

# The MIDP and restructuring in the auto industry<sup>1</sup>

*The MIDP has been viewed as one of the dti's 'successful' interventions into a sector of the economy. **Anthony Black** reflects on this experience and attempts to draw some broader implications for other sectors.*

In recent years the South African automotive industry has received much positive publicity as a successful example of industrial policy. Important investments by major multinational carmakers and the achievement of large export orders have underpinned this apparent success. Most recent has been the announcement by Toyota in May that the company would be investing R3.5bn over the next three years partly, to cater for the export of Corolla vehicles to Australia. In April, Ford announced they had invested over R1bn in South Africa's only major engine plant and would expand production from 55 000 units last year to 240 000 units in 2003. These expansions have taken place at a time when the domestic vehicle market has shown little growth and foreign investment inflows have not met expectations. Furthermore, success in global markets is occurring in an industry, which less than ten years ago was highly protected and regarded as very uncompetitive. Too many small assembly plants, all producing too many models in uneconomically low volumes meant that both the assembly and component sectors were seemingly under grave threat from looming tariff reductions.

The policy applying to the automotive industry since 1995 has been the Motor Industry Development Programme (MIDP). Originally scheduled to run until 2002, it has been extended (in a phasing down format) to 2007 and negotiations are currently in progress to extend it to 2012.

## **Automotive policy**

In common with policy in many other developing countries, the South African automotive industry has always been treated somewhat differently to other sectors. Tariffs historically were prohibitively high and as far back as 1960, requirements that domestically assembled vehicles should have minimum levels of local content were introduced.

The first steps to expose the industry to foreign competition occurred in 1989, prior to the beginning of the MIDP, with the introduction of Phase VI of the local content programme. This allowed firms to include exports as part of their local content requirement. In 1995, the MIDP was introduced after lengthy negotiations in the tripartite Motor Industry Task Group. The major objectives of the MIDP are to promote the development of an industry, which is able to compete in local and foreign

markets and through increased production provide sustainable employment and achieve an improved sectoral trade balance. In turn, this requires a phased integration into the global automotive industry and an increase in the volume and scale of production through expanding exports and gradual rationalisation of models produced domestically. The key policy instruments have been a gradual reduction in tariff protection and the encouragement of higher volumes and a greater degree of specialisation by allowing exporting firms to earn rebates in import duties.

## **Production and trade**

Until the early 1990s, prohibitive tariff levels resulted in negligible imports of vehicles into South Africa. Vehicle prices were significantly above international levels. The phasing down of tariffs led to an increase in light vehicle imports from 2% of the market in 1990 to 18.7% in 2000. This increase is roughly in line with the expectations of policymakers but with vehicle exports increasing from 15 700 units in 1995 to 108 000 units in 2001, the number of vehicles being exported is now significantly higher than the volume being imported (Figure 1). A number of factors such as falling

protection and limited domestic market growth possibilities have contributed to export expansion but the import-export complementation arrangements of the MIDP have been crucial.

From 1960, the introduction of a series of local content regulations led to increasing levels of localisation. With the introduction of Phase VI of the local content programme and later the MIDP, the sector has been coming under increasing pressure from imports. However, the reduction in average local content levels has not been great although the very low levels of local content in certain recent, low volume models have caused some concern. Again, this has been offset to a large degree by the rapid increase in component exports.

As a result of growing component and vehicle imports, the overall automotive trade deficit widened dramatically from under R5.1bn in 1992 (a year of weak demand) to R14.1bn in 1996 before declining as a result of falling domestic vehicle production (requiring fewer imported components) and growing exports. In 2000 it had declined to only R9.7bn as imports increased moderately while exports continued to grow rapidly.

### Rationalisation and industry restructuring

The scale of production is one of the central policy issues facing the South African automotive industry. South Africa's eight light vehicle plants produced an average of less than 50 000 vehicles in 2001 and a total of as many as 30 different basic models. Resulting average volumes per model are way below the world norm and significantly lower even than in relatively low volume producers such as Brazil and Australia. While this is an improvement from a few years ago, the cost premium incurred by component

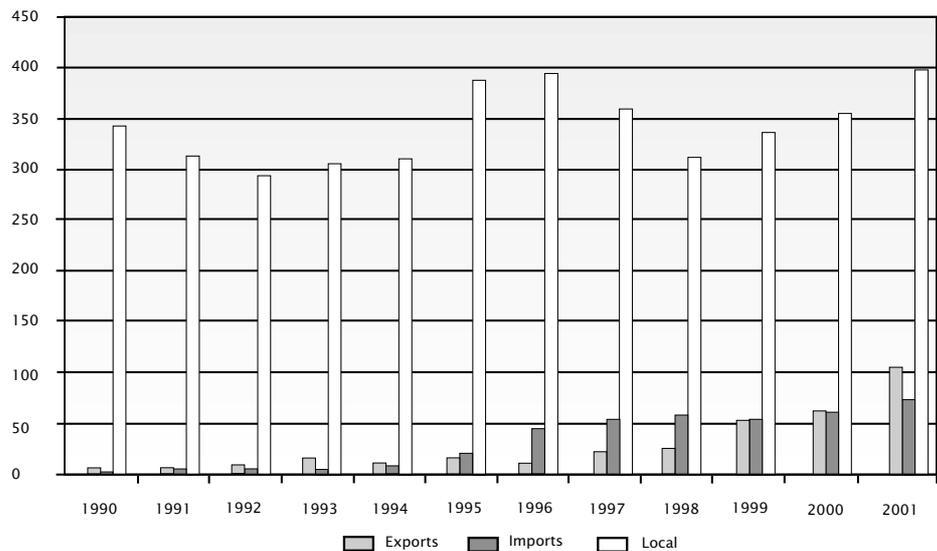


Figure 1: Vehicle production and trade, 1990-2001  
Sources: dti, NAAMSA

	CKD assembly	Transition	Full manufacturing
<b>Target market</b>	Domestic	Domestic and export	Domestic and export
<b>Level of integration with parent company</b>	Low; import of CKD packs	Medium	High
<b>Model line up</b>	Many models	One or two	One or two
<b>Derivatives</b>	Limited to reduce costs	Full range to supply export market	Full range to supply export market
<b>Localisation</b>	Generally low but may be quite high as a result of local content requirement	Moderate based primarily on cost factors	Medium to high
<b>Quality</b>	Below source plant	Equal to source plant	Equal to source plant
<b>Production cost</b>	High	Medium; penalties incurred by high logistics costs	Low
<b>Domestic design</b>	Local adaptations	None	None – may do worldwide R&D in niche areas

Table 1: Stages in the development of vehicle production in South Africa

makers for producing a wide range of products at low volume is considerable.

In this context, the objective of the MIDP has not been simply to increase exports. Policies to assist exports can only make sense if they are to offset cost raising import duties on components or as a temporary expedient to help firms break into export markets. Another reason, which is applicable in the case of the auto industry, is to assist the industry to

restructure. An important objective of the import-export complementation scheme as well as the tariff reductions is to assist vehicle manufacturers and component suppliers to achieve high volumes which would make them more efficient, and able to compete in export markets as well as against imports in the domestic market. This policy, which could be termed 'guided integration' is aimed at encouraging a phased transition from completely knocked

down (CKD) assembly to full manufacturing with the attendant benefits of higher volumes and increasing localisation of components (Table 1).

For instance, the MIDP has made it possible for companies such as BMW and Daimler Chrysler to discontinue local production of low volume models and expand production of remaining models. This has the advantage of enabling them to reduce unit costs and increase local content by encouraging investment by first-tier suppliers. For example, production of the C Class Mercedes has increased from below 10 000 units per year in 1999 to over 35 000 units in 2001. With higher volumes it then becomes economical for domestically based component firms to make the large investments required to produce a greater share of the components in these vehicles. The objective is that a smaller range of vehicles would be produced in South Africa but in higher volumes and with higher local content. This then requires that some imports would be necessary in order to ensure the availability of a wide range of vehicles to local buyers. To some degree, this objective has been met. Firms such as BMW, VW and Daimler Chrysler have achieved high volumes through exporting. Toyota will join this group next year. However, these volumes remain insufficient to justify high levels of local content but are nevertheless a step in the right direction.

In the bid to offset import duties on vehicles and components, all vehicle makers have also facilitated growing volumes of component exports. This has resulted in the growth of a large, new export sector in products such as catalytic converters, automotive leather and wheels. While South Africa has become an efficient global player in these products, this development

contributes little towards reducing domestic industry input costs as the bulk of these products are exported.

#### **Investment, productivity and employment**

The entry of imported vehicles in significant volumes has led to much greater price competition and lower margins, which have added to the pressures of stagnating sales volumes. While profits are under pressure in an increasingly competitive market, there is clearly the risk of investment being reduced and gradual attrition taking place leading eventually to plant closure. However, the investment behaviour of the assemblers is influenced by a number of industry specific factors. The importance of economies of scale means that the increased competitive temperature places some pressure on firms to increase production as a way of reducing unit costs. This in turn may require that the parent company creates export opportunities for the South African subsidiary and invests accordingly.

Interestingly, there have been moderate increases in investment in both assembly and the component sector. Fixed investment in the assembly sector increased from R492m in 1994 to R1 562m in 2000. Firms such as BMW, Daimler Chrysler and Toyota have announced major expansion plans. Since 1994, the automotive sector has been the fourth largest recipient (after telecommunications, energy and food and beverages) of foreign investment which is particularly significant given adverse domestic market conditions and the fact that the industry faces declining protection.

Automotive industry productivity is low in South Africa but is improving rapidly. Data collected by MIs

International Motor Vehicle Programme, based on assembly plant surveys conducted in 1994 and 1996, showed that the average South African assembly plant compared poorly with assembly plants in other countries. The reasons for this can be ascribed to relatively low levels of automation and the complexity of most assembly plants, which continue to produce a range of models in relatively low volumes. However, the rate of improvement has been rapid and the component sector has also made rapid progress in productivity.

The automotive industry is exceptionally cyclical and this shows up in employment levels. Disaggregating the effect of trade liberalisation from the impact of market conditions is complicated by the impact on market growth resulting from the reduced price of vehicles in real terms, which in turn is partly the result of liberalisation. The export sector has now also become a major source of employment. Total employment in the vehicle manufacturing industry increased from 73 800 in 1994 to 82 100 in the boom year of 1996 followed by a decline to 71 000 in 1999. Partly as a result of export expansion employment has since then shown moderate increases. However, the prospects for massive productivity gains make employment gains in the assembly sector unlikely in the absence of rapidly expanding output and the potential for employment growth will be primarily in the component sector.

#### **Implications for trade and industrial policy**

The experience of the automotive industry under the MIDP raises a number of broader questions. These relate to the impact of globalisation and the role for trade and industry policy in promoting and regulating this process.

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For a relatively small developing economy moving away from the dead-end of protectionism, there remain important questions about the rate of the liberalisation. And more specifically how policy can help economic sectors integrate into the global economy on a basis that maximises the possible gains of access to world markets, while minimising the potential downside in the form of the destruction of local capacity and jobs. This means linking the domestic sector into global value chains on a basis that strengthens local capacity and creates new opportunities rather than placing it under excessive competitive pressure. In the global automotive industry, the value chain is controlled by a handful of large multinational vehicle producers.

The largest firms such as Ford and General Motors each assemble vehicles in over 30 countries around the world. These large carmakers also coordinate huge global networks of suppliers and play an important role in the location of investments undertaken by these suppliers. National policy clearly must attempt to maximise the benefits for the local industry of these decisions.

In the case of the South African automotive industry, the impact of globalisation has been felt in two main areas. Firstly, the level of foreign investment and ownership has increased substantially in both the assembly and component sectors. Locally owned assembly firms operating under licence from foreign carmakers have seen it as increasingly necessary to have a multinational partner in order to gain access to export markets. The same applies to component makers who have frequently sought foreign partners in

order to upgrade technology to the required standard. Therefore, while foreign ownership has frequently led to the demise of local R&D and the ending of local adaptations in product technology, for many locally owned firms with minimal indigenous product technology and a traditional reliance on foreign technology, it remains the most viable option.

Secondly, the industry has become much more open to international competition although it is far from being in a free trade situation. With its limited domestic market, unfavourable geographical location (in terms of distance to major markets) and history of heavy protection, the prognosis for the South African industry did not appear good in the face of the pressures of trade liberalisation. To date the costs of liberalisation have been quite low. The share of imports has grown but the small fall in employment that has occurred is mainly attributable to weak domestic sales. However, investment has increased and there has been a very rapid increase in exports. Vehicle prices have also declined significantly in real terms.

Coupling tariff reductions with strong export support rather than simply liberalising imports has provided an important catalyst for international automotive groups to strengthen their ties with their South African licensors and subsidiaries and draw them into their global networks. This has provided crucial access to high volume markets for both vehicles and components and in turn encouraged the investments, which have gone some way to making parts of the South African automotive industry competitive.

In spite of the successes, key problems remain. Considerable pressure has been placed on component suppliers and parts of the ‘traditional’ component sector have not been able to adjust and have contracted. There are also question marks over the sustainability of export expansion. The rationalisation process has been slow and may have benefited from more interventionist policies. Nevertheless, a number of vehicle manufacturers have made considerable progress towards rationalising their operations and it is likely that more will follow. Higher model volumes in the assembly industry are more likely to encourage investment in the component sector resulting in a lower cost production structure and more sustainable basis for industry development. A further problem has been slow growth in the domestic market. Multinational firms do not, on the whole, see South Africa as an export platform and future investment and expansion will depend to a large degree on perceptions regarding the growth of the domestic vehicle market over the medium and longer term.

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**Endnote**

1. More detail can be obtained in Black A (2001) ‘Globalisation and restructuring in the South African automotive industry’, *Journal of International Development* 13, pp 779-796.

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