC – no change</i>
BMW	BMW AG: 100%	BMW AG: 100%	BMW AG: 100%	<i>MNC – no change</i>
DaimlerChrysler	DaimlerChrysler (Mercedes Benz): 50%, Local 50%	DaimlerChrysler (Mercedes Benz): 100%	DaimlerChrysler	<i>Joint Venture to MNC</i>
Samcor (Ford)	100% local (Anglo American)	Anglo American: 45%, Ford: 45%, Employees trust: 10%	Ford: 90%, Employees trust 10%	<i>South African to MNC</i>
Automakers	87% local, Nissan Diesel (Japan): 4.3%, Mitsui & Co. (Japan): 8.7%	Sankorp (local): 37%, Nissan (Japan): 50%, Nissan Diesel: 4.3%, Mitsui: 8.7%	Nissan (Japan): 87%, Nissan Diesel: 4.3%, Mitsui & Co.: 8.7%	<i>Primarily South African to MNC</i>
Delta	100% local (management)	Local managers: 51%, General Motors: 49%	Local managers: 51%, General Motors: 49%	<i>South African to Joint Venture</i>

³ For DaimlerChrysler and Automakers the picture is even more complex, with ownership changes having also occurred at the MNC level. Daimler and Chrysler have merged, whilst Nissan (Automakers' parent MNC) is now controlled by Renault.

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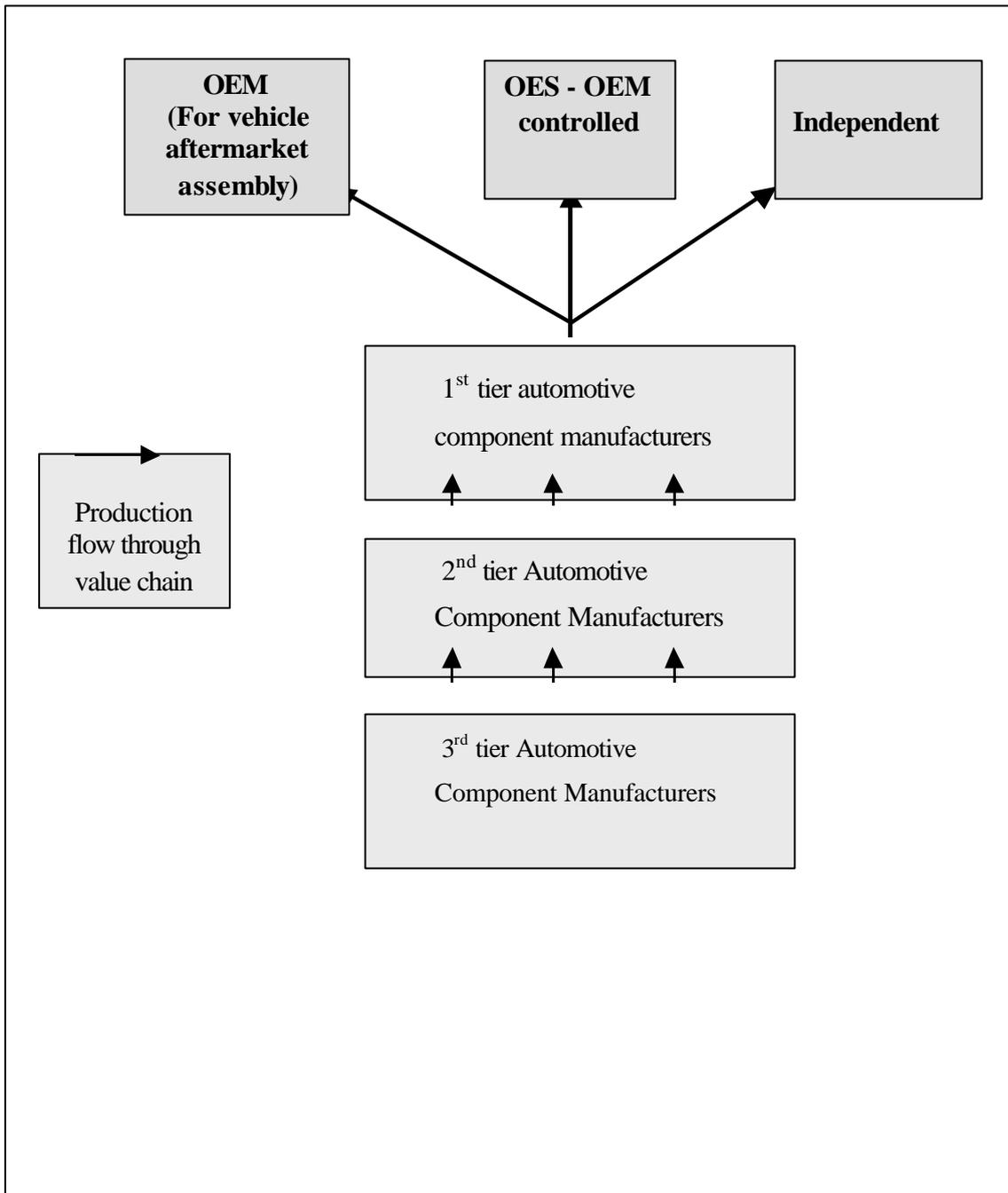
The reintegration of the domestic OEMs into their global families offers both opportunities and threats to the domestic component manufacturers. At the one level it forces the component manufacturers to comply with internationally set performance standards or lose business⁴, whilst at another level it facilitates exporting opportunities for globally competitive firms. This is further supported by the Import-Export Complementation (IEC) component of the MIDP as OEMs can earn lucrative duty rebates for facilitating component exports. In many cases, then, the distinction between domestic and international markets is falling away. The net result of these changes is new market demands. South African based customers will no longer accept the previous performance standards of their component suppliers. This does not only relate to pricing issues, but to a range of other performance issues such as adherence to quality standards, conformance to internationally set specifications, delivery reliability in the face of increasing Just in Time (JIT) requirements, new product development capabilities, flexibility, etc.

3.3. DOMESTIC MARKET STAGNATION

The importance of meeting increasingly onerous performance requirements becomes particularly apparent when considering the stagnation of the domestic automotive markets into which the South African automotive component manufacturers supply. These markets, which are outlined conceptually in Figure 3, have not grown through the latter part of the 1990s thus placing even more pressure on the automotive components industry. Vehicle production in South Africa has, for example, stagnated since 1996, and yet 72% of domestic automotive component sales into the South African market are for OEM supply. The value of total output from the South African automotive industry has, moreover, remained at roughly R30 billion over the last four years. In real terms the value of automotive output has consequently deteriorated by a small margin.

⁴ It also forces domestic component manufacturers into relationships with MNC component manufacturers, either via joint ventures or as is increasingly desired by the South African based OEMs, fully equity relationships (i.e. the South African component manufacturers sell out to the MNC and become subsidiary operations).

Figure 3: An outline of South African automotive components industry and the domestic markets it supplies



The fact that the domestic automotive market, which still constitutes the most important market for South African based OEMs, is not booming and has not grown since the 20% market growth experienced in 1995, places even more competitiveness pressure on the domestic automotive components industry. This is because the OEMs have not only shifted their sourcing decisions in line with the liberalisation of the domestic industry and their re-incorporation into global networks. They have also begun bolstering their own competitiveness in the face of a stagnant domestic market with seven principal domestic competitors as well as a host of direct importers. These market-related pressures have

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obviously exacerbated the squeeze on component manufacturers, with OEMs looking to generate competitive advantage through the generation of improved supply chain efficiencies.

Understanding the domestic market pressures bearing down on the automotive components industry is therefore of enormous relevance, particularly in terms of OEM supply. Whilst these pressures are, of course not new, they have clearly intensified over the last couple of years. Although previous IRP research explored the magnitude of these pressures from the perspective of the OEMs (Barnes and Kaplinsky 1998), given the further intensification of the trends noted in this section, a further analysis of market perceptions of automotive component manufacturing performance is critically important. In Section 2, the views of the OEMs are therefore explored, whilst in Section 3 consideration is given to a range of OEM, aftermarket and “other component manufacturer” customer viewpoints regarding the performance of their automotive component suppliers.

4. AUTO COMPONENT RESPONSES TO DOMESTIC MARKET CHALLENGES: THE VIEW OF THE OEMS

The six OEMs that participated in the 1998 IRP study into OEM perceptions of domestic automotive component manufacturers had very strong views pertaining to the competitiveness and long-term trajectory of the industry. The five key points that were raised were:

1. The generally poor competitiveness of automotive component manufacturers in South Africa relative to OEM requirements, with this having negative implications for future domestic sourcing arrangements in line with the MIDP's tariff phase down process. It was highlighted that component manufacturers needed to reach international levels of competitiveness if they wanted to remain first tier suppliers.
2. Continued purchasing of products locally that have a low value to weight ratio and that need to be purchased on a Just-in-Time basis from suppliers located near to vehicle assembly operations.
3. The shift away from needing to procure certain components locally irrespective of adaptations in the local market. The advent of global purchasing and the design of "world cars" was highlighted as the most important factor underpinning the movement away from procuring products re-designed specifically for the South African market. This, however, applied only to new models that were being released.
4. The movement away from purchasing products made with South African technology. This was seen as inevitable due to global sourcing arrangements and the restructuring of relationships between OEMs and their first tier suppliers at the global level.
5. The movement away from purchasing from South African owned companies. Given lead source arrangements, it was strongly argued that South African first tier automotive component manufacturers could not survive in the long term by simply having licensing agreements with MNC lead source suppliers. There consequently needed to be a strong emphasis on attracting foreign equity into the South African first tier suppliers. Alternatively, the OEMs would "follower source"; i.e. they would encourage the location of a MNC lead source supplier's plant in South Africa. This was seen as particularly important for JIT requirements.

These were the same five areas explored in the OEM survey undertaken in 2000 and the interviews that were conducted with key purchasing personnel. The purpose of this was to track changes over the last two years, thus identifying those areas where the OEM views held in 1998 have or have not been borne out, as well as where projected trends have intensified or shifted. Given the clear responses received in 1998, the 2000 survey was strongly informed by these previous responses, and as such the structure of this section follows the key points raised in 1998.

4.1 The competitiveness of South African automotive component manufacturers: The view of the OEMs

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In order to gauge OEM perceptions of the competitiveness of South African automotive component manufacturers against their own requirements, we asked the domestic OEMs to rate the performance of the suppliers against their requirements in both 1998 and 2000. Whilst six OEMs completed the assessment of the component manufacturers' performance levels in 1998 only five returned the questionnaire in 2000. The 2000 perception questionnaire was also more refined than the 1998 questionnaire, with "innovation" as a performance criterion being divided into three separate performance criteria: New product development capacity, capacity to modify products and process innovation capacity. Not all of the findings are therefore directly comparable.

In the 1998 IRP study the domestic OEMs indicated that they were far from satisfied with the average performance levels of their domestic component manufacturers. This position has not shifted significantly over the last two years, with the average performance ratings given by the OEMs in 2000 (see Figure 4) revealing marked similarities to the performance ratings that were given in 1998 (see Figure 5). OEM perceptions of major domestic component manufacturer performance levels as revealed in Figures 4 and 5 suggest that there are still significant gaps between OEM performance requirements and their ratings of their major domestic component manufacturers' performance levels. These gaps are, moreover, larger for the more important performance criteria, with the important exception of quality, where domestic component manufacturers are acknowledged as performing relatively well. For the less important performance criteria, however, there appears to be widespread recognition of the adequate performance of South African suppliers – although admittedly against far less onerous requirement levels.

Figure 4.

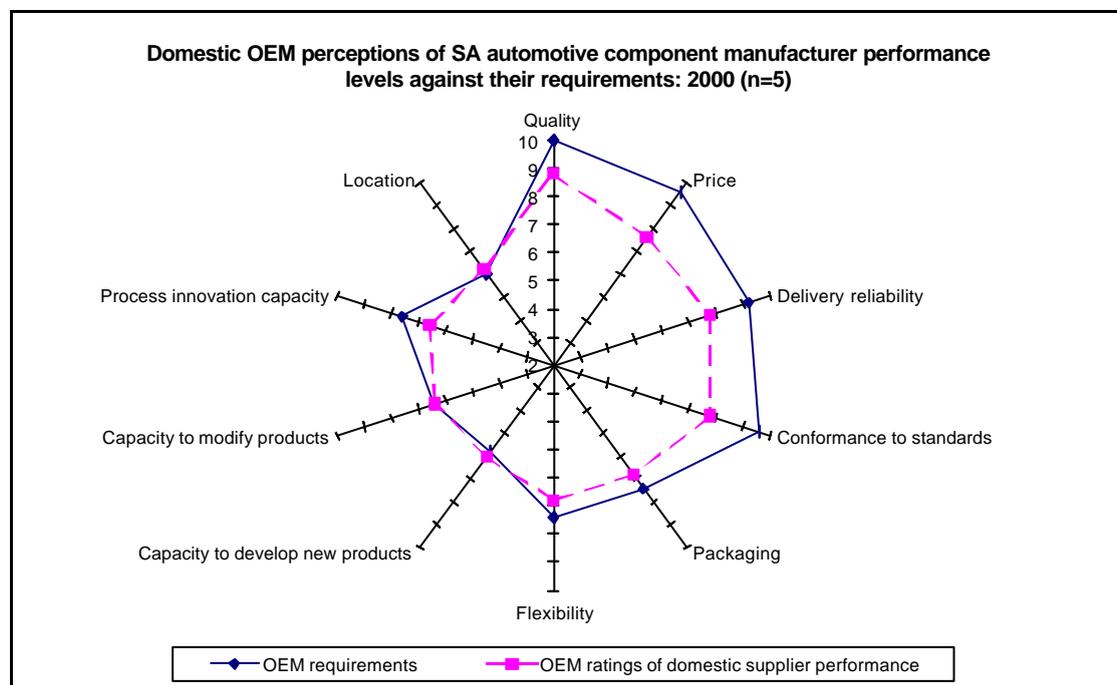
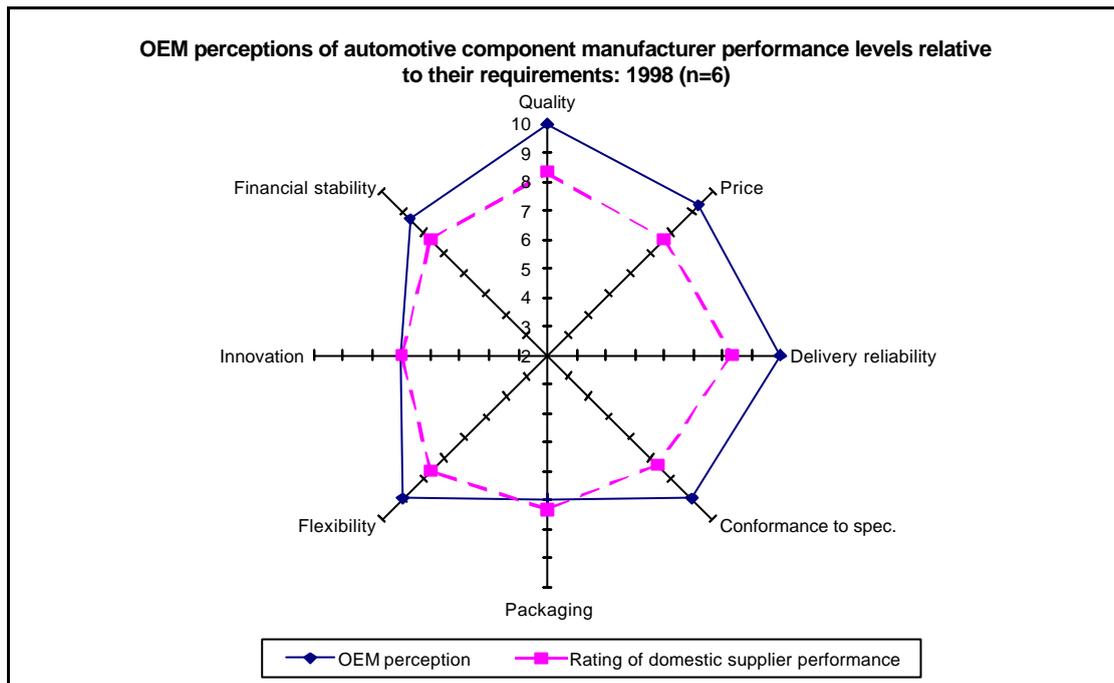


Figure 5.

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The domestic OEMs' perceptions of their foreign supplier performance levels in 2000, were also quite similar to the perceptions held in 1998. The one significant shift relates to their recognition of the importance of South African technology. Whilst the South African automotive component manufacturers continue to receive lower ratings than their international counterparts in terms of all the key performance requirements explored, as highlighted in Figures 6 (2000) and 7 (1998), the gaps are not overwhelming. The significant difference relates rather to new product development capacity where the international suppliers are seen to have a huge – and growing - advantage over their South African counterparts.

Figure 6.

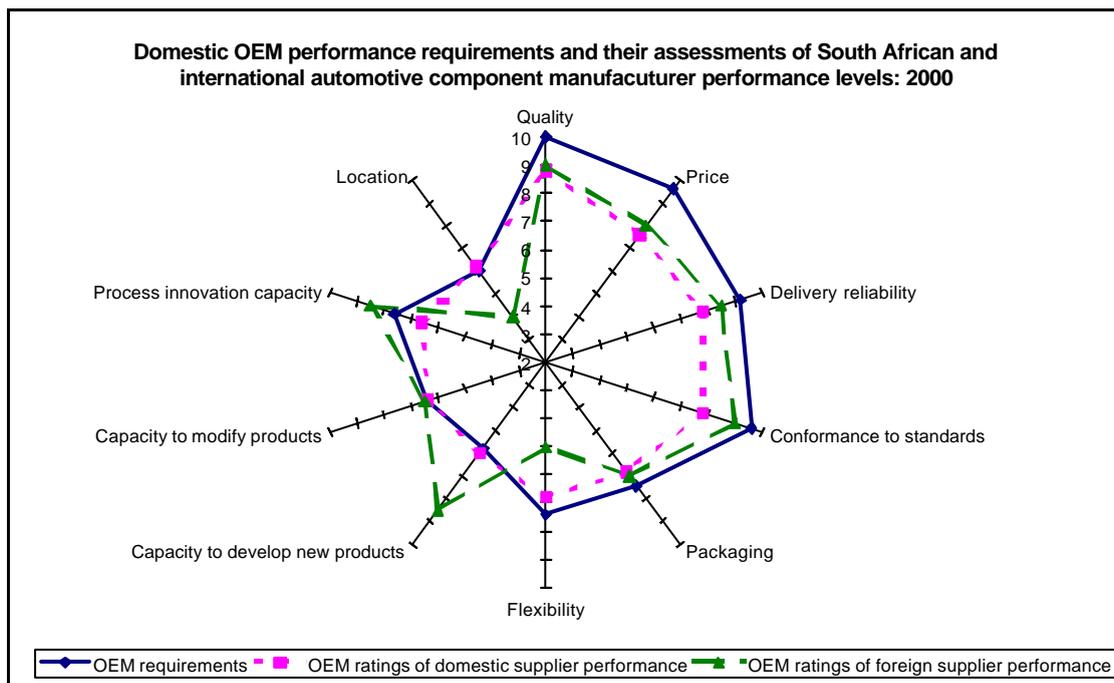
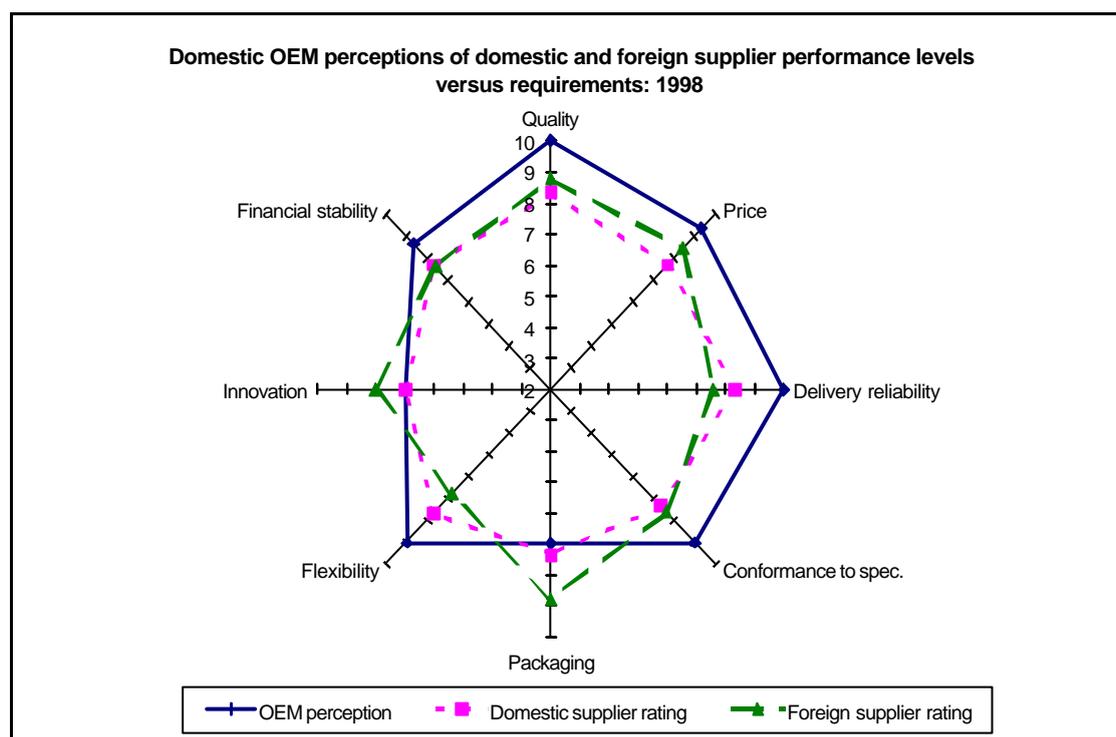


Figure 7.



In summary, then, domestic OEMs are still largely dissatisfied with the performance of their South African automotive component suppliers. This is revealed not only through the measures highlighted above, however, as this was a point that was reiterated at all of the interviews undertaken with OEM purchasing personnel. In addition, these average figures mask the very uneven development of the industry. Whilst two of the seven OEMs were dismissive of the potential of their South African automotive component supply base as it is presently constituted, the other OEMs recognised that many of their suppliers were significantly improving their performance, with some starting to achieve world class performance standards. Two of the seven OEMs were strongly advocating the importance of follower sourcing, whilst the five other OEMs held far more nuanced positions regarding the competitive capabilities of their domestic suppliers.

4.2. Purchasing of low value to weight products

As was the case in 1998, performance dissatisfaction with local suppliers does not inevitably lead to global purchasing. Unless significant technology changes occur, certain components were highlighted as always likely to be sourced locally. This was principally due to their low value to weight ratio, transportation difficulty, and/or local adaptation requirement. All of these factors necessitate supply in close proximity to OEM operations. The five most significant components sourced from each of the OEMs' most important domestic suppliers is highlighted below in Table 4. As is apparent, whilst there has been some shift in the make-up of these components from 1998, they tend to be non-core technology parts with low value to weight ratios.

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Table 4: The most significant components sourced from each of the five most important domestic component suppliers by five OEMs

Type of component	Number of assemblers: 2000 (n=5)	Number of assemblers: 1998 (n=6)
Axles	3	5
Sheet metal/pressings	2	5
Air conditioners/radiators	3	4
Wiring harnesses	3	3
Seats	3	3
Glass	1	2
Trim	2	1
Wheels	2	0
Exhausts	2	1
Machined components	1	2
Other	3	4

4.3. Re-designing for local market conditions

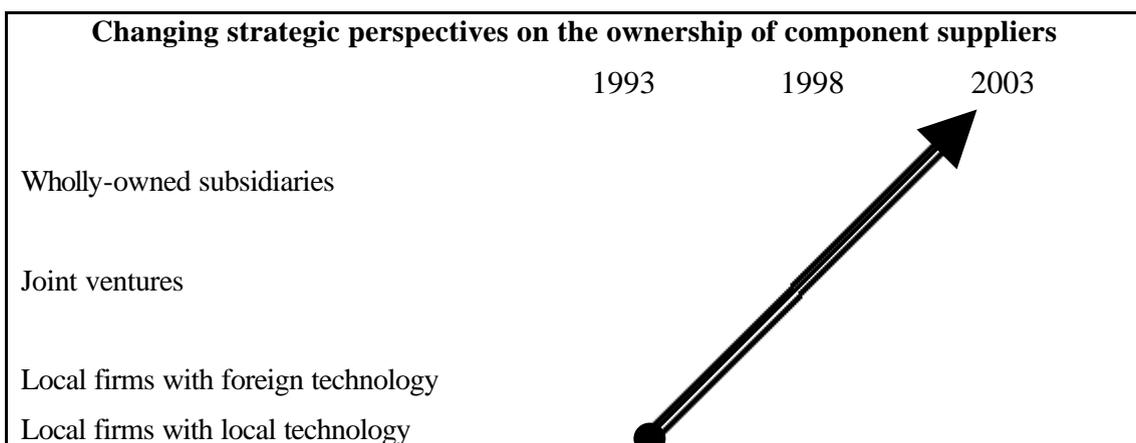
All of the OEMs indicated that South African market conditions were not unique and that apart from certain interior and exterior trim components that were designed exclusively for the peculiar taste of the South African market, most products followed global source design, with adaptations where necessary for hot climate conditions. These adaptations are not unique to the local market, although in certain instances the adaptations are designed in South Africa. Importantly, moreover, these designs are carried out in-house at the OEMs and as such design technology is not an important purchasing requirement for the domestic OEMs. This was clearly highlighted in Figure 6 and further clarified through the qualitative interviews carried out at the OEMs.

4.4. The death of SA technology?

One of the key findings from the 1998 study was the indication on the part of the OEMs that they had already largely moved away from purchasing components from South African automotive component manufacturers with their own technology. In line with their own integration into their parent company's global operations they indicated a strong preference for purchasing components from MNCs located in South Africa. The qualitative interviews undertaken at the OEMs suggested that this trend was likely to intensify. In line with these assertions we developed a conceptual overview of where we saw the industry progressing, with this highlighted in Figure 8.

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Figure 8.



Source: Barnes and Kaplinsky (1998)

In order to quantitatively verify the actual progress made in this regard we asked each of the OEMs in 2000 to indicate the ownership and technology breakdown of their South African component supply base in 1997, in early 2000 then the likely scenario in 2003. The findings, highlighted in Table 5, are illuminating, as they reveal the accuracy of the conceptual trajectory postulated in 1998. For example, wholly owned subsidiary operations of MNCs in SA presently account for approximately 32% of component sales into domestic OEMs and this is expected to increase to 37.5% in 2003. Similarly, purchasing from Joint Venture operations is expected to increase from 26% to 32.5%. The purchasing of components from SA companies with SA technologies is expected to decline from the present level of 18% to 10% in 2003, which is considerably down from the 1997 level of 26%.

Whilst the general trajectory highlighted in Figure 8 has been borne out, it may still be too early to refer to the death of SA technology in the automotive components industry. Its scope may be rather limited, but at least 10% of all of the OEMs' local purchases in 2003 are expected to be from SA companies with SA technology.

Table 5: Categorisation of the ownership status of, and the technology used by, SA based component manufacturers that supply SA OEMs: 1997, presently and 2003 projections (n=4)

Category	1997	Presently	2003
Wholly owned subsidiaries of MNC auto component manufacturers	26%	31.7%	37.5%
Joint ventures between SA companies and MNC auto component manufacturers	18.5%	26%	32.5%
SA companies with technology agreements with MNC auto component manufacturers	29.8%	24.3%	20%
SA companies with SA technologies	25.8%	18%	10%
Total	100%	100%	100%

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4.5. The death of the local firm?

Linked to the ongoing demise of the importance of SA technology, increasingly onerous OEM requirements, as well as the critical need for sales into global markets, many locally owned automotive component manufacturers were expected in 1998 to either shift down to the second tier of the automotive supply chain or become JV partners with, or subsidiaries of, MNCs. As suggested in Table 5 (above) and as further revealed in Table 6 (below) this trend appears to have occurred over the last two years. In 1998, the major suppliers of the six OEMs who participated in the IRP study represented a mix of South African owned and internationally owned companies, whereas in 2000, the majority of major suppliers are MNC owned.

Table 6: Ownership status of the SA OEM's major SA based component suppliers: 1998 versus 2000

Ownership	Proportion of major suppliers: 1998* (n=19)	Proportion of major suppliers: 2000* (n=20)
South African	58%	40%
Joint Venture	5%	10%
Multinational	37%	60%

* Please note that all double counting has been removed hence the smaller n. numbers.

The shift in ownership has been dramatic. In only two years, MNC owned suppliers based in South Africa have become the dominant major suppliers to the OEMs. Whilst some of this has been through the acquisition of previously independent South African operations or an expansion of previously smaller South African operations, the development of greenfield sites has also been important, in line with the "follower sourcing" strategy of certain of the OEMs. The importance of carrying through follower sourcing strategies in South Africa was strong argued during the course of three of the seven OEM interviews. These OEMs viewed the location of lead source suppliers close to their operations as key to their own competitive potential.

4.6. Summary

Five of the seven OEMs that were interviewed during the course of the study returned the perception questionnaires that were handed over to them at the time of the qualitative interviews in time for the writing of this report. The views expressed in the seven interviews remained largely unchanged from the views that were expressed during the course of the 1998 OEM study. Domestic OEMs are still largely dissatisfied with the performance of the local supply base, with the domestic components industry being rapidly restructured as a result. Whilst low value to weight products are still largely being purchased in South Africa, domestic OEMs now purchase less inputs from South African owned automotive component manufacturers and even less inputs from South African owned companies with local technology. The trend that was envisaged in this regard in 1998 has clearly maintained its momentum over the last two years. Critically, the South African based OEMs viewed the trajectory of the automotive components industry as intractable, and likely to intensify over the next few years, especially as new vehicle models are released into the domestic market.

5. CUSTOMER PERCEPTION SURVEY FINDINGS

This section comprises five sub-sections. First, we consider the purpose of the perception study that was carried out, with this including a profile of the customers and automotive component manufacturers sampled. Secondly we outline the automotive component manufacturers' perceptions of their own performance relative to customer demand. Third, we consider the aggregated customer perceptions of automotive component manufacturer performance levels relative to their demands. Then we disaggregate the customer perceptions according to their market and ownership profiles, thus highlighting variance in demand and satisfaction ratings across domestic market segments. Finally we consider the survey responses according to customer ownership – South African versus Multinational.

5.1. Purpose of the perception study

The purpose of sending perception surveys to the major customers of 14 KwaZulu-Natal and Eastern Cape Benchmarking Club members was to gauge how effectively each of the automotive component manufacturers' performance levels matched up against the performance requirements of the markets into which they fed. By sending the perception questionnaires to the buyers at each of the major customers, the automotive component manufacturers were able to gain a clear understanding of where their customers perceived their major strengths and weaknesses. An aggregation of the responses from the 58 customers therefore allows us to generate an understanding of the average customer perceptions of the 14 automotive component manufacturers' performance levels.

Whilst the 14 automotive component manufacturers are not a representative sample of automotive component manufacturers nationally, given their skewed geographical location, the 14 firms are broadly representative of the types of automotive component manufacturers operative in South Africa. A brief profile of the 14 automotive component manufacturers relative to the profile of a larger sample of 35 firms surveyed in a 1998 study of the competitiveness of the South African components industry (see Barnes 1998) supports this contention. Ownership, firm-size (employment and turnover), date of establishment, export propensity and categorisation according to primary raw material input indicators suggest similarities between the two sets of firms.

The findings therefore appear to be largely representative of domestic customer perceptions of South African automotive component manufacturer performance levels.

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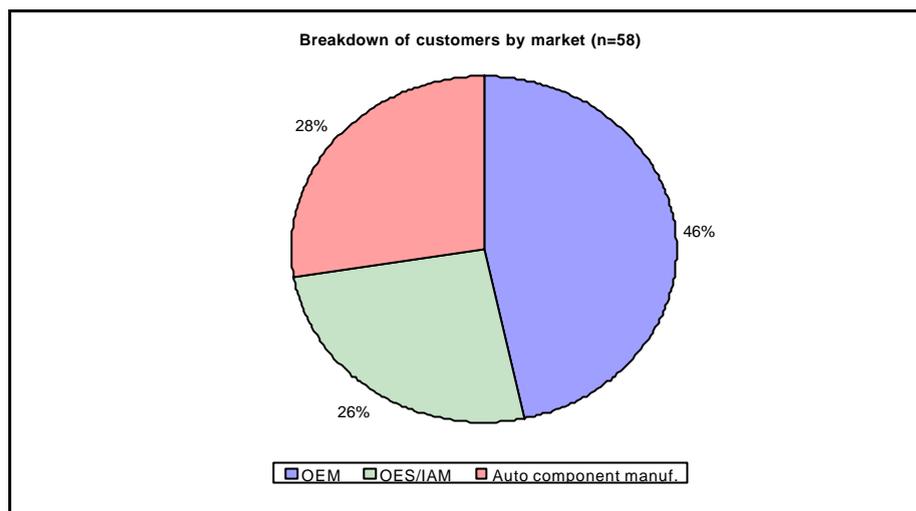
Table 7: Profile of the 14 Benchmarking Club members against a sample of component manufacturers surveyed in 1998 (n=35)

	Benchmarking Club members	Auto component firms (1998)
Average employment level	331	320
Average turnover	R88 million	R72 million
Date of establishment	Pre-1970: 57%, 1971-90: 36%, 1991+: 7%	Pre-1970: 48%, 1971-90: 33%, 1991+: 18%
Geographical location	Gauteng: 0%, Eastern Cape: 36%, KwaZulu-Natal: 64%	Gauteng: 31%, Eastern Cape: 27%, KwaZulu-Natal: 42%
Ownership	MNC or JV (SA/MNC): 50% South African: 50%	MNC or JV (SA/MNC): 26% South African: 74%
Categorisation according to primary raw material input	Ferrous metal: 29%, Non ferrous metal: 21%, Plastics/chemical: 14%, Textiles: 14%, Glass: 14%, Electronics: 7%	Ferrous metal: 54%, Non ferrous metal: 11%, Plastics/chemical: 23%, Textiles: 11%
% of turnover generated from exporting	18.3% (1998)	17.8% (1997)

Given the importance of the domestic OEM market for automotive component manufacturers (as highlighted in Section 1) it is also significant to note that 46% of the surveyed customers were OEMs, with a smaller percentage OES/IAM customers and the remainder automotive component manufacturers. This is illustrated in Figure 9 below. Due to the particular demands of each of the domestic markets outlined in Figure 9, the findings from the total dataset are disaggregated according to each of these market segments. Given the important dissimilarities in customer requirements and their perceptions of supplier performance levels across each of the market categories, it is important that these be explored.

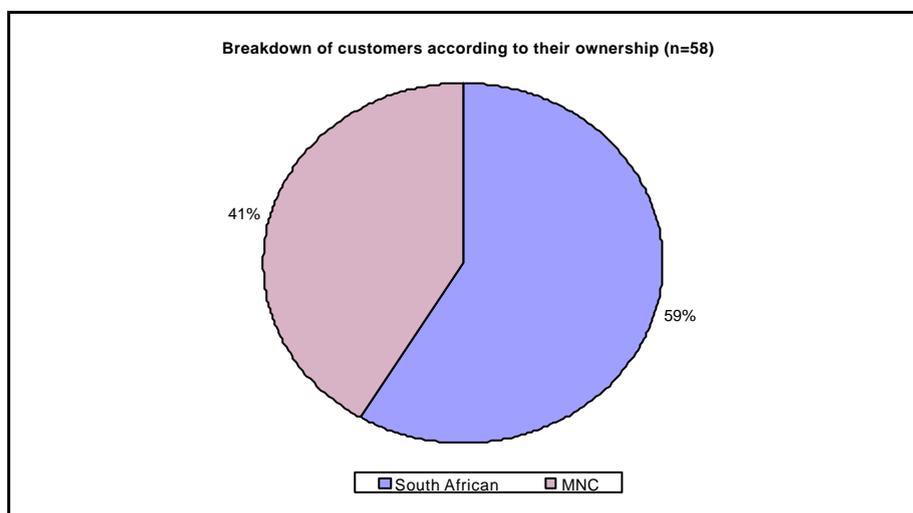
Figure 9.

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Another key distinction that needs to be made between the customers is their ownership. As argued in Section 1, as the industry increasingly integrates into the global operating environment so competitiveness pressures intensify. One would therefore expect the domestic customers who are part of multinational organisations to be more demanding in terms of their supplier performance levels. Is this, however, really the case or have South African owned customers increased their performance requirements to that of their MNC owned competitors? Given the relatively even ownership split amongst the 58 customers surveyed (see Figure 10), a breakdown of domestic automotive component manufacturer performance levels through the eyes of MNC owned and SA owned customers is therefore also presented in this section.

Figure 10.



The 12 key customer performance requirements that were explored in each of the perception surveys were:

1. Quality
2. Price
3. Delivery reliability
4. Conformance to standards
5. Packaging
6. Flexibility
7. New product development
8. Capacity to modify products

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- | | |
|--------------------------------|-----------------------------------|
| 9. Process innovation capacity | 11. Offering of credit facilities |
| 10. Financial stability | 12. Geographical location |

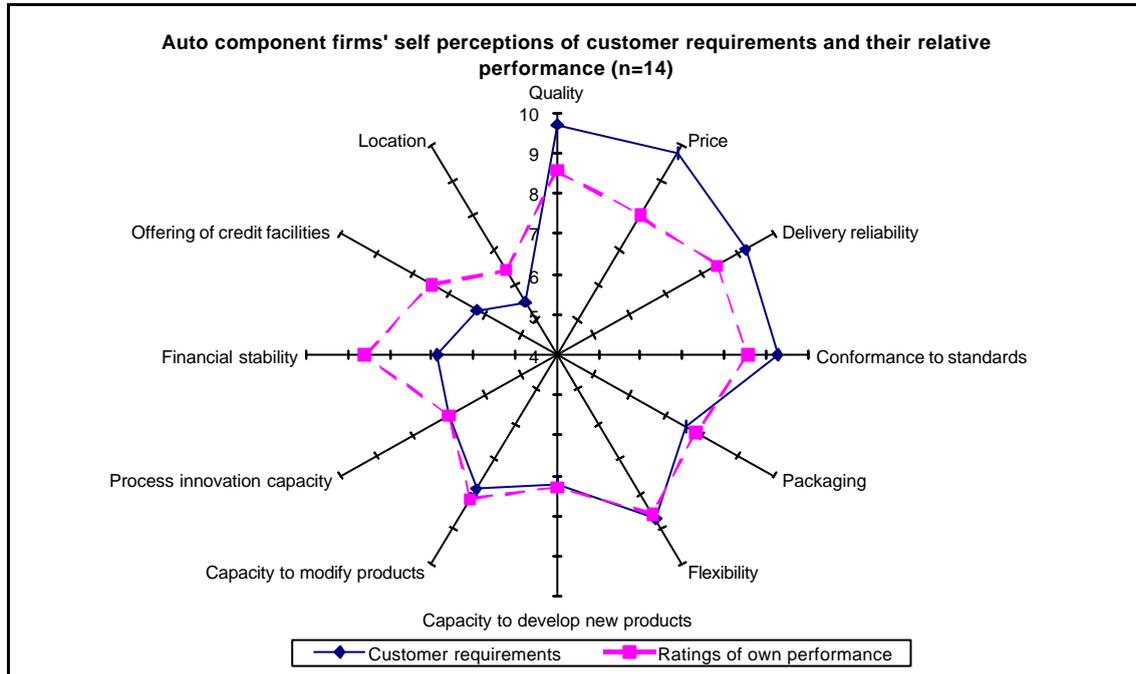
Each customer was requested to rate the importance of each of these criteria when assessing the performance of their suppliers. A perception scale of one to ten was used for all the criteria, with a rating of one highlighting that the performance criteria was not important at all and ten that it was critically important. Each customer was then requested to indicate the performance of the component manufacturer using the same perception scale; thus allowing us to gauge the relative importance of each performance criteria, as well as the relative performance of the component manufacturer against the customer's requirements.

Before the customer findings are presented, an overview of the 14 automotive component manufacturers' perceptions of their own customer requirements and their self-perception of performance relative to these requirements is outlined. The same perception scale was used, with this exercise offering a useful indication of (1) the extent to which the 14 automotive component manufacturers believe they are meeting their customers' demands and (2) the extent to which they are actually reading their customers' performance requirements. Automotive component firms that over-rate their own performance relative to customer requirements are unlikely to respond as positively to market changes as those firms that have a clear understanding of their customers' performance requirements, their customers' perceptions of their performance levels, and where performance gaps clearly exist. It is therefore important to first gain an impression of the automotive component manufacturers' perceptions of their own performance relative to customer demands.

5.2. The automotive component manufacturers' performance perceptions

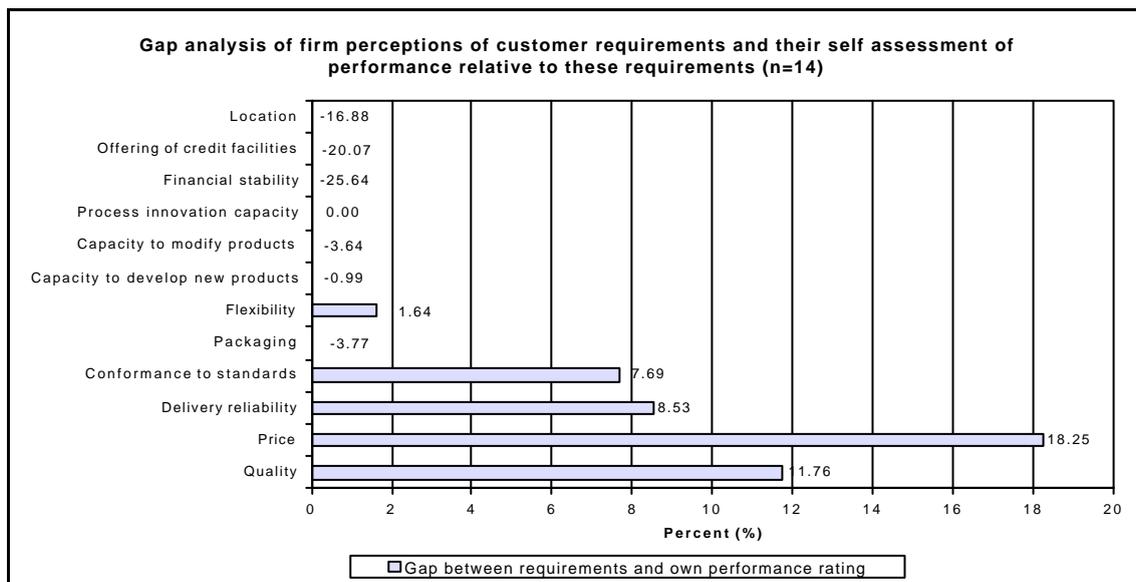
As highlighted in Figure 11, the 14 automotive component manufacturers believe that their customers' most important performance requirements are price, quality, conformance to standards and delivery reliability, with each of these performance criteria receiving an average rating of over 9. Another important requirement is flexibility, which received an average importance rating of over 8. All the other performance requirements were deemed to be of less importance, receiving average performance ratings of less than 8. The performance requirement perceived as being of least importance was geographical location, which received an average performance requirement of under 6. The automotive component manufacturers indicated that they either met or even surpassed all of their major customers' less important performance criteria. Performance gaps were, however, recognised for the more important performance criteria, with significant gaps indicated for price and quality.

Figure 11



The extent of the perceived performance gaps is clearly illustrated in Figure 12. For only two criteria were performance gaps perceived to be larger than 10% of the automotive component manufacturers' performance levels. This represents a relatively comfortable self-diagnosis on the part of the automotive component manufacturers. This is a level of comfort that should not exist. As will be highlighted in 3.3 the performance gaps are significantly larger when viewed through the eyes of the customers themselves, with more performance criteria also deemed to be important.

Figure 12.

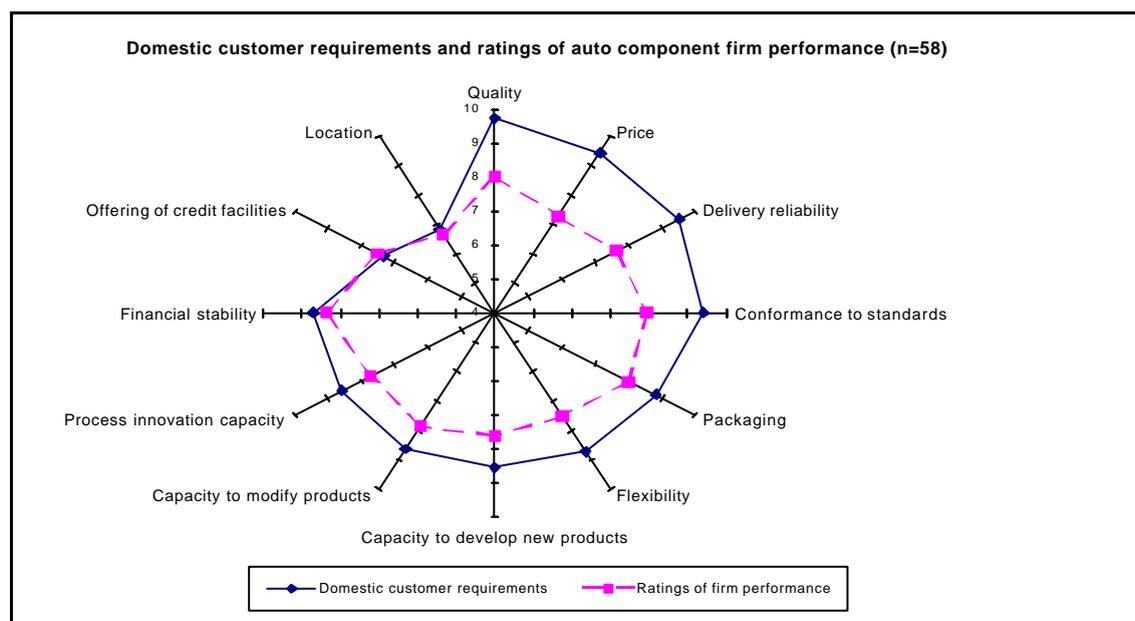


Please note: A negative (-) figure indicates that the component suppliers believe they are surpassing their customers' performance requirements.

3.3. Customer perceptions of the component manufacturers' performance levels

Customer perceptions of the automotive component manufacturers' performance levels are significantly less promising than the automotive component manufacturers' self perceptions. As highlighted in Figure 13, whilst the automotive component manufacturers are correct in rating their customers' quality, price, delivery reliability and conformance standards as being critically important they underestimate the importance of the other performance requirements. Packaging, flexibility, new product development capacity, capacity to modify products, process innovation capacity and financial stability were given average performance requirements of between 8 and 9, thus signifying their importance. Only the offering of credit facilities and geographical location received average ratings below 8.

Figure 13.

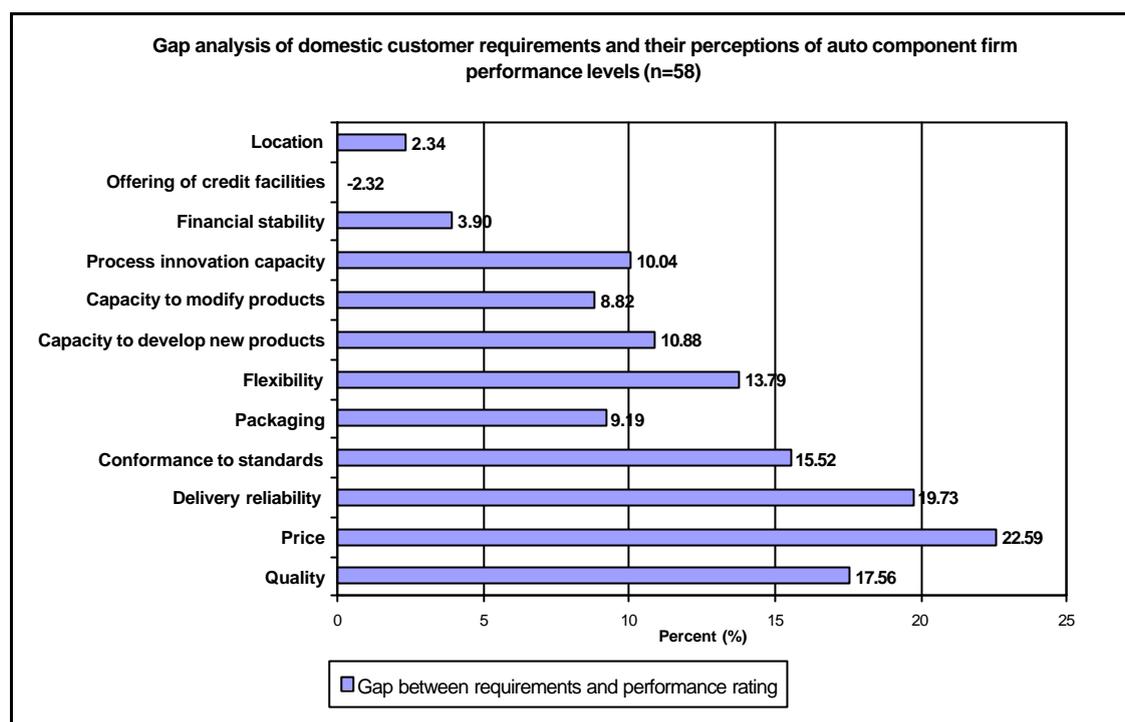


As highlighted in Figure 13 and as further illustrated in Figure 14, the gaps between the customers' requirements and their ratings of the automotive component suppliers' performance levels are significantly larger than perceived by the automotive component manufacturers. The largest gaps exist for the four most important performance requirements, with the domestic customers being particularly unhappy with the price, delivery reliability, quality and conformance to standards performance of component manufacturers.

Performance gaps of over 10% were also evident for three other criteria, flexibility, process innovation capacity and capacity to develop new products. The only areas where the customers indicated general satisfaction with the suppliers' performance levels related to the lesser important criteria of geographical location, the offering of credit facilities and financial stability.

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Figure 14.



Importantly, the performance requirements of the total sample of major customers (n=58) are concentrated for the more important criteria and less concentrated for the less important criteria. This is verified by the standard deviations on each of the average figures as highlighted in Table 8. As further highlighted in Table 8 the dispersion around the average for the performance ratings of the automotive component suppliers is, however, significantly larger. The standard deviation for quality as a performance requirement is, for example, only 0.69 (average = 9.74), whereas the standard deviation for the rating of supplier quality performance is 1.95 (average = 8.03). This suggests that the performance requirements for critical criteria are rather consistent across the 58 customers included in the perception survey, but that there is widespread variability in their assessments of supplier performance levels.

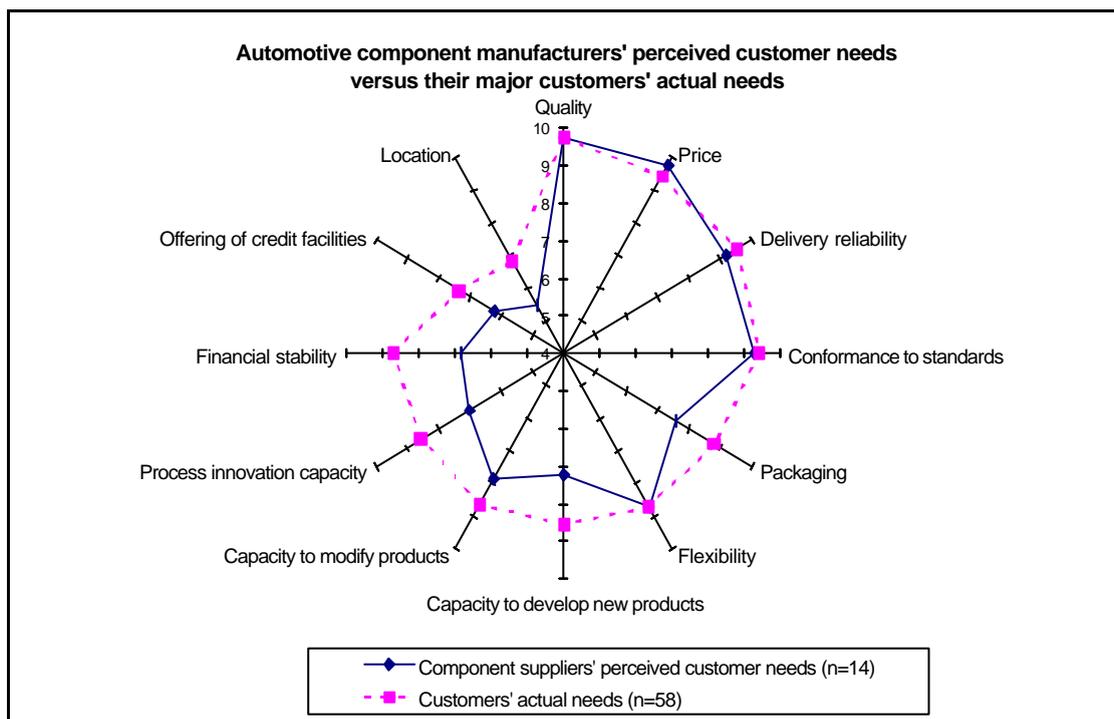
Table 8: Standard deviations for customer performance requirements and their ratings of supplier performance levels

<i>1.1 Criteria</i>	Customer performance requirement		Ratings of supplier performance	
	Mean	<i>Standard deviation</i>	Mean	<i>Standard deviation</i>
Quality	9.74	0.69	8.03	1.95
Price	9.43	0.91	7.3	1.93
Delivery reliability	9.53	0.93	7.65	2.25
Conformance to standards	9.41	1.53	7.95	2.18
Packaging	8.81	1.43	8	2.01
Flexibility	8.7	1.63	7.5	1.98
Capacity to develop new products	8.55	1.97	7.62	1.9
Capacity to modify products	8.62	1.67	7.86	1.83
Process innovation capacity	8.57	1.55	7.71	1.68
Financial stability	8.72	1.72	8.38	1.76
Offering of credit facilities	7.34	2.68	7.51	2.25
Location	6.84	2.52	6.68	2.31

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Whilst the automotive component manufacturers over-rate their own performance relative to customer perceptions of their performance levels, it is striking to note that the automotive component manufacturers were very accurate in their self-assessment of customer performance requirements. This is highlighted in Figure 15. The only areas where the component manufacturers failed to adequately gauge the importance of their customers' performance criteria related to the lesser important performance criteria of packaging, flexibility, innovation capacity, etc. As highlighted in Table 8 these are moreover the areas where customer requirements are relatively dispersed.

Figure 15.



Whilst there are significantly larger gaps between customer requirements and automotive component manufacturer performance levels than perceived by the automotive component manufacturers themselves, which is a cause for some concern for industry stakeholders, the overall findings from the customer perception survey are not too disconcerting. Although automotive component manufacturers generally over-rate their own performance relative to customer requirements and are not meeting their customers' key performance criteria, they appear to be largely cognisant of the critical success factors in the automotive market and the weightings apportioned to these criteria by their customers.

A disaggregation of the customer perception findings according to type of market and ownership reveals some interesting dissimilarities between customer perceptions of their automotive component suppliers' capability levels. It is therefore important to consider these findings.

5.4. OEM, OES/IAM and “Other automotive component manufacturer” customer perceptions of automotive component manufacturer performance levels

As highlighted in Section 1, South African automotive component production feeds into a number of different domestic automotive markets. The customer surveys undertaken for the KwaZulu-Natal and Eastern Cape Benchmarking Club members illustrated this, with production feeding into the domestic OEM and OES markets, as well as the independent aftermarket and other automotive component manufacturers. For the purposes of analysis the total customer population was divided in terms of three market categories, with the description of the findings presented below based on these market categories.

5.4.1. OEM customer perceptions: The domestic OEM customer perceptions of the automotive component manufacturers’ performance were rather consistent with the aggregated findings generated. This is highlighted in Figure 16, with their four key performance requirements in order of importance being quality, conformance to standards, delivery reliability and price, with packaging also receiving an average requirement rating of over 9. All other performance requirements received average ratings of between 8 and 9, with the exception of geographical location and the offering of credit facilities, which received importance ratings of between 7 and 8. As revealed in Figure 17, it was for these two requirements that the OEMs believed the automotive component manufacturers came closest to meeting their performance requirements. Substantial gaps were recorded for all the other criteria. Performance gaps were largest for the four most important performance criteria, with quality and price ratings of automotive component manufacturer performance levels particularly severe.

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Figure 16.

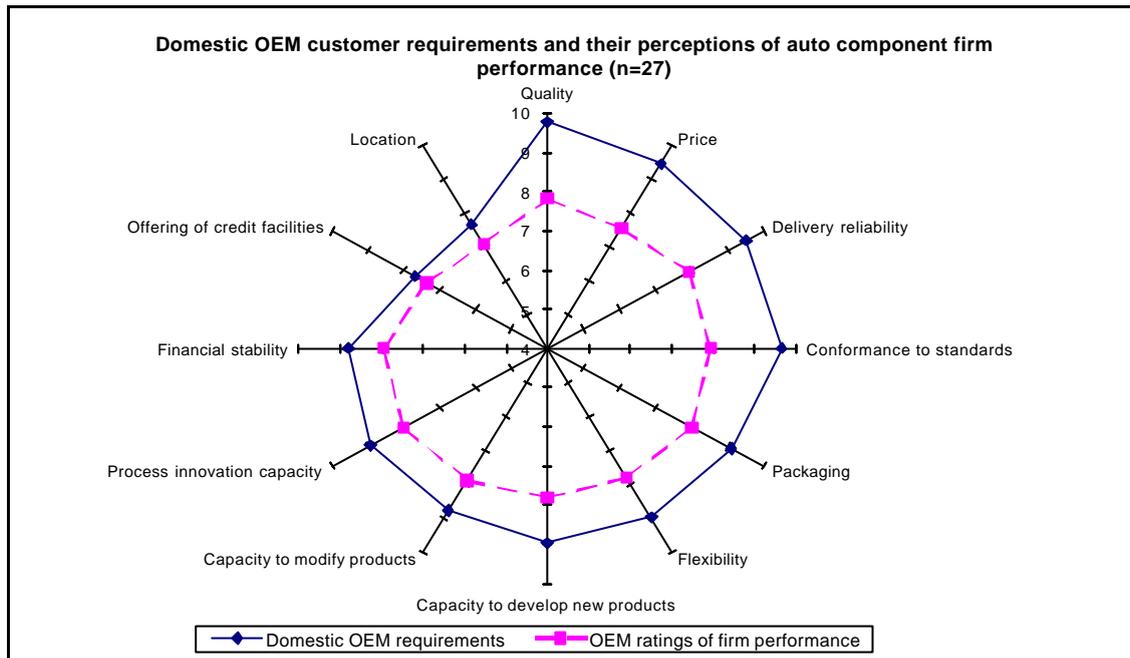
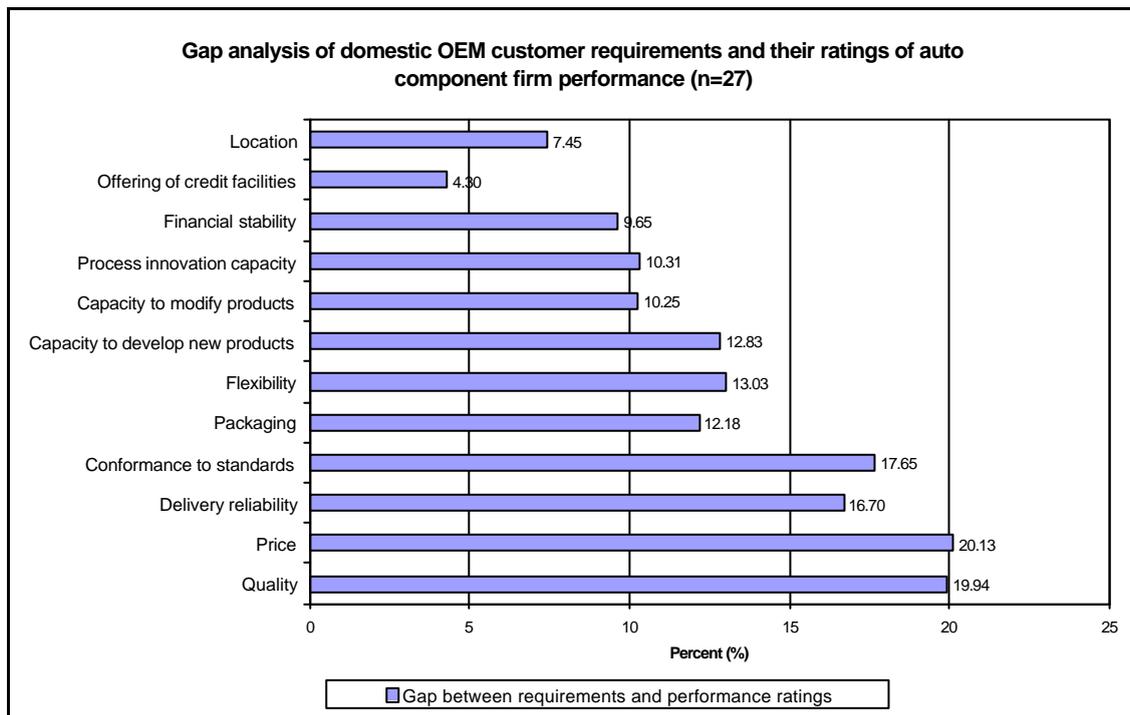


Figure 17.



5.4.2. OES/IAM customer requirements: The OES/IAM customers differed quite substantially from the OEM customers in their assessment of the automotive component manufacturers' performance levels relative to their requirements. Whilst the key performance criteria remain the same (Figure 18), as highlighted in Figure 19, the biggest problem these

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customers have with the component manufacturers is their poor delivery reliability and flexibility.

Qualitative interviews at the automotive component manufacturers offered an insight into the reasons for the very poor performance ratings for these two criteria. The automotive component manufacturers are apparently very aware of the penalties associated with the stopping of OEM assembly lines and as such ensure that their OEM customers receive preferential treatment in terms of supply. Production runs for OES/IAM components will be broken into in order to produce OEM components that are required urgently, but the opposite will not occur, even when the OES/IAM component is the more financially lucrative to manufacture.

Component manufacturers will also sometimes delay aftermarket production until adequate volume has been demanded. Due to their production organisation many component manufacturers will not manufacture below a certain batch quantity, thus limiting their response time to OES/IAM orders (i.e. they will postpone production until they have a large enough batch run to justify the manufacture of the component).

In line with the less demanding nature of the OES/IAM, less concern was revealed about the quality/conformance to standards performance of the component manufacturers. Whilst the OES/IAM customers gave these two performance criteria very high ratings they indicated that their component suppliers were not too far off the performance standards expected of them. This differs quite significantly from the OEM customers. In addition, whilst the OEM customers were largely unhappy with the performance of the component manufacturers across all of the criteria explored, the OES/IAM customers expressed far less concern with the component manufacturers' performance in terms of the lesser important criteria. Price concerns are however very similar between the two different market segments.

Figure 18.

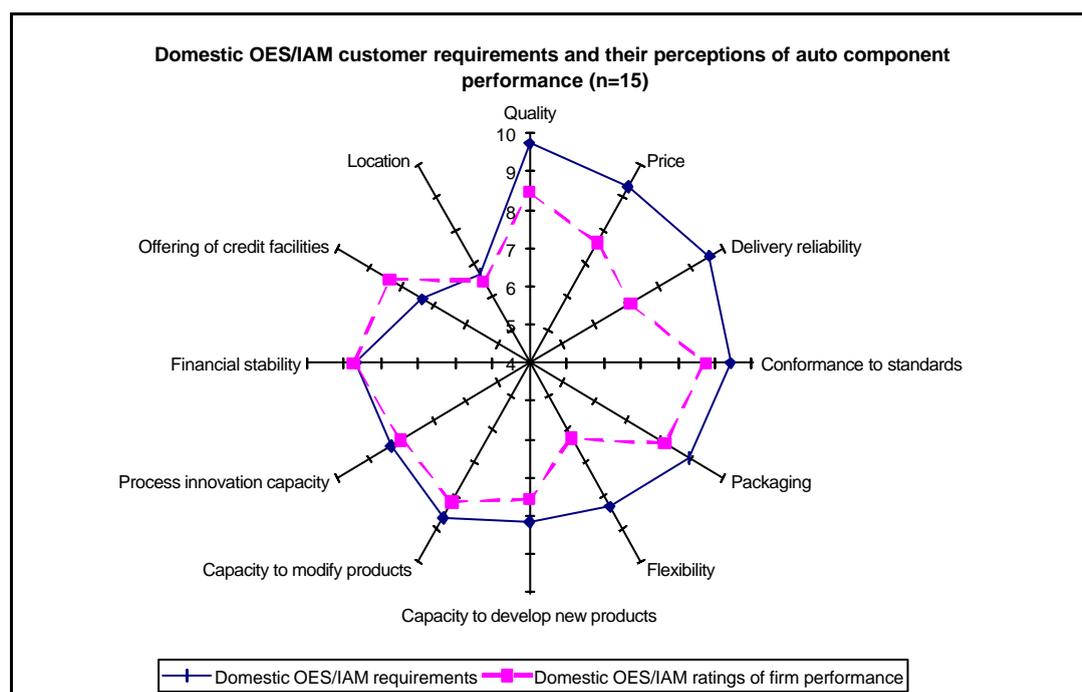
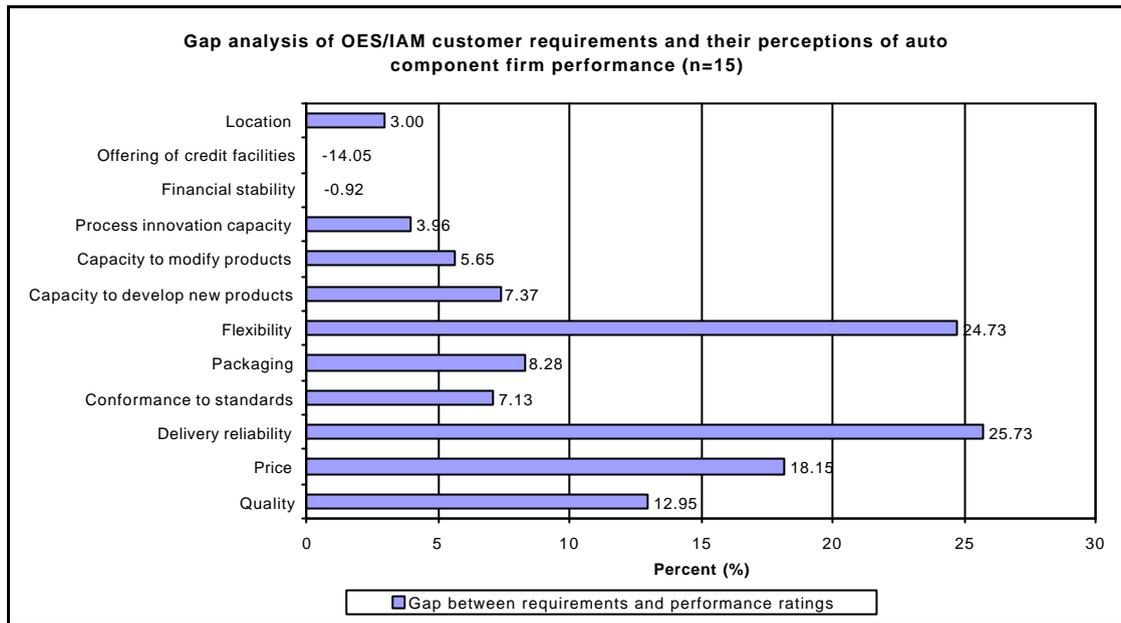
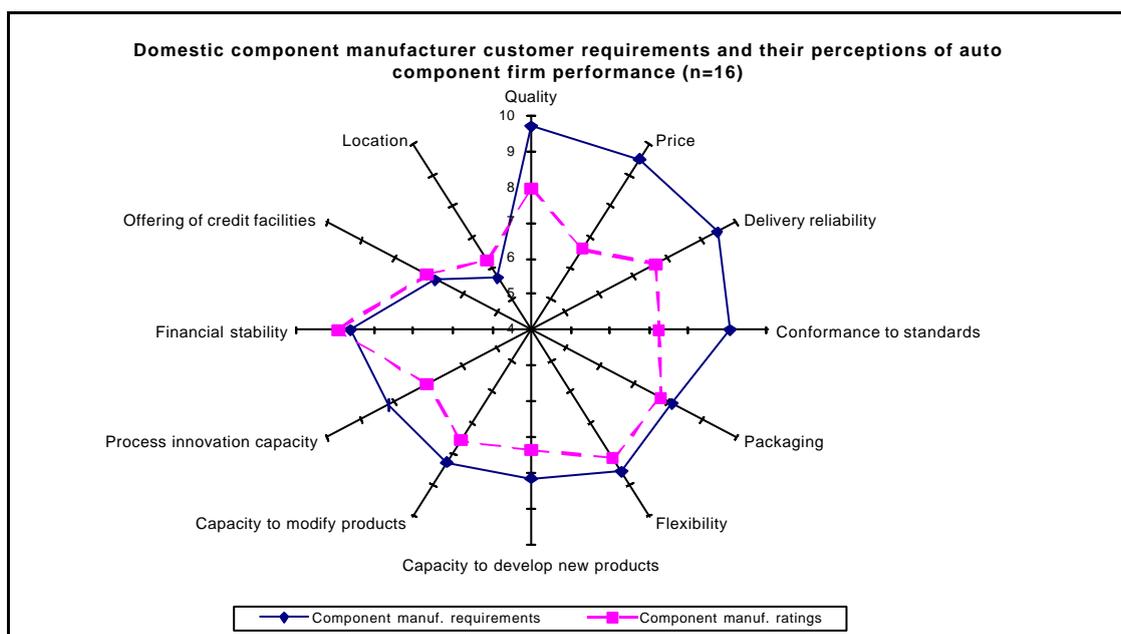


Figure 19.



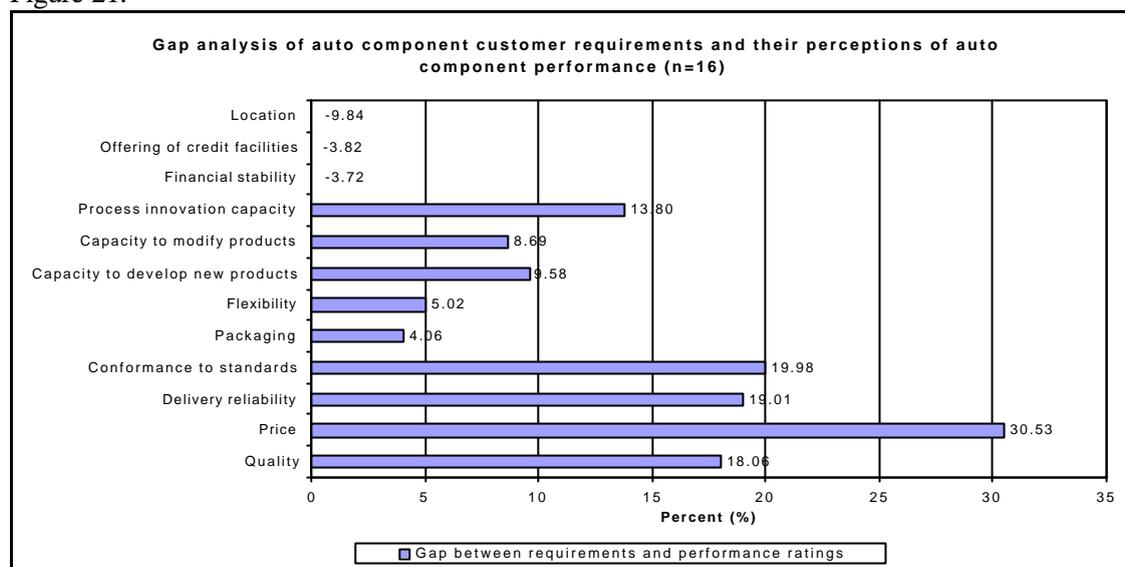
5.4.3. Other automotive component manufacturer perceptions: The most important performance requirements of the other automotive component manufacturers supplied by the Club members was quality and price, followed by delivery reliability and conformance to standards (Figure 20). The increased focus on price by these customers is unsurprising given the fact that the majority feed their production into the domestic OEMs and as such are under an enormous amount of cost-down pressure, hence the focus on price. This is further reflected by their assessment of the automotive component manufacturers' price performance. Interestingly, the auto component customers are also particularly severe on the automotive component manufacturers in terms of their quality, conformance to standards and delivery reliability, while expressing a degree of satisfaction with their performance in terms of most of their lesser important requirements.

Figure 20.



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Figure 21.



5.4.4. Summary: The customers in the three domestic market segments explored hold different views as to the performance of the automotive component manufacturers, whilst also having different requirements. Whilst this is not so noticeable for three of the four key performance criteria the differentiation becomes more marked amongst the less important criteria. A summary of the customers' performance requirements and their ratings of the automotive component manufacturers' performance levels according to the three market categories is highlighted in Table 9.

Table 9: Ranking of performance criteria according to the importance ratings given to them by customers in the different market categories

Ranking position	OEM customers	OES/IAM customers	Auto component customers
1	Quality	Quality	Quality
2	Conformance to standards	Delivery reliability	Price
3	Delivery reliability	Conformance to standards	Delivery reliability
4	Price	Price	Conformance to standards
5	Packaging	Packaging	Financial stability
6	Flexibility	Financial stability	Flexibility
7	Capacity to develop new products	Capacity to modify products	Capacity to modify products
8	Process innovation capacity	Flexibility	Process innovation capacity
9	Financial stability	Process innovation capacity	Capacity to develop new products
10	Capacity to modify products	Capacity to develop new products	Packaging
11	Offering of credit facilities	Offering of credit facilities	Offering of credit facilities
12	Location	Location	Location

5.5. Customer perceptions according to customer ownership

As highlighted in Section 2, the reintegration of the domestic industry into the global environment has led to substantial MNC investments. Given their global presence and experience in competing internationally one would expect the MNC owned automotive customers, which comprise 41% of the customer population surveyed, to be more demanding than their South African counterparts. In this subsection the customer findings are therefore disaggregated in terms of their ownership.

5.5.1. MNC owned customer perceptions: As highlighted in Figures 22 and 23 the MNC owned domestic customers are both extremely demanding of and largely dissatisfied with the performance levels of the automotive component manufacturers. The gap between their four most important requirements (quality, delivery reliability, price, and conformance to standards) and the performance levels of the component suppliers exceeds 20% in every case. The gap between their price requirements and their perceptions of supplier performance levels is particularly disconcerting at 26%. Importantly, moreover, whilst the gaps between the less important requirements and supplier performance levels are not as large, the innovation gaps (new product development, process innovation capacity and product modification capacity) are larger than that perceived by the South African owned customers (see 3.5.2). The gaps are only non-existent or extremely small for the least important performance criteria of financial stability, offering of credit facilities and geographical location.

Figure 22.

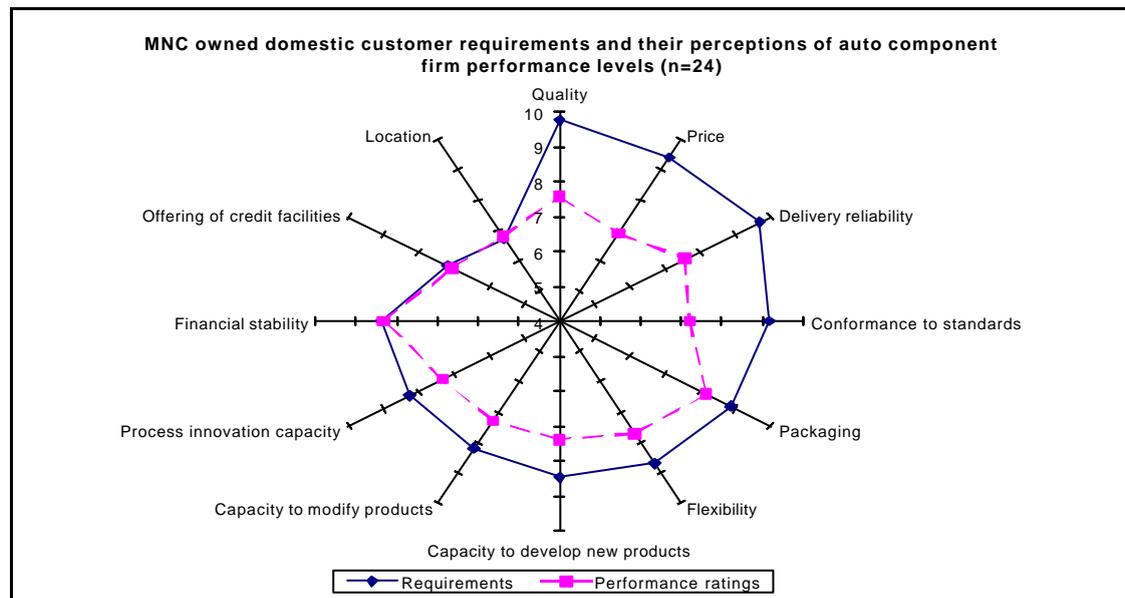
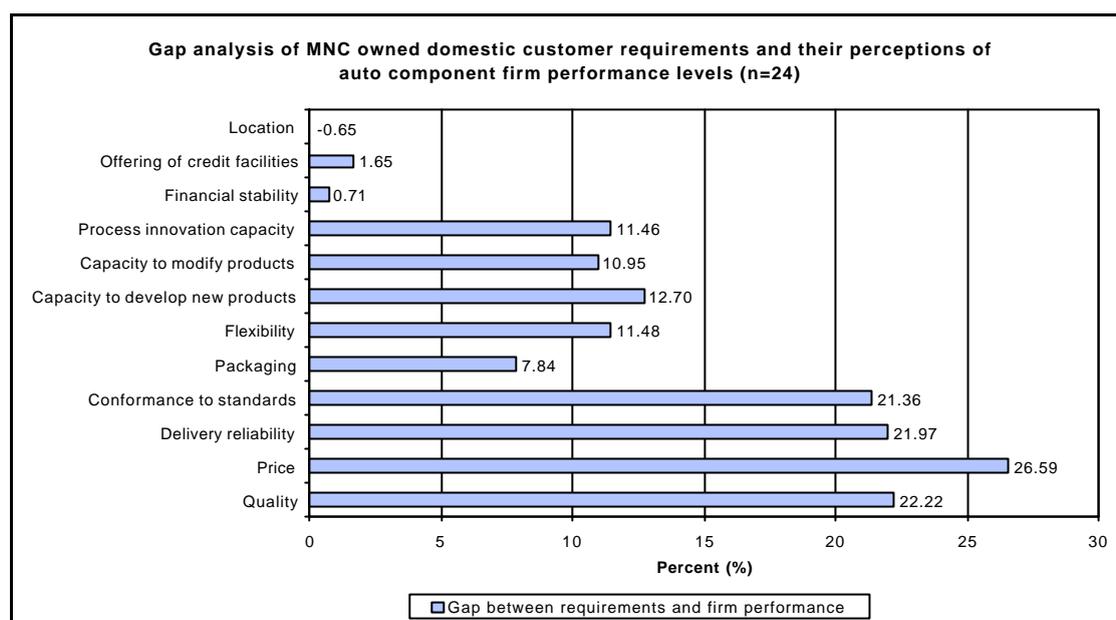


Figure 23.

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5.5.2. SA owned customer perceptions: The view that MNC owned domestic customers may be more demanding than their South African counterparts is borne out by the views of the South African owned customers. While the SA owned customers were largely dissatisfied with the performance levels of the automotive component manufacturers the magnitude of the gaps between their performance requirements and that of their suppliers was significantly smaller. For example, the gap between requirements and supplier performance levels for the four most important criteria of quality, conformance to standards, delivery reliability and price ranged from 11% to 20%, significantly less than the 20% and higher of the MNC owned customers. The gaps for the less important innovation performance criteria were similarly smaller in magnitude, although the SA owned customers are less satisfied with the performance of the component manufacturers in terms of some of their less important performance requirements, such as flexibility and packaging.

Figure 24.

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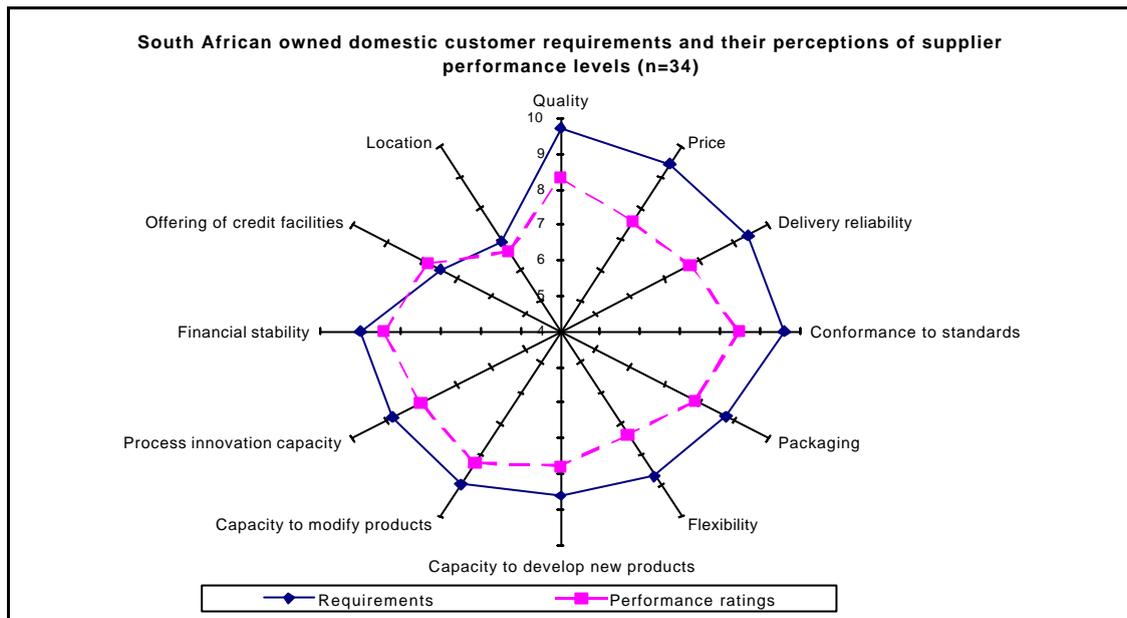
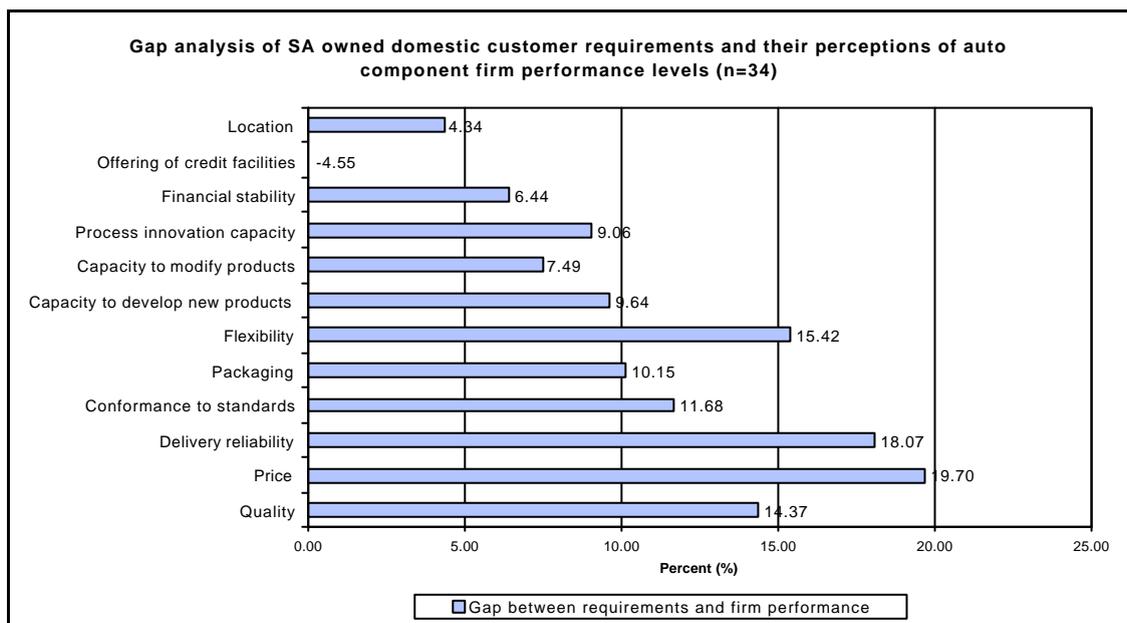


Figure 25.



5.5.3. Summary: The MNC owned and the South African owned customers would appear to hold very similar views of the automotive component manufacturers. The only important distinction between the two sets of customers is the magnitude of the perceived gaps between their requirements and component manufacturer performance levels, with the MNC owned customers generally being far more critical of the component manufacturers' performance levels.

5.6. Key lessons

One of the key lessons one can draw from the findings presented in this section of the report relates to the increasing pressure bearing down on the automotive components industry in South Africa. In support of the findings presented in Section 2, it is quite clear that South African based automotive component manufacturers are struggling to compete in increasingly demanding domestic automotive markets. This applies to the OEM, OES/independent

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aftermarket and other automotive component manufacturer customers. Whilst there is some demand variability across market segments, with the OEM market the most demanding, as highlighted in Table 8 the weightings apportioned to the most important performance criteria by customers are relatively consistent across the different automotive market segments.

Importantly, it was also highlighted that MNC-owned customers tend to be more demanding of automotive component manufacturer performance levels relative to their South African owned counterparts. Given the findings presented in Section 2, this poses an important set of questions for component manufacturers. As the MNC presence in the domestic automotive industry further consolidates how intense are the competitiveness pressures likely to become? Will the MNC customers tolerate performance levels that are below internationally set standards? As suggested in 3.5, these are extremely pertinent questions that are likely to become more pertinent as the MNC-owned customers of the automotive component manufacturers increase their dominance of the domestic automotive industry.

6. CONCLUSION

The extensive data collected during the course of the various facets of the research study has revealed a number of very important findings. As revealed in Section 1, the automotive industry in South Africa is presently undergoing a number of major structural changes, with competitiveness issues now critical to its future survival. This is a result of market liberalisation and the industry's rapid reintegration into the global automotive operating environment. As also revealed in Section 1, the most important market for domestic automotive component manufacturers remains the South African OEM market, a market which is presently undergoing profound transformation, whilst stagnating in terms of absolute levels of output.

In order to ascertain the extent, as well as the intensity at which the domestic OEM market was changing for automotive component manufacturers, all of the OEMs in South Africa were visited. This was done to gain an impression of their views pertaining to their domestic automotive component suppliers. The OEMs were also left with a detailed perception questionnaire that was to be completed as a mechanism for quantifying their views of the South African automotive components industry, as well as their procurement changes over the last two years. This was undertaken as a follow up to a similarly constituted study undertaken in 1998. The information from the seven qualitative interviews that were undertaken and the five OEM procurement questionnaires that were completed formed the content of Section 2. As revealed in Section 2, three key interlinked findings emerged from this component of the research:

- (1) OEMs are still largely dissatisfied with the performance of their South African based component suppliers, although absolute levels of dissatisfaction are very similar to the levels recorded in 1998,
- (2) OEMs are increasingly sourcing their major components from MNC owned suppliers and
- (3) South African technology is increasingly being squeezed out of the domestic OEMs' supply chains.

These three findings are unsurprising and were projected in the IRP's 1998 analysis of domestic OEM procurement shifts in South Africa (Barnes and Kaplinsky 1998). Importantly, however, the follow-up research that was undertaken for this study quantified these shifts, thus concretely highlighting both their intensity and exact magnitude. These were important weaknesses in the 1998 study.

The customer perception survey that was carried out as part of the overall study also revealed a number of important findings, as revealed in Section 3. In support of (and in addition to) the more general findings presented in Section 2, the findings from the 58 domestic customer surveys that were undertaken revealed the enormous pressure being placed on the automotive components industry in all market segments. The findings revealed the importance of both price and non-price factors in the different market segments that were analysed, whilst also revealing the extensive pressure that is likely to build amongst automotive component

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suppliers and customers as MNC dominance of the industry consolidates over the next few years.

Given the nature of the overall study, the findings that were generated through the various methodologies employed are neither discouraging nor positive. Whilst the automotive components industry is still struggling to meet domestic market expectations, this is the same picture that emerged from the similar 1998 IRP study. In effect then, whilst domestic market pressures have clearly intensified over the last two years the South African automotive components industry has not lost competitiveness ground. That in itself is an extremely positive finding.

If the South African government is to successfully facilitate the improved competitiveness of the domestic automotive components industry attention should be placed on those key performance criteria which the market views as critical, but where the performance of the South African automotive components industry is deemed to be poor. These relate to the four performance criteria of quality, price, delivery reliability and conformance to standards.

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