New challenges, old constraints

the automobile sector

*As tariff protection comes down, the auto sector must restructure to survive in a fiercely competitive global market. **Malcolm Ray** finds that automation, cost-cutting and job losses are dominant features of the new order.*

When auto workers emerged on a landmark national strike led by NUMSA in 1991, there was reasonable cause for celebration. Workers successfully halted the biting effects of depressed trading conditions on their jobs, forcing employers to agree to a moratorium on retrenchments. In return, the union promised to co-operate in efforts to improve productivity. The agreement was driven by the recognition that the survival of the industry hinges on increasing its competitiveness in the global market.

The victory was short-lived. Since the heady days of the strike, conditions have worsened considerably. The principle gains won by NUMSA are being clawed back by employers as the complexities of implementing productivity improvements at plant level sharpen. Pressure to rapidly restructure and become competitive is resulting in a relentless rationalisation process. Labour is facing the cost. Flexibility, cost-cutting measures and job losses are once again looming large. Workplace democratisation is under threat.

MIDP

In a bold attempt to resolve the problem the government released the Motor Industry Development Plan (MIDP) in 1995. The new policy seeks to restructure the industry in line with the following objectives:

- become more productive and internationally competitive;
- reduce tariffs;
- ensure growth;
- develop human resources and create employment opportunities;
- minimize the use of foreign exchange.

The plan is based on the Australian model of 'export complementation'; it reduces import tariffs by 3,5% a year until 2002, and encourages the export of locally sourced components to secure duty-free imports. It also encourages the creation of a smaller, more efficient industry by 'rationalising' both the components and assembly sectors and bringing down the number of auto models produced locally.

The plan is clearly an inversion of the old policy: instead of promoting inward industrialisation, it looks to a complete reorientation of the components sector towards international markets.

Beyond protection

The question is whether the new policy will permit the industry, still heavily reliant on preferential tariffs, to compete internationally in any meaningful way. Contrary to assumptions that the MIDP will cure all ills, greater exposure to world markets has had adverse and unintended consequences.

Instead of reducing the number of models produced locally, a proliferation of cheap, imported cars is hampering the heavily over-traded industry. Last year most manufacturers reported substantially reduced turnovers and falling profit margins because of unsustainable price cutting. An estimated 34 models – the highest in the world – entered the country. Forecasts for this year are worse. *Finance Week* (28/1/98) notes that plunging import duties – which could see tariffs drop by 54% – and the untimely devaluation of the South-East Asian currency could see foreign manufacturers such as Hyundai and Daewoo reducing prices by as much as 10%.

Most low-volume manufacturers are repositioning themselves to import rather than manufacture locally at higher costs. Consistent with this trend, exports of locally produced components are declining. International assembly plants are turning to the emerging markets of South America, Eastern Europe and the Pacific rim for cheaper supplies. Figures released by the National Association of Automobile Manufacturers (NAAMSA) late last year show a potential increase of between 8% and 10% of vehicle sales accruing to foreign companies in the first quarter of this year.

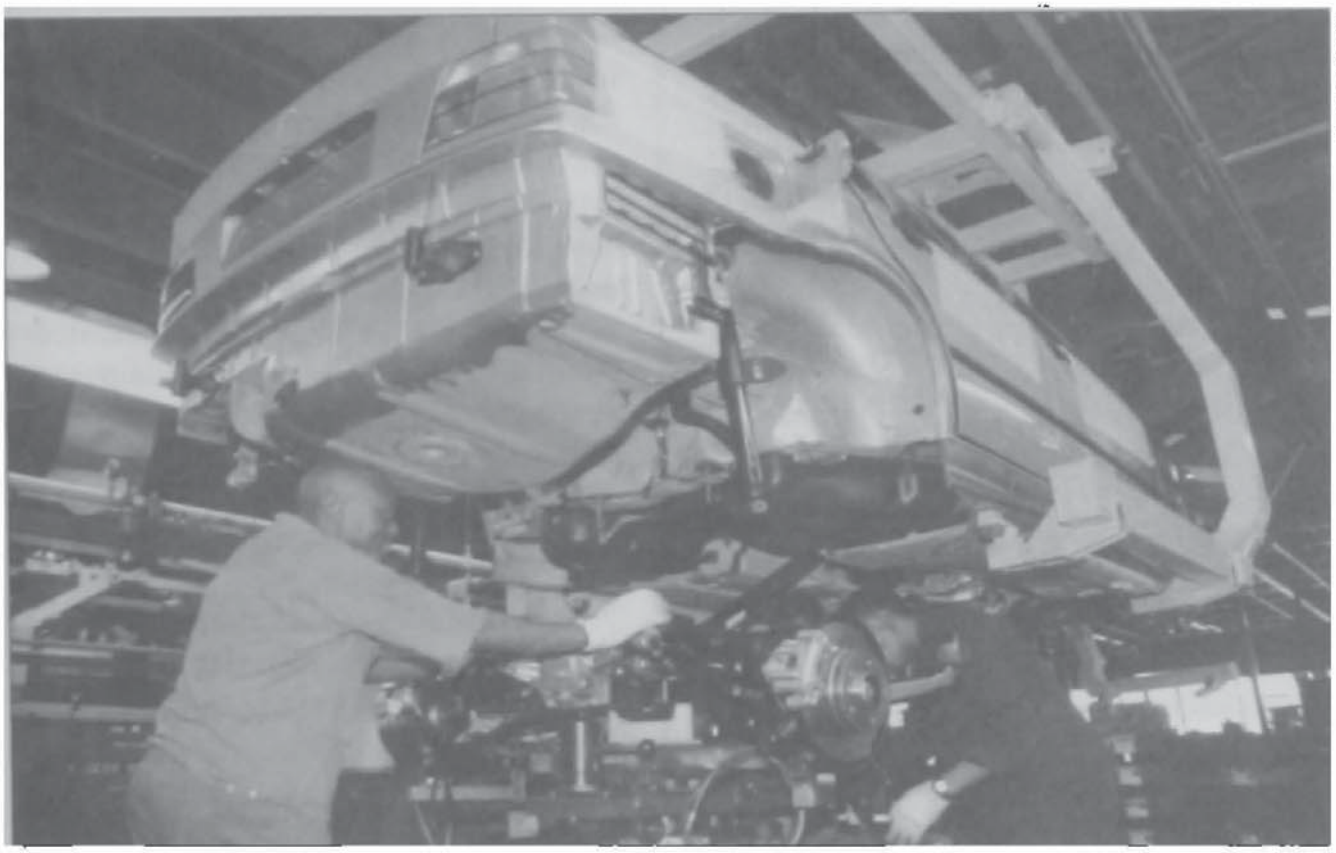
Constraints

The industry is on the horns of a dilemma: it is forced to enter the global economy saddled with structural constraints that competitors – principally in the emerging markets – do not face.

- South African labour and raw materials are not particularly cheap in global terms and technology is still a long way behind industrialised countries. The apartheid government's policy of import substitution (inward industrialisation) and the diverse demands of the limited domestic market restricted manufacturers to small-scale production runs. This tempered the development of 'mass production' methods and consequently prevented the introduction of cutting-edge technology, which would have been an essential step towards making the industry a player in the export market.
- The growth of the components sector, arguably the backbone of the industry, remains stunted by the industry's marginal status as a 'satellite assembly warehouse' for highly automated, multi-national component suppliers in industrialised countries. Many assembly firms operate under 'franchise agreements', relying on imported components from parent companies abroad. Local component firms are also constrained by the product and market prescriptions (licenses) of parent companies.
- The comparatively high cost of locally manufactured cars, high interest rates and the rapidly shrinking disposable income of (white) consumers has fragmented the industry into a number of small-scale component and assembly companies competing with each other. The spin-off effect is an over-supplied domestic market which does not allow for adequate economies of scale.

Rationalisation

Taken together with South Africa's isolation from global developments, these



Pic: Abdul Sharif

A relentless rationalisation process underway.

factors substantially inhibit meaningful restructuring efforts at plant level. While there is reasonably common ground between labour and employers on the need to improve productivity, a restructuring strategy which is kinder on workers is deeply contested between the parties.

For their part, employers are worried about their capacity to keep pace. Toyota chairperson, Bert Wessels, sums up the problem, "To meet the growing competition caused by market changes and reduced protection for local manufacturers, companies must supply a relatively sophisticated international market with value-added components. It is a tall order to expect employers, still a long way behind the global market, to compete in the export market."

Much-needed technological and organisational innovations are not easily adaptable to the inherited skills structure of the workforce. Overall unit costs for fully built up kits are high by international standards.

David Duncan, the author of a 1997 study on the auto sector, sheds more light on the issue: "Unlike typical post-Fordist (flexible) production methods, the industry has inherited a production process characterised by... racial patterns of production and consumption. South African plants rely... on a top-heavy managerial layer deploying much larger numbers of unskilled and semi-skilled black workers than are required to produce the same number of cars abroad."

Not surprisingly, present thinking among employers on restructuring is shaped by cost considerations. Their preferred strategy is to rationalise work organisation to fit the requirements of technological change. The tendency is to trade job security for efficiency, a strategy clearly incompatible with employment security.

SAMCOR

The main elements of this strategy are thrown into sharp focus at plant level. In his study of SAMCOR, a motor assembly plant in Pretoria, Franco Barchiesi shows how major investment in capital intensive equipment placed the company at the forefront of cost-cutting innovations.

In 1991 SAMCOR embarked on an ambitious modernisation programme aimed at expanding its use of robotics five or six fold. Highly flexible machinery enables the company to adapt its operations to local demand for a differentiated range of models with relatively little change and short set-up times. Barchiesi describes the degree of automation: "The introduction of robots controlled by programmable microprocessors used in spot-welding and in its body-framing line speeds up output per car comparable to international standards. The body shops alone employ 47 robots. Fifteen kilometres of conveyors transfer (vehicle) units through the plant's eight body shops, two paint shops and six assembly lines."

In the first stage of the production process, workers are employed to 'spot weld' the undercarriage and engine compartments. Then, robots re-emphasise the spots, welding the entire body.

The paint shop and final assembly stage are fully automated. Only painting of the interior using 'cup guns', final waxing, sealing of products, and quality checks are done manually. Four workers complete the final assembly stage.

Flexibility

SAMCOR's approach to restructuring does not involve any improvement in work organisation or management structure.

Barchiesi observes that the company's attention to technological detail is matched by a highly flexible organisation of work. The insertion of flexible technology into the production process has merely segmented the labour [illegible] into increasingly routinised operations: "Manual operations are standardised, [illegible] based, homogenous and directed at [illegible] units. Workers are divided into semi-autonomous teams located in segmented group activities... This is not [illegible] by a reduction of the grading system or flattening of the management hierarchy; supervisors stand by their position, and very little interaction is observable with workers in production."

Workers are "adaptable to tooling operations for diverse models." They are removed from the overall technological design of the production process. This capital intensive operation, sometimes labelled 'lean production' or 'Taylorism', allows for very little worker responsibility and self-initiative. Decisions are taken entirely by management. The difference between the traditional labour intensive method of production and the SAMCOR scenario is that labour time is reduced and output per unit of production is increased.

If anything, Barchiesi concludes, the SAMCOR case demonstrates the link between automation, flexible production and product diversification. It is the sector's way of adapting to the low skills base and peculiar demand patterns of the domestic market.

Cost cutting

SAMCOR's cost-effective, high-tech and flexible strategy is a direct response to the peculiar productivity challenge facing manufacturers. It aims at increasing productivity in the form of diversified, small volume output for a competitive internal market at a lower cost.

Production output is not increased; rather, the unit cost of production is decreased through an increase in

productivity. In the short term, this strategy can be expected to exert considerable strain on employers to cover overhead costs, particularly the cost of technological innovations.

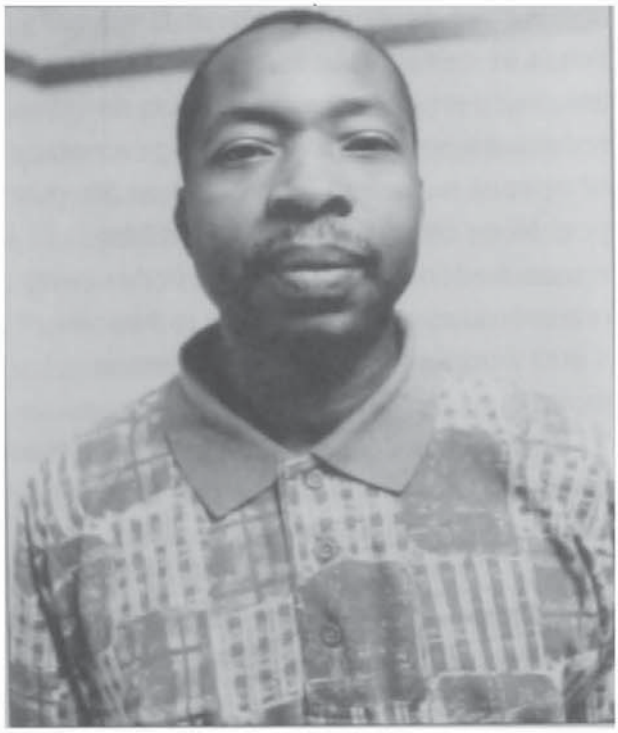
For management, the way out of this problem is to increase the rate of exploitation by rationalising the labour process. This involves a smaller number of portable teams performing 'ad-hoc' tasks to meet production targets. A core of experts and technicians employed in permanent functions oversee this process. Writes Barchiesi, "Production teams at SAMCOR are part of a top-down regimentation structure. Rather than 'horizontal' representatives of a defined production area, teams are a form of rationalisation of the factory hierarchy. They emphasise cost-cutting and the stringent control of workers."

A discernible rationalisation trend can be seen in other companies. Plans are already underway for Toyota's manufacturing plants in Durban to ditch the assembly of completely knocked down components. The plants will perform final assembly operations on semi-built imports using 'high-tech flexibility'. In this way, a considerable chunk of the assembly line will be done away with.

Component suppliers

Similar spin-off effects can be expected to afflict the component supplier pipeline. The increasing reliance of assembly plants on semi-built imports instead of locally sourced knocked-down components is bound to decimate this sector. In some cases, assemblers with in-house component plants are outsourcing their operations, modelled on the 'Just-in-Time' system to speed up the production process.

The cumulative effect of this restructuring strategy leaves deeper structural problems besetting the components sector intact. It does not break out of the market constraints facing components suppliers and therefore fails to achieve economies of scale.



Tony Kgobe.

Component firms are still locked into the production of low-value heavy parts – a legacy of import substitution – leaving the supply of technologically advanced components to foreign companies.

Union response

NUMSA is implacably opposed to the employers' approach to restructuring. Tony Kgobe, the union's auto sector co-ordinator, points to a number of concerns.

Employers are not looking at the long-term sustainability of the sector. Their restructuring strategies are 'short-term measures' to survive the impact of tariff reductions. Plant-level restructuring is a 'crisis response' to short-term pre-occupations, as in the case of outsourcing, downsizing and employment reduction.

In terms of this perspective, the estimated 70% of workers who are functionally illiterate and innumerate are an expensive cost. Since 1995, employment

levels have declined by about 10% as a result of cost-cutting measures. The figures are rising steadily. Toyota expects to reduce wages and salaries as a percentage of operational costs by more than 5% this year. More than 500 workers will be retrenched in the process. Mecedez-Benz recently announced plans to reduce its 3 800 workforce by 8% in the coming months.

Kgobe concedes that the low skills base poses serious problems for productivity-enhancing methods of production: "A worker's ability to read statistical information or articulate a programmed task is severely hampered." He is confident, however, that costs can be saved and productivity improved by ridding the industry of bureaucratic waste, flattening the management structure, skilling workers and involving workers in decision-making and long-term planning.

Competition unfortunately means that training becomes training for flexibility. Most companies are unwilling to spend large sums of money on training workers to achieve higher production volumes while supply continues to exceed demand.

Dead end?

Given the obvious limitations of the MIDP, is there a realistic way out of the productivity problem? Or has the industry reached the end of the road? Kgobe believes that there is hope for the components sector. He blames the "fundamentally flawed assumptions underlying the MIDP" for the seemingly hopeless state of affairs: "Despite its good intentions, the MIDP has contributed to the present crisis. Instead of focussing on medium-term regulatory measures based on a clear strategy to improve the productivity of labour, it enforces the weakened industry's exposure to fiercely competitive global market forces at the expense of domestic growth and employment security."

He acknowledges that the industry cannot ignore global realities. Reaping the fruits of economies of scale is a matter of forging closer links between component suppliers and multi-national companies over an extended period. "The bottom-line," he says, "is that the comparative advantage of the components sector will be limited and the industry will remain a marginal producer unless exports ..."

An industry policy which is more responsive to changing patterns of international competition and ensures employment security would fit this objective. The reality, however, is that employers are already under pressure to become competitive in a relatively short period of time. While the auto sector might be able to maintain assembly operations, the development of an export-oriented components sector will be difficult in the near future.

Options

The only hope seems to lie in the adoption of a less ambitious strategy, geared towards domestic growth. The challenge is to combine comprehensive supply-side measures (for example, training) with export incentives to help develop internationally competitive companies while protecting domestic markets from foreign competition. Duncan recommends the following measures:

- ***Training***

  The first step is to ensure a comprehensive training plan for workers in the components and assembly sectors. Current provisions are woefully inadequate. Supply-side measures put in place by the DTI have not been combined with the sector-specific training needs required to facilitate the restructuring of the

industry. Training needs can only be met by a national effort which has the full backing of the government. A pooling of resources may lend coherence to the present patchy plant-based methods of training. It would allow individual companies to share their strengths without undermining their competitiveness.

- ***Regional trade bloc***
  A second step would be to work towards regional trade and the possible formation of a bloc of regional partners. The sector could create a centre for researching and testing components for use in South African and African conditions. This would greatly assist the industry's hopes for trade in the wider African market rather than attempting to compete with the enormously capital intensive countries of Europe, Japan and north America.
- ***Transport scheme***
  A third step would be to establish a scheme to provide transport to the mass market in South Africa. Government-supported supply-side measures to buy up the tooling for an obsolete model overseas and establish a plant in a high unemployment area in South Africa would not distort the market. This would create jobs and a manufacturing capacity in areas where a strategic need is identified. It would also address chronic transport problems by providing more affordable models to mass consumers.
- ***Time-frame***
  Finally, the time-frame set out in the MIDP must be extended to permit a more gradual reduction of tariffs. Moving towards a sustainable global agenda is possible provided the industry is given adequate time to build up its manufacturing capacity.

The success of this approach will stand or fall on the attitudes of the parties. The critical issue is for labour, employers and government to agree on a long-term vision for the industry. A greater willingness to co-operate is necessary. Unless this is accomplished, the present trend toward job loss will continue and the threatened closure of uncompetitive companies will be hastened. The few surviving manufacturers will remain peripheral adjuncts of major multi-national players in the global marketplace. ★

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