From Import Substitution to Export Promotion: Driving the South African Motor Industry

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1. Introduction and Overview

Exports and foreign investment in the South African motor industry have been growing very rapidly. The Motor Industry Development Program (MIDP) has been a crucial factor behind this performance. Although recent success has attracted considerable attention, questions are also being raised about the future of the industry, about its dependence on government assistance, and about whether and how the MIDP should be extended after 2007. The questions are important not just for the motor industry, but also for South Africa's industrial development.

This paper analyzes the complex incentives provided by the MIDP, and discusses some of their likely economic implications. It also examines systemic issues arising from the use of such incentive mechanisms.

The analysis supports some of the skeptical views that have been expressed about the success of the motor industry.

While the MIDP incentives are based on selective import duty reductions, they provide substantial protection to sales in the domestic market and give large subsidies to investment and exports. The value of these subsidies rests on the rents created by continued import protection for vehicles and components in the domestic market. They result in large transfers from South African vehicle buyers, and encourage economic inefficiency through high cost production of vehicles and components in South Africa. The direct cost per job created in the motor industry appears to be very high, and the indirect costs to employment in other sectors might also be large.

The paper begins with a review of the motor industry's recent successes and of the long history of government support for this sector. Many other industries appear to be having similar export success without the need for government assistance. Following the economic analysis of the MIDP, international experience is also examined for guidance on alternative policy strategies for the motor industry.

2. The Success of the Motor Industry

The auto sector has been identified as a success story for South African industry and industrial policy. This success is based primarily on the recent growth of exports, of both assembled vehicles and components, and on the substantial foreign investments that have been undertaken or announced recently. The sector's success has attracted considerable public attention. A recent session on the economics of the auto sector at the TIPS Annual Forum provoked some lively discussions among academic researchers, policy makers and industry representatives, and provided an illuminating overview of the industry.

The motor industry is far from unique in its recent export accomplishments. Following the economic isolation of the apartheid era, and in large part as a result of deregulation and trade liberalization across the entire economy over the past decade, many previous import substitution industries are becoming competitive in world markets. Successful exporters can be found in a wide range of sectors – from valves to medical equipment, and from garments to electric appliances and electronics. The net impact is very promising for South Africa.

Nevertheless the auto sector has attracted special attention, and its development has taken on a symbolic value far exceeding its contributions to output, exports or employment. This is not peculiar

to South Africa. A successful automotive industry is often seen as an emblem of economic success and, especially in developing countries, as a sign of mastery of modern technologies.

One thing that distinguishes the motor industry from other industrial sectors in South Africa is the importance of government policies in steering its development. The policies that have driven the auto sector are central to understanding the sector's history and its recent accomplishments.

After decades of high cost import substitution, the government is now promoting exports. This major change of direction was long overdue. But has it gone too far?

Subsidies and protection, whether explicit or hidden, and whether they assist producers in domestic or in foreign markets, can have serious economic costs. Their unintended effects are not always obvious, but more often than not they impede rather than promote economic development.

In their reviews of industrial policies in the South African motor industry, Black and Mitchell¹ caution that that one must be very careful in labeling these policies an economic success.² Evidence presented by the auto sector commentators at the TIPS Forum gives additional support to this skeptical view. A number of recent press reports raise similar concerns.

The Black and Mitchell framework would be a good starting point in estimating the benefits and costs of government policies in this sector.³ Some of the elements of the required quantification were provided by the industry commentators. However, much work remains to be done.⁴

3. History of Government Support

While the focus of current discussions has been on the relatively recent MIDP, the history of government support of the auto industry is long and revealing.

Assistance to the industry began in the 1920s. The initial phase, lasting until 1961, was one of classic import substitution, favoring simple assembly for the domestic market. Very high protective tariffs on imported vehicles fostered development of an industry of small plants producing a relatively wide variety of models in small volumes, at high cost and with low domestic content.

Between 1961 and 1995 Black and Mitchell (2002) identify five distinct new phases of government support for the industry. They featured continued domestic market protection and a variety of incentives and requirements for increased local content. Local content requirements were supported by punitive tariffs on imported components.

The government attempted to keep pace with the industry by correcting for unanticipated responses to each set of new incentives. It was not recognized, for instance, that defining the local content requirement in terms of the weight of components would have perverse effects on the mass of South African vehicles, or that decreases in *nominal* protection might result in increases in *effective* protection, perpetuating inefficiencies due to excessive product variety and short production runs. The government responded to the latter problem with increases in local content requirements which were intended to *raise* production costs and thus to force some rationalization of production. In the

¹ See Black (2002) and Black and Mitchell (2002).

 $^{^2}$ It should be noted that the papers confine themselves to the new vehicle and OEM component industries. They have not examined the retail, service or after market component sectors, which in many countries account for very large amounts of economic activity and employment – often far more than new vehicle and OEM manufacturing. This is certainly true in South Africa. See Pursell (2001) for the case of India.

³ Trevor Bell's comments explained how their model would be well suited to such an exercise.

⁴ Two papers by Wendy Takacs, one on the Philippines (Takacs 1994a) and the other on Uruguay (Takacs 1994b), might serve as useful models for work of this type.

late 1970s this had the desired effect of rationalizing the range of product lines, but at the expense of higher production costs and hence of increased consumer prices.

Phase VI, introduced in 1989, signaled a major policy shift through promotion of automotive exports. The two principal changes were a provision permitting exports to be counted towards the local content requirement, and a substantial reduction in the local content requirements.

The MIDP began in 1995. Its main features were

- abolition of all local content regulations,
- gradual reduction of import duties on built up vehicles and components,
- a duty-free allowance on components equal to 27 percent of the value of vehicles produced for sale in the domestic (SACU) market, and
- an extension of the existing incentives for exports.

Between 1995 and 2002 the import duty on vehicles was scheduled to fall from 65 to 40 percent, and that on components from 49 to 30 percent.

The export incentive provides import duty reduction privileges to exporters of vehicles and Original Equipment Manufacture (OEM) components. Exporters can earn tradable import credits (import rebate credit certificates, or IRCCs) that grant a reduction in the dutiable value of components or vehicles in proportion to the value of the local content of goods exported. For every Rand of CBU (Completely Built Up vehicle) exported (measured net of the value of imported components used in their production), the firm can earn a one Rand reduction in the dutiable value of imported CBUs or components – i.e. they earn the right to import one Rand of CBUs or components duty-free. And for every Rand of components exported (measured once again net of the value of imported inputs used), either R0.65 of CBU or one Rand of components may be imported duty-free.

Under this facility, automobile exports with local content value of R100 million, for instance, generate the (tradable) right to import the same value of vehicles or components free of duty (or to reduce the dutiable value of imports by this amount). With a 40 percent duty on imported vehicles, this would provide a duty reduction of R40 million on imported vehicles. This is 40 percent of the value of the domestic content of exports that generated the duty credit. If the credits are used for imported components, the duty reductions amount to 30 percent (the current import duty rate on components) of the value of the domestic content of the exports generating the credit.

Following a mid-term review in 2000 it was agreed to continue the MIDP through 2007, with several adjustments, all of which reduce the value of this export incentive. The phase down of import duties will continue, with the rate on vehicles falling to 30 percent by 2007 and that on OEM components falling to 25 percent. The "qualifying value of eligible export performance" used to determine the value of import duty credits earned in respect of exports is also scheduled to fall gradually from 100 percent to 70 percent of the value of exports (net of imported components) by 2007. And the value of credits for CBU imports in respect of components exports will fall gradually from 65 to 60 percent in 2007.⁵

Offsetting these changes which reduce the value of incentives is a new feature, a "Productive Asset Allowance" (PAA) that grants import duty credits equal to 20 percent of the value of qualifying new capital investments in the sector, with the duty relief spread over a period of 5 years from the date of the investment – i.e. providing a duty reduction of 4 percent of the value of qualifying investments in the year of the investment and each of the following four years. In the case of a qualifying investment

⁵ This was reduced from 70 to 65 percent in 2002.

of R100 million, for instance, the investor would be granted import duty credits totaling R20 million, of which R4 million could be used in the year of the investment and each of the next four years. These duty reductions can be applied against duties otherwise payable on imports of OEM components or CBU vehicles.

In order to qualify for the PAA an investment must result in an increase in the scale of production of a particular product line and must be aimed at increasing production for export markets. In other words, like the earlier export incentive program, this incentive is also conditional on export performance.

Very recently the government indicated its intention to extend the MIDP's end date from 2007 to 2012. Details have not yet been revealed.

4. Effects of the MIDP

The MIDP has resulted in a remarkable transformation of imports, exports and production. Ninetyfive percent of all automotive imports (vehicles and components) now enter South Africa duty-free. In addition, a thriving export business has developed, in both vehicles and components. In 2000, motor industry exports were estimated to have reached R20 billion of which R7.4 billion was vehicles and R12.6 billion was components (NAACAM). Over 50 percent of components exports are accounted for by just two products, catalytic converters and leather seat covers.

While total production of automobiles grew from 242,000 vehicles in 1995 to 320,000 in 2001, the number exported grew from 9,000 to 115,000 over the same period. The share of exports in total automobile production grew from less than 4 percent to 36 percent in just six years. At the same time, imports have accounted for a rapidly growing share of domestic sales – rising from 7 percent in 1995 to 27 percent in 2001 (estimated from data on NAAMSA website).

A number of multinational motor industry firms have recently undertaken or announced major new investments in vehicle and components production in South Africa. Much of the new investment is aimed at export markets.

It is the new investments and the high rate of export growth that have drawn the most public attention. An accounting of the benefits and costs of this success story cannot be made, however, without considering the costs of MIDP facilities and of the costs and benefits of all other incentives and regulations governing the development of this industry. In addition there has been increasing public concern about the apparent lack of job creation in the industry and the relatively small degree of integration of the components and vehicle assembly sectors, despite the high levels of investment and export growth, in both vehicles and components.

5. Economics of the MIDP

The MIDP has led to a major reorientation of the domestic motor industry. The IRCC facility provides a substantial export incentive whose benefits are realized through duty-free imports of vehicles and OEM components. The productive asset allowance program provides an incentive for export-oriented investments and is also realized through duty reductions on imported vehicles and components. And the duty free allowance provides import duty reduction facilities in respect of production for the domestic market. The result, unsurprisingly, has been an increase in exports of both vehicles and components, and a parallel increase in imports of the same products.

This is a very complex system of incentives. Indeed the system is criticized for its high compliance costs, the great discretion it grants to program administrators, and the difficulties it poses for firms in determining the tax implications of alternative business decisions. The paperwork involved in tracking and documenting the import content of vehicle and components exports is extremely

burdensome. And multinational firms armed with sophisticated management systems and specialist auditing consultants claim to be unable to understand or contest administrative decisions on their accruals and uses of MIDP import duty reduction privileges.

The MIDP was designed and is continually monitored in close collaboration with industry representatives. This inevitably politicizes both commercial and policy decisions. The design of such complex incentives through negotiation between officials and major industry players also tends to breed systems that favor insiders and that reduce rather than increase competition.⁶

The complexity of the MIDP makes it difficult to determine its true economic impacts. For instance, much of the MIDP is based on reductions on import duties and on a variety of special duty reduction facilities. This might be taken to mean that the MIDP has reduced protection and moved the industry closer to a "level playing field" *vis à vis* international competition. While there is some truth to this view, the complete picture is far more complex.

For production aimed at the domestic market, increased effective protection due to duty reductions and the abolition of local content requirements on components, together with additional import privileges under the duty free allowance program most likely outweigh reductions in effective protection due to decreased import duties on CBU vehicles.⁷ In other words, the net effect of duty reductions and other import facilities offered by MIDP has probably been to *increase* effective protection in the domestic market.

Prior to MIDP, South African vehicle producers faced negative effective protection on exports. Import duties on CBUs provide no assistance in export markets – exporters have to sell at world prices in order to compete. However, local content requirements and duties on imported components imposed a major cost penalty relative to international producers able to source components at world cost and price. While the import duties could in principle be exempted or rebated through duty drawback arrangements, they could not avoid the cost-raising effects of local content requirements. With the resulting negative effective protection, it is not surprising that South African producers did not even contemplate competing in export markets.

The MIDP has changed this in a major way.

5.1 Removal of Anti-Export Bias

First, it eliminates all local content requirements, and provides a mechanism for vehicle exporters to import components free of import duty. If this permits them to obtain all necessary imported components at free trade prices, the negative protection on exports is eliminated. They face zero effective protection on exports.

The usual mechanism for governments to ensure this level playing field for exporters is through duty drawback and exemption programs, or equivalently granting EPZ (export processing zone) status for exporters. These mechanisms are widely used internationally and are recognized under the WTO as a legitimate means to ensure policy neutrality for exporters.

The MIDP provides duty-free import privileges on components in a much more complex manner. The IRCC scheme relates duty valuation reductions on imported components to the *domestic* content of exports, exactly the opposite of a duty drawback mechanism. And the productive asset allowance ties duty reduction privileges on components to the value of qualifying investments in expanded export capacity, once again very different from a duty drawback mechanism.

⁶ The productive asset allowance facility is a good example of a high-valued investment incentive designed to assist expansion by existing producers.

⁷ Import restrictions on used vehicles eliminate another source of competition in the domestic market and so also provides substantial protection to domestic producers of new vehicles.

Regardless of the way in which it is done, however, it would appear that MIDP has succeeded in giving vehicle exporters duty-free access to imported components used in export production, and eliminating the anti-export bias due to previous local content regulations and continuing import duties on components.⁸

Components producers exporting OEM components for use in motor vehicle manufacturing plants can also register for MIDP and benefit from IRCC and PAA import privileges. Since components makers generally rely much less than vehicle producers on imported inputs, the amount of duty free imports required to remove anti-export bias is less than for vehicle exporters. As in the case of vehicle exporters, they could choose to apply for 470.03 import privileges rather than MIDP. Their preference for MIDP must indicate that the MIDP privileges are more valuable.

By eliminating anti-export bias, the MIDP has succeeded in removing a serious and potentially costly policy distortion affecting development of the motor industry.

5.2 Additional Export Subsidies

The MIDP export incentives, however, go considerably beyond removal of the anti-export bias of the previous regime. The IRCC and productive asset allowance schemes also permit duty-free import of CBU vehicles; and they do not restrict the use of imported components to production of goods for export. Assuming that these privileges are, in effect, in addition to any import privileges that are necessary to remove anti-export bias, they constitute a subsidy to vehicle and components exports.⁹

5.2.1 IRCCs – Vehicle Exports

The IRCC scheme gives an exporter of vehicles with local content valued at R100 million the right to import CBU vehicles or OEM components of the same value duty-free. In the case of vehicles this is a cost saving on imports (in the form of import duties not paid) of R40 million and in the case of OEM components the cost saving is R30 million.

The benefits of these savings to the exporter/importer can be seen as follows.

If they import CBU vehicles with an international value of R100 million, they will be competing in the local market with other importers who have had to pay import duty and therefore will have to charge a duty-inclusive price (plus all other markups and costs, of course) to recover their costs. The importer with the duty-free privilege will be able to charge the same price and still be able to compete. Therefore, the duty saving of R40 million is a surplus arising as a result of the qualifying export activity. The extent to which this surplus accrues as additional profit or covers excess costs of producing for export is not, of course, clear. But as long as the subsidy is sufficient to cover any excess costs of producing in South Africa, they will be happy to continue exporting.

Expressed as a percentage of the qualifying domestic content of exports, this amounts to a subsidy of 40 percent of the exports. Rather than facing negative effective protection as they did prior to MIDP, this measure alone gives vehicle exporters positive effective protection at a rate of 40 percent, if IRCCs are used to import CBU vehicles.¹⁰

⁸ In fact vehicle exporters have the option to register under drawback/exemption programs (under chapter 470.03) rather than MIDP. The fact they choose MIDP suggests that MIDP privileges are of greater value than these EPZ-type arrangements. Components exporters can apply to register under MIDP only if they export OEM components for sale to vehicle assembly operations. The rationale for this restriction is not clear.

⁹ As mentioned earlier, the fact that all producers have chosen to register under MIDP rather than 470.03 suggests that the value of MIDP is greater than that of the 470.03 privileges that, at best, simply remove antiexport bias arising from import duties on components.

¹⁰ This protection will gradually diminish as the import duty on vehicles and the "qualifying value of eligible export performance" are phased down. At the end of the current phase of MIDP, when the import duty on

Who pays this subsidy? Superficially, the cost of the subsidy is borne by the government budget in the form of lost tariff revenues. In a more fundamental sense, however, it is borne by South African consumers of automobiles. The import duty on motor vehicles means that the domestic price is higher than comparable world prices. Although IRCC holders can import vehicles duty-free, domestic consumer prices do not fall, and the benefits accrue to the exporter/importers as extra profits on vehicle imports and/or as a cross-subsidy to exports. This is an export subsidy paid for by consumers of vehicles in the protected domestic market.

That the benefit of the IRCC does not accrue to consumers can be seen by comparing it with an alternative policy – simple removal of the import duty for *all* vehicle importers. If the import duty were eliminated on a non-selective basis, competition among importers would drive the domestic price down by roughly the amount of the import duty, with the full benefit accruing to consumers. This does not happen with selective duty reductions such as the IRCC scheme. As long as the duty-free import privilege is scarce, the marginal importer has to pay import duty, and it is the costs of such an importer that will determine the price in the local market. Only if the number of IRCCs issued is sufficient to supply the entire domestic market with duty-free imports will competition drive the price down to that based on duty-free imports. This is far from being the case in South Africa today.

The value of the IRCC to an exporter depends on the fact that domestic prices are determined by the tariff-inclusive price of imports. Any producer that can claim truthfully that South African vehicle prices are equivalent to international prices would never need to use an IRCC to import a motor vehicle. If he (or any other producer or importer) uses IRCCs to import vehicles, the South African vehicle tariff must still be protecting the domestic market.

Suppose now that the vehicle exporter uses the IRCCs to import components for the manufacture of vehicles for the local market. This lowers his costs relative to those of producers who have to pay duty on imported components. Exports with domestic content of R100 million give the right to import R100 million of components duty-free. Under the current import duty rate on components of 30 percent, the resulting cost saving is R30 million – i.e. when used this way, the IRCC provides effective protection to exports of 30 percent. Since the domestic price of vehicles is determined by the duty-inclusive price of importing them, the cost reduction arising from use of the IRCC accrues to producers and not to consumers.¹¹

5.2.2 IRCCs – Components Exports

IRCCs can also be earned through export of OEM components destined for use in vehicle production. Qualifying exports of components with R100 million of local content can earn R100 million of duty valuation reductions on the import of components or R65 million of duty reductions on import of CBU vehicles.¹² This provides a substantial subsidy to components exports. The exact value of the subsidy depends on whether IRCCs earned are used to import vehicles or components. The current import duty on CBU vehicles is 40 percent and that on OEM components is 30 percent. If the IRCCs are used to import vehicles, therefore, they provide an export subsidy on components exports of 26 percent (65 percent of 40 percent). And if the IRCCs are used to import components, the export

vehicles is 30 percent and the qualifying value of eligible export performance is 70 percent, the effective protection due to this measure will still be 21 percent (70 percent of 30 percent).

¹¹ At the end of the current MIDP, when the import duty on components has fallen to 25 percent and the "qualifying value of eligible export performance" has been reduced to 70 percent, the effective rate of protection for exports whose IRCCs are used to import components will become 17.5 percent (70 percent times 25 percent).

¹² The import valuation reduction in respect of CBU imports will later fall from 65 to 60 percent of the local content value of qualifying components exports.

subsidy is 30 percent (100 percent of 30 percent). As in the previous discussion, all of these subsidies are expressed as a proportion of the domestic content of the exports being subsidized. In other words, they are a measure of the effective protection to export production.

As with the IRCC scheme for vehicle exports, the value of the IRCCs depends on protection of components and vehicles in the domestic market, and the ultimate cost of the export subsidy is borne by domestic consumers who must pay higher prices as a result of this protection.

Table 1 summarizes the effective rates of protection to exports of vehicles and components arising from the IRCC facility.

Table 1Effective Protection Given to Exports by IRCC Facility					
Use of IRCCs	Vehicles	Components			
Vehicle Imports	40%	26%			
Components Imports	30%	30%			

Source: author's calculations. Details are available on request.

5.2.3 Productive Asset Allowance

The productive asset allowance provides a subsidy, not directly to export production, but rather to investments in new facilities for export production. By giving a duty credit of 20 percent of the value of qualifying investments, the allowance is, in effect, a 20 percent subsidy on the costs of these investments. The subsidy is received in 5 annual installments beginning in the year of the investment, which means that the present value of the subsidy is slightly lower than 20 percent of the cost of the investment.

As with the IRCCs earned on exports, the productive asset allowance subsidy is "redeemed" through the import of otherwise dutiable components or vehicles, and so its value is contingent on continued protection of vehicles and components in the domestic market. Once again, the cost of this 20 percent subsidy to the capital costs of new export production facilities is borne by domestic consumers of motor vehicles.¹³

5.3 Duty Free Allowance (DFA)

Unlike the IRCC and productive asset allowance schemes, the DFA is directed solely at production of vehicles for the domestic (SACU) market. The DFA provides a reduction of duty valuations on imported OEM components or CBU vehicles equal to 27 percent of the value of vehicles produced for sale in the domestic market. The vehicle values for DFA purposes are based on an adjusted retail list price (net of VAT and excises) of vehicles produced. The adjustments to retail list price are company specific and are meant to exclude the value of service contracts and other considerations that "distort" the level of the retail price for this purpose. The firm-specific adjustment factors are revised on a quarterly basis.

Duty free allowances must be used initially for imported components. If component imports are insufficient to use up the total DFA available in a quarter, the excess can be carried forward into the following quarter and used to reduce the dutiable value of imported CBU vehicles. Since the import

¹³ A detailed analysis of the combined effects of the export complementation (IRCC) facility, the productive asset allowance scheme and special income tax incentives is the subject of a separate investigation.

duty on CBU vehicles is higher than on components, this provision gives a small incentive to source components locally, in order to free up DFAs for CBU imports.

To determine the effective protection provided to vehicles produced for sale in the domestic market, it is necessary to include the effects of the duty free allowance as well as the import duties on CBUs and components. The rate of effective protection depends on the share of vehicle production costs due to imported components and on whether the producer has available for its use IRCCs arising from export activities or Productive Asset Allowances from qualifying investments. Table 2 shows illustrative calculations of effective rates of protection for a domestic vehicle producer on the assumption that no other duty reduction facilities are available and under a range of assumptions about the importance of imported components in total production costs. Current import duty rates on components (30 percent) and CBU vehicles (40 percent) are used, as is the current DFA rate of 27 percent.

Table 2			
Effective Rate of Protection (ERP) for Vehicles Sold in the Domestic Market			

	Import Content (%)		
	30	50	70
ERP Without DFA (%)	44	50	63
ERP With DFA (%)	62	73	101

Source: author's calculations. Details are available on request.

Import duties alone, without the benefit of the DFA facility (and without the benefit of any IRCCs or Productive Asset Allowances) provide high levels of effective protection – ranging from 44 to 63 percent. This is due to the fact that the duty on vehicles is higher than on components. By allowing further duty reductions on components and in some instances even the duty-free import of vehicles into the protected domestic market, the DFA facility substantially increases this protection. Even with a very low level of import content (30 percent) effective protection is 62 percent, and with 70 percent import content protection exceeds 100 percent. These effective protection rates do not take account of the additional protection arising from restrictions on imports of used vehicles.

5.4 Overall Economic Impacts of the MIDP

The MIDP has substantially changed the incentives facing vehicle and components producers in South Africa.

The MIDP has removed the anti-export bias that previously faced the industry and provides in addition a substantial subsidy to exporters. At the margin (i.e. after sufficient IRCCs or PAAs have been used to remove anti-export bias) the IRCC facility gives effective protection to vehicle exporters of 30 to 40 percent and to components exporters of 26 to 30 percent.¹⁴ The PAA gives an additional subsidy of 20 percent of the cost of qualifying new investments aimed at export production.

In addition, the structure of import duties on vehicles and components, together with the DFA facility, provide substantial effective protection to production of vehicles for the domestic market. Depending on the import content of such production, the effective rate of protection ranges from 62 to over 100 percent.

¹⁴ The effective rate of protection in each case depends on whether the IRCCs are used to import vehicles or components. For vehicle exporters the subsidy is 40 percent if the IRCCs are used for vehicle imports and 30 percent if they are used for components. For components exporters the IRCCs give a 26 percent export subsidy if they are to import vehicles and a 30 percent export subsidy if they are used to import components.

A very interesting aspect of this structure of protection and subsidies is that it rests on selective *reductions* in import duties and duty valuations. Such tariff reductions might appear to represent a movement towards a neutral free trade regime. However, this is not the case.

The value of incentives granted through selective tariff reductions, whether in the form of IRCCs, Productive Asset Allowances, or Duty Free Allowances, rests precisely on continued protection of the domestic market. This means that the subsidies are borne, not by the tax payers through the government budget, but rather by vehicle consumers through their purchases of vehicles in the protected domestic market. This applies to both vehicles sold domestically, and vehicles and components exported under MIDP incentives.

There could be considerable discussion of whether it is fair to burden vehicle consumers with subsidies to motor industry production and export in South Africa. However, the complexity of the MIDP incentives has hidden both the extent of the subsidies being given and the peculiar way in which they are financed by domestic consumers. This lack of transparency has tended to diminish debate and impede understanding.

The MIDP incentives create sizable economic rents. These rents raise some important policy issues.

- How much of the rent accrues to wealthy foreign and domestic shareholders?
- How much do they distort manufacturing wage structures and hence impede the development of labor-intensive industries that are needed to address South Africa's long term unemployment and poverty problems?
- To what extent does the scramble for these rents divert entrepreneurs and policy makers from creating an economic environment that will permit the continued growth of other industrial sectors that are able to compete without any special government assistance, and in so doing begin to address South Africa's pressing economic and social development needs?

Of equal or even greater concern should be the direct economic waste that is encouraged by the MIDP incentive regime. Not only do vehicle consumers pay to support high cost production of vehicles for the local market; they also pay to subsidize production of vehicles and components for export. The incentives inevitably encourage investment and production that would not be viable in their absence. They enable producers and investors to sell both domestically and internationally despite much higher costs than their international competitors.

As a result, vehicles and components are produced with domestic resources whose opportunity cost is much greater than the export revenues earned or foreign exchange saved through replacement of imports with domestic production. These inefficiencies of the incentive regime are not just a transfer from one pocket to another; they are pure economic waste.

Consider for instance the 40 percent export subsidy on vehicles arising from the use of IRCCs to import duty-free CBUs. For every R70,000 of South African resources used in producing exported vehicles, South African consumers get in exchange an imported vehicle worth R50,000 in the world market. That is, as a result of this MIDP incentive, South Africa uses R70,000 of its own resources to gain R50,000 of foreign exchange. Each such vehicle exported costs South African R20,000 (the difference between R70,000 and R50,000, or the import duty saved on the import of a vehicle duty free).¹⁵ This is a considerable economic loss for a poor country such as South Africa. Even at a duty

¹⁵ This can be seen best with a simple example. Suppose that an exported vehicle worth R50,000 in world markets is produced in South Africa and, for sake of simplicity of exposition, suppose that all the components and other inputs are sourced in South Africa. The export of such a vehicle earns IRCCs sufficient to import a CBU worth R50,000 duty-free. With a 40 percent import duty, an imported vehicle costing R50,000 can be sold in the domestic market for R70,000 (R50,000 plus 40 percent import duty). The surplus of R20,000 earned

rate of 30 percent, which will take effect in 2007, the cost per such vehicle exported will be R15,000. Is this a sensible way to "earn" or to "save" foreign exchange?

One of the industry commentators at the recent TIPS Forum estimated the total amount of subsidy being given at the moment to be about R11 billion per year. He claimed furthermore, that the motor industry would not be able to survive without continued subsidies of at least this amount.

What benefits are created in return for these costs? Some would claim the motor sector is a strategic infant industry that must be supported in order to ensure South African mastery of key industrial technologies. Others might argue that the motor industry is a key source of industrial employment in an economy with a large labor surplus. But certain key questions must be answered if these are legitimate concerns.

- How much cost is worth bearing in order to gain any such benefits? How can the benefits be quantified? With all the talk of the success of the motor industry, there has been little effort to measure the costs or the benefits.
- When can the industry be expected to grow up and lose its infant status? As the recent TIPS Forum papers indicate, the South African government and people have been carefully nurturing this infant for 80 years already. The industry representatives argued that "infant" industry subsidies for this sector will be required in perpetuity.
- How many jobs are being created right now, and how many would be lost if the rate of subsidization were to be reduced? Industry data suggest that the South African components and vehicle industries (including tires) employ about 80,000 workers and this number has not been growing under the MIDP.¹⁶ Using the industry estimate of the size of subsidies currently received (R11 billion), this amounts to an annual subsidy of R137,500 per job in the industry. On the assumption that at least some and possibly many of these jobs would continue even in the absence of subsidies, the actual cost per job is much greater than this. How does this subsidy compare with the wage of a typical motor industry worker? How does it compare with the incomes of those without unionized jobs in the formal sector? Can this size of subsidy be justified on grounds of job-creation? In the case of leather seat covers, there is evidence that these subsidized exporters are unfairly competing with footwear producers for leather raw materials.¹⁷ Taking account of job losses in the footwear industry, is net job creation from seat cover exports positive or negative?

6. International Experience

South Africa is not the first country to become captivated by the high priests of the motor industry. Countries around the globe – from Australia to Uruguay and from Canada to Malaysia – can attest to their strength and influence. Unfortunately this international experience includes many cases of costly policy errors. The mistakes arise from the premise that a domestic motor industry is central to

through the use of the IRCC can be used to cross-subsidize the export vehicle. As long as the domestic cost of the exported vehicle is no more than R70,000, the vehicle can be exported profitably. Thus, under this incentive, it is profitable to export a vehicle costing R70,000 to earn only R50,000 of foreign exchange.

¹⁷ This is based on recent correspondence with SAFLIA, the South African Footwear and Leather Industries Association.

¹⁶ This was in 1999. At the time employment had been falling steadily since 1996 (despite the subsidies provided under MIDP) and so 80,000 might be an overestimate for more recent years. Discussions of motor industry employment are often confused by including in total employment estimates all those employed in the retail and service sectors. When these jobs are included, "motor industry" employment appears to be 255,000 workers. However, 175,000 of these jobs are in "the motor trade" – jobs that would continue to exist regardless of the size of the motor industry itself.

economic development, and from the resulting willingness, even in poor countries, to pursue the development of an integrated motor industry without regard to economic cost.

South Africa's experience mirrors that of many other countries, especially in respect of the growing complexity of policies used to support the industry. South Africa is not unique in discovering that such policies have unintended consequences that require constant fine-tuning and reform. Each adjustment has additional consequences that call for yet further changes and often policy reversals. Already pleas are being voiced in some quarters to reinstate local content requirements.

Some countries trapped in this process eventually concluded that a radical new approach was necessary; that the basic premise of the need to develop a motor industry at any cost was wrong. This is not to say that there was no place for a motor industry in these countries. It is to say only that the governments would serve their people better by resisting the temptation to support this sector through special protection, subsidies and direct regulation.

International experience shows, unfortunately, that the network of vested interests and of policy makers clinging to the protectionist world view tends to be self-perpetuating, and that disentangling this web is very difficult. However, it is by no means impossible. Australia finally succeeded in breaking the knot of protection and developing a competitive, outward oriented motor industry (Pursell 2001). The key was to abandon the complex protective policy framework and let investors and producers operate in an undistorted, unprotected environment.

Recent examples in Southeast Asia are instructive. Malaysia and Thailand both developed local assembly and components industries through policies similar to South Africa's, with the use of high and cascading tariffs, other import controls and local content requirements. The result in both cases was a high cost, inward looking motor industry, similar in many ways to South Africa in the early 1990s. Beginning in the early 1990s, however, Malaysian and Thai policies diverged.

Thailand adopted an outward-looking strategy, not through export subsidies, but simply by eliminating regulatory controls such as local content rules, enhancing a market friendly investment environment, and providing essentially free trade facilities to motor industry exporters. This new policy direction was driven in part by enlightened policy makers, but at least equally so by international investors that saw Thailand as a potentially competitive production location for both the region and the world market. The imminent elimination of import duties on intra-ASEAN trade as a result of full implementation of the ASEAN Free Trade Area was an additional attraction with respect to regional exports.

As a result of these changes Thailand has attracted large new international investments in vehicle and components, many in partnership with local investors. Exports of vehicles and components have grown very rapidly, to the point where Thailand is referred to as the new "Detroit of East Asia". Some difficult adjustments were required by firms that were stuck in the old protectionist modes and were unable or unwilling to adjust. But the industry overall has benefited from large increases in investment, output, exports and employment.

Just when Thailand began to question its protectionist motor industry program, Malaysia became even more protectionist, through the adoption of its national car strategy. Development of the national car was assisted by external protection as well as by differential domestic taxes and a variety of other supports. Local content requirements and incentives were increased.

With the advent of full AFTA tariff liberalization Malaysia has declared this sector "sensitive" and has refused to open its domestic market. The reason is simple – with its high cost production structure built up under years of protection, Malaysia's national car would be unable to survive against external competition. Among the most serious difficulties were the adjustments that would be required of the network of small scale components makers that had developed under various incentives, including

local content requirements. Many of the components producers were SMEs set up under schemes to promote indigenous entrepreneurs from previously disadvantaged groups in Malaysia.

The deeper Malaysia got into its protectionist motor industry strategy, the more difficult it became to get out. Pressures under AFTA might force them to adjust. The alternative, of course, is to continue to support a high cost, uncompetitive motor industry indefinitely, with the cost borne by local consumers and tax payers. Change will also be costly, with the cost borne by some disappointed investors and/or by tax payers that are called upon to bail them out. But the economic waste from a continuation of the current strategy certainly exceeds any costs of adjusting to a more sensible strategy. However, if Malaysian tax payers and consumers are not saved by the pressures of Malaysia's AFTA commitments, it is not clear that the current political calculus will stimulate change from within.

Like Malaysia and Thailand, South Africa introduced significant changes to its motor industry program in the early 1990s. Elimination of local content regulations and a greater outward orientation are very healthy signs. On the other hand, export subsidies provided through import credit schemes are unhealthy and wasteful. At least the worst of these subsidies, the export-related import credit program and the productive asset program are limited in magnitude by the size of the domestic vehicle market. Since they are also contrary to South Africa's commitments under the WTO and SADC, there is some chance that external pressure might bring them to an end. In any case, the next steps, especially in formulating the details of the extended MIDP, will be crucial.

Will South Africa follow the lead of Thailand and Australia, or will it follow the Malaysian path of continued protection, regulation and isolation? At the moment the signs are ambiguous.

7. Conclusion

The question is not, as some suggest, whether South Africa should have a motor industry. The real policy question is: what is the justification for the large subsidies provided by the MIDP's peculiar protection-based incentive regime? And what should be the future direction of MIDP? The subsidies that are related to exports are large and almost certainly violate South Africa's commitments under the WTO and hence also under the SADC Trade Protocol. But their real harm lies in the economic waste caused in South Africa, the unnecessary costs they impose on consumers and the harm they might cause to South Africa's economic development.

South Africa might well be a globally competitive base for exports of catalytic converters and/or leather seat covers. The same might be true of other components and certain assembled vehicles. But these questions and decisions are best left to people in the business, and not to government policy makers.

The complexities of the MIDP mask the size of the investment and export subsidies being provided, and the manner in which they operate. However, close analysis shows that the incentives are very large and have undoubtedly had a major impact on motor industry development.

The MIDP is to be extended further after 2007. Is there a need for more fine-tuning of past policies, a process that has been going on for many decades? Or is it time for a fundamentally new approach – to treat catalytic converters and BMWs in the same way as electric kettles, television decoders and water valves? How can policy makers create an enabling environment in which South Africa can continue to attract production and investment in activities that are truly competitive and do not depend on ongoing subsidization?

The current MIDP includes some built-in phase downs. The value of the subsidy schemes based on import rebates and duty reductions is also limited by the size of the domestic market. When duty-free allowances and export and investment credits reach the level of imports that can be absorbed by the

domestic market, their marginal value will fall quickly to zero.¹⁸ Will the government continue to phase down MIDP incentives and allow this self-limiting feature to bring the MIDP to a natural conclusion, or will it respond to the inevitable pleas from investors for new forms of support?

Continued export growth, together with new investments and the promised extension of the MIDP have attracted praise as well as probing questions about the success of the motor industry. An industry whose performance depends so heavily on policy support should not necessarily be considered an economic success. The public admission by industry representatives of past dependence on huge subsidies and of a need for indefinite future support, without any justification, speaks eloquently to the need for a critical view and for a much more broadly based and economically informed discussion of future motor industry policies.

¹⁸ In the case of automobiles in 2001, exports (115,000 units) were now running at just over 40 percent of domestic sales (280,000 units). Imported vehicles (75,000 units) accounted for about 27 percent of domestic sales (data from NAAMSA website). According to Black and Mitchell (2002), about 95 percent of components are already being imported duty-free.

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