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The Effect of Motor Industry Development Programme on the Motor Vehicle Industry in South Africa

By

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Abstract :

The Motor Industry Development Programme (MIDP) in South Africa has been one of the most significant industrial policy interventions since 1994, because of the powerful incentive structure it established and the sheer size of the industry it impacted. Because of these factors, as well as the cost of support, the industry is central to any analysis of the impact of South African industrial policy on employment and inclusive growth – and not only within the sector itself but more importantly on the economy as a whole. This experience also has lessons for the conduct of industrial policy in other sectors.

The MIDP reduced tariffs and provided strong support for exports. The result was rapid export expansion, although the sector remains vulnerable to declining support. Domestic consumers have far greater choice but soaring vehicle and parts imports have contributed to a growing trade deficit. Progress has been made in rationalizing the industry but it still operates below minimum efficient scale. Growing investment and much higher levels of foreign ownership

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have modernized the sector and integrated it into global production networks. But the orientation of MNCs is towards the domestic market and South Africa is a long way from being a true export platform for global firms.

The aim of this paper is to assess the impact of the MIDP in terms of the objectives set by government. It also considers the question of the whether the MIDP has been worth its heavy cost and what lessons can be learned for industrial policy more generally. The paper concludes with some lessons from nearly two decades of policy experience including some comments about the recent introduction of the replacement Automotive Production and Development Programme (APDP). The growth and structure of the industry has arguably been too influenced by automotive policy. Long term certainty and gradual policy adjustments should be the objective and policy makers must be cautious about policy which diverts too far from market outcomes. While the MIDP has made a positive impact on the development of the industry, its provision of easy access to import credits has resulted in a rapid climb in imports, arguably to unsustainable levels. This trend has continued under the APDP in 2013 and needs to be substantially curbed. Policy should have the objective of reducing the share of imported vehicles and components below current levels.

The important question of cost of the MIDP is only briefly addressed. The key point is that the MIDP marked a decline in support from its inception and this support declined steadily through the course of the programme. A related question is whether the sector will continue to rely on high levels of state assistance to remain viable. In this regard, one fundamental recent change has brightened prospects considerably. Rapid growth in the southern African region and in Africa as a whole will, in the medium term, provide a large

and rapidly growing regional and continental market, the lack of which has always been the main constraint to the domestic industry. Properly handled, this represents an opportunity for rapid and sustainable growth in the sector in South African and the region.

1. INTRODUCTION

The automotive industry is one of South Africa's largest manufacturing sectors and has a long history of government support. From 1995-2012, it was subject to the Motor Industry Development Programme (MIDP) which has perhaps been the most significant industrial policy intervention since 1994, because of the powerful incentive structure it established and the size of the industry it impacted.

The South African automotive industry grew under high levels of protection. While considerable diversified development took place under this protective regime, the industry was highly inward oriented. In a process, which began in 1989 and accelerated with the introduction of the MIDP in 1995, the automotive industry has become increasingly exposed to international competition as government has sought to make it more competitive and also to encourage exports and a more rational industry structure. Lower tariffs were accompanied by import-export complementation arrangements, which enabled firms to rebate import duties by exporting. As a result of these measures, the industry has been through a period of rapid international integration and structural change.

Views on the impact of the MIDP vary widely. In his overview of economic reform since 1994, Hirsch (2005) cites the MIDP as one of the "notable successes" of this period and argues that "the automobile assembly and component sectors were strongly assisted by a well-designed Motor Industry Development Programme". While acknowledging the strides made in productivity, earlier work

by Bes and Kaplinsky (2000a, 2000b) pointed to weaknesses in the domestically owned component industry and the growing role of foreign ownership. Barnes, Kaplinsky and Morris (2004) argue that it helped develop dynamic competitive advantage in the industry. Black (2009), while acknowledging that the MIDP has facilitated a strong supply response to the changed incentive regime because it encouraged international automotive firms to integrate South African based producers into global networks, points to the limitations of this process and the fact that South Africa is far from being an export hub. Flatters and Netshitomboni (2007) take a much more critical view, citing the heavy costs of the MIDP and arguing for more rapid liberalisation. The MIDP has also received considerable positive media comment over a long period. This has focused on what has been achieved, for example, in terms of export expansion, new foreign investment or vehicle prices. More recently, there has been a greater focus on negative attributes, especially the costs of the programme.

Section two of the paper provides a brief overview of the development of the industry. The MIDP and its objectives are explained in section three. The main part of the paper (section four) examines the effects of the MIDP on the motor vehicle trade, investments , productivity , and employment . Section five concludes with some lessons from this experience.

2. THE DEVELOPMENT OF THE SOUTH AFRICAN INDUSTRY

A- production and exports :

The South African vehicle market grew very rapidly from 1950 to the early 1980s with sales increasing tenfold over this period. The market stagnated during the 1980s as the economy entered a phase of very slow expansion with growth constrained by political instability and increasing international isolation. Gradual recovery followed

and after 2002, sales grew strongly, boosted by rising incomes, a strong rand and low interest rates. Sales plummeted in the aftermath of the global financial crisis, but recovered to reach 624,000 vehicles in 2012. This constitutes a fairly small market in global terms and the regional market, apart from South Africa, remains very small. Production has tracked sales quite closely but recently has failed to keep pace with the expansion in the domestic market. In 2012, 540,000 vehicles were produced, of which 52.4% were exported.

Table 1: Production and exports of passenger cars/light commercial vehicles – 1995 to 2012

Light commercial vehicles					Passenger			
	Market			Exports as a % of total	Market			Exports as a % of total
	Total	Export	Domestic		Total	Exports	Domestic	
1995	133 719	6 356	127 363	4,8	242 488	8 976	233 512	3,7
1996	135 641	7 125	128 516	5,3	235 359	3 743	231 616	1,6
1997	121 204	8 000	113 204	6,6	226 242	10 458	215 784	4,6
1998	104 862	6 806	98 056	6,5	193 212	18 342	174 870	9,5
1999	101 907	6 581	95 326	6,5	212 291	52 347	159 944	24,7
2000	113 269	9 148	104 121	8,1	230 577	58 204	172 373	25,2
2001	123 340	10 229	113 111	8,3	269 651	97 599	172 052	36,2
2002	113 655	11 699	101 956	10,3	276 499	113 025	163 474	40,9
2003	113 290	11 283	102 007	10,0	291 249	114 909	176 340	39,5
2004	132 827	9 360	123 467	7,0	300 963	100 699	200 264	33,5
2005	172 522	25 589	146 933	14,8	324 875	113 899	210 976	35,1
2006	219 618	60 149	159 469	27,4	334 482	119 171	215 311	35,6
2007	220 753	64 127	156 626	29,0	276 018	106 460	169 558	38,6
2008	205 955	87 314	118 641	42,4	321 124	195 670	125 454	60,9
2009	131 177	45 514	85 663	34,7	222 981	128 602	94 379	57,7
2010	153 773	56 950	96 823	37,0	295 394	181 654	113 740	61,5
2011	192 829	84 125	108 704	43,6	312 265	187 529	124 736	60,1
2012	235 741	123 623	112 118	52,4	274 873	153 196	121 677	55,7

Note : Medium and heavy commercial vehicles are excluded from this table.
Source : AIEC (2013)

There are currently seven producers of light vehicles in South Africa and there have been no major new entrants into the assembly industry over the last decade. There has, however, been a significant increase in foreign ownership and all assemblers are now wholly owned by multinational firms. This was not the case in the early 1990s, when most assemblers were under majority local ownership. There has also been growing foreign ownership in the component sector, which numbers some 350 firms. The majority of large component firms (over 500 employees) are now foreign owned.

B- Early policy developments

In many respects, South Africa followed a programme of import substitution similar to that adopted in other developing countries, especially in Latin America. High tariffs were placed on built up vehicles which when combined with a rapidly growing market, acted as a magnet to a large number of (initially foreign) companies which established assembly plants in the country. These operations, although in many cases highly profitable, were very small in international terms with correspondingly high unit costs.

Production was aimed solely at the domestic market and the South African assembly plants were kept isolated from the global production networks of the parent companies except as markets for completely knocked down (CKD) packs of imported parts (Black, 2001).

The first in a series of local content programmes was introduced in 1961 and followed by a number of adjustments which increased local content requirements over time. Considerable diversified development took place under this protective regime. Imports of vehicles were minimal. A major driver was foreign direct investment but there was also significant domestic ownership, especially in the component sector. The component industry developed significant investment and production capability as well as the capacity to innovate in process development and to a lesser extent in product development.

A major problem was the failure to use some form of industrial policy to limit the excessive proliferation apparent in the large number of models and makes of vehicle being assembled in low volume. This in turn forced component firms to produce at below efficient scale.

The problems of high protection and associated low volume production had become increasingly apparent by the late 1980s. South Africa's automotive industry was inefficient and highly inward oriented. Phase VI of the local content program, introduced in 1989, marked the beginning of reduced protection for the industry. The component sector was partly liberalized and vehicle producers could meet part of their local content requirements by exporting and, as such, were proactive in developing international marketing channels. Exports rose rapidly from negligible volumes in the mid-1980s to R2,245 million in 1994. The level of protection on built up vehicles, however, remained prohibitive at 115% (100% ad valorem plus 15% surcharge). In the early 1990s, South African car prices were well above international prices and Phase VI was widely blamed in the media and by industry analysts as being a contributing factor. Also, Phase VI did nothing to reduce the proliferation of models being assembled domestically. This proliferation of models was in turn one of the major reasons for the component sector being uncompetitive.

3. THE MOTOR INDUSTRY DEVELOPMENT PROGRAMME

The Introduction of the MIDP

Phase VI came in for heavy criticism particularly from the component producer federation, NAACAM, who were concerned with rising import competition and the fragmented structure of the assembly industry. In late 1992, a tripartite forum, the Motor Industry Task Group (MITG) was appointed to re- examine the programme and advise government as to the future development policy for the industry. Government also made it clear that tariffs had to be reduced in line with the country's GATT obligations.

The Government accepted the recommendations of the MITG. And announced the MIDP .The MIDP continued the direction taken by Phase VI and entrenched the principle of import-export complementation. However, it went a step further by abolishing local content requirements and introducing a tariff phase down at a steeper rate than required by the terms of South Africa's offer to the GATT. The main elements of the MIDP were the following: (DTI ,1997)

a) The excise duty based local content system was dropped and replaced by a tariff driven programme.

b) Tariffs on light vehicles were to be phased down to 40% for light vehicles and 30% for components by 2002.

c) Manufacturers of light vehicles for the domestic market were entitled to a duty free allowance (DFA). Components to the value of 27% of the wholesale price of the vehicle could be imported duty free.

d) Import duties on components and vehicles could be offset by Import Rebate Credit Certificates (IRCCs) derived from the export of vehicles and components.

While nominal duties on imported vehicles were set to remain quite high in the medium term, the ability to rebate import duties by exporting, enabled importers to bring in vehicles at lower effective rates of duty. Import-export complementation also enabled assemblers to use import credits to source components at close to international prices. These credits could also be traded. Thus declining nominal protection on vehicles was to some extent, therefore, compensated by reduced protection for components.

To assess the impact of the MIDP and provide long term policy certainty to the industry, the South Africa Department of trade and Industry (DTI) conducted two policy reviews, in 1998 and 2002. These extended the MIDP, first until 2007 and later until 2012 but on a phasing down basis. The gradual decline in tariffs continued

and the import/export complementation provisions were retained, although the qualifying value of eligible export performance declined from 2003 (Table 2). This means that while exports of components with a local content value of R100 would allow the exporter to import R100 of components on a duty free basis in 2002, by 2012 only components to the value of R70 could be imported. Coupled with the continuing phase down of tariffs this meant that export assistance was reduced quite rapidly. It also offset, to some extent, the liberalising effect of tariff reductions by requiring a greater level of exports to rebate duties on a given level of imports.

In the 1998 review there were again extensive discussions regarding the imposition of direct industrial policy measures to rationalise the industry, but these were not adopted. An important late change introduced into this process as a result of concerted pressure on the Minister of Trade and Industry by vehicle manufacturers, who were planning major export programmes, was the introduction of a Productive Asset Allowance (PAA). In terms of the PAA, firms making qualifying investments received import duty credits equal to 20% of the value of these investments, spread over five years.

The Objectives of the MIDP

The initial objectives of the MIDP were to provide high quality affordable vehicles, provide sustainable employment and through increased production, contribute to economic growth (Department of Trade and Industry, 1997). More specifically, the MIDP was devised as a trade facilitating measure with very particular industry policy objectives. As a result of protection, the industry structure had historically been very fragmented and the resultant failure to achieve economies of scale had not only made the assembly industry inefficient, but imposed major negative externalities on the component sector. So an objective of the MIDP was to increase the volume and scale of production through a greater level of specialisation in terms

of both vehicle models and components. The MIDP sought therefore to provide support for the automotive industry on a gradually declining basis. This required it to meet a number of objectives, including some protection for vehicle assembly and components production as well as support for exports and investment.

Table 2: The MIDP as Amended in the 1998 and 2003 Reviews

Year	Import duty		qualifying value of eligible export performance	Qualifying PGM content	Ratio of exports against imports		
	built up light vehicles	original equipment components	built up vehicles and components (excluding tooling)	catalytic converters exported	components, heavy duty vehicles & tolling exported: CBU light vehicles imported	components, vehicles and tolling exported: components, heavy vehicles and tooling imported	built up light vehicles exported: built up light vehicles imported
1999	50.5%	37.5%	100%	90%	100:75	100:100	
2000	47%	35%	100%	80%	100:70	100:100	
2001	43.5%	32.5%	100%	60%	100:70	100:100	
2002	40%	30%	100%	50%	100:65	100:100	
2003	38%	20%	94%	40%	100:60	100:100	
2004	36%	28%	90%	40%	100:60	100:100	
2005	34%	27%	86%	40%	100:60	100:100	
2006	32%	26%	82%	40%	100:60	100:100	
2007	30%	25%	78%	40%	100:60	100:100	
2008	29%	24%	74%	40%	100:60	100:100	
2009	28%	23%	70%	40%	100:60	100:100	
2010	27%	22%	70%	40%	100:60	100:100	
2011	26%	21%	70%	40%	100:60	100:100	
2012	25%	20%	70%	40%	100:60	100:100	

Sources : adapted from Black and Barnes(2003) and NAAMS(2005)

Notes : The Duty Free Allowance of 27% remained unchanged during this period. The Productive Asset Allowance(PAA) was put in place until 2007 to be reviewed later.

4. THE EFECETS OF THE MIDP

International competition in the South African automotive industry increased substantially as a result of the MIDP. Vehicle manufacturers faced the prospect of the domestic market being eroded by imports as tariffs were reduced from prohibitive levels and as growing exports enabled firms to offset import duties. The component sector, which had only just begun the transition from low volume, flexible production faced further restructuring and consolidation. The outcome of the shift towards more open markets depended not only on the level of import penetration, but also on the supply response of firms, especially in terms of investment and export expansion. This section of the paper will deals with the (MIDP) impacts on the motor vehicles industry in terms of :

A - Imports

B - Exports

C - Investment

D - Productivity , competitiveness, and employment

A - Automotive trade: The share of imports

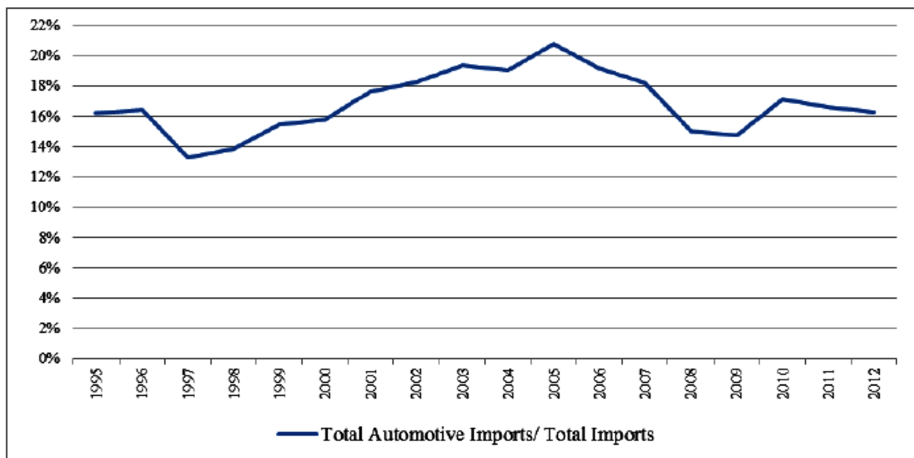
As protection is reduced, imports can be expected to gain a larger share of the domestic market and rapid import expansion can threaten the viability of local producers, not only by eroding their domestic market share but also by limiting their capacity to take advantage of new export opportunities. Until the earl 1990s, high protection resulted in very low volumes of vehicle imports. However, total imports of vehicles and components have grown at a more rapid rate than policy makers expected, in nominal terms from R16.4 billion in 1995 to R 136.1 billion in 2012 (AIEC, 2013: 32). Automotive imports account for a significant share of total imports; on average approximately 17% between 1995 and 2012 (Figure 1). Interestingly, the overall share of automotive imports has not increased over the period although it is highly cyclical. This, of course, is indicative of the rising share of imports in the South African economy as a whole.

Nevertheless, the major contribution of the automotive sector to South Africa's trade deficit has major macroeconomic implications.

Figure 2 shows that at the inception of the MIDP, the automotive trade balance improved. From 2004, a recovering rand and booming consumer demand led to rapid growth in imports and a deteriorating trade balance. In 2008, record vehicle exports helped the deficit return to a more stable level (DTI, 2009), with this then followed by the slump in both exports and imports in the aftermath of the global financial crisis. Since 2009, the marginal growth in exports has been overwhelmed by the rapid increase in imports.

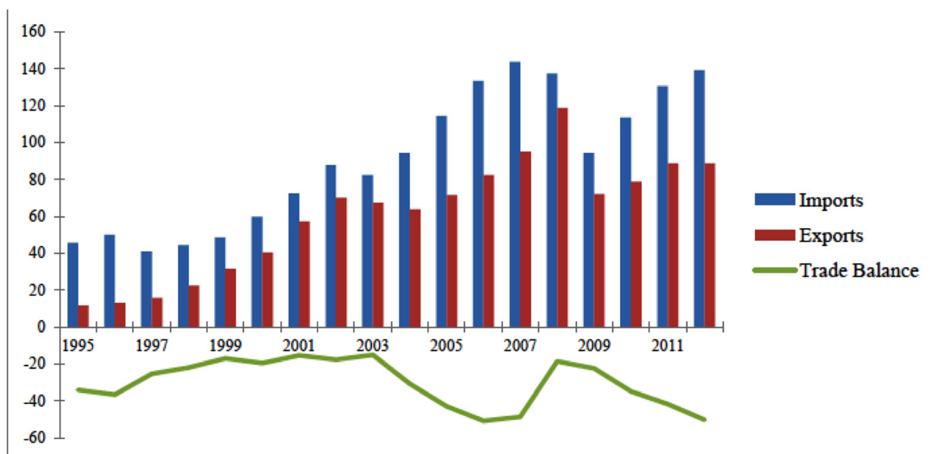
The nominal tariff on light vehicles, at 25% in 2012 was still reasonably high and cannot on its own explain the rapid increase in automotive imports. The key factor was that the MIDP enabled firms to rebate import duties by exporting. An important aspect of the strategy of the carmakers operating in South Africa was to expand market share via a combination of local production and vehicle imports. Importing vehicles and components incurred import duties and much of the strategic behaviour of firms was, therefore, directed at optimising their duty position.

Figure 1: Automotive Imports as a Percentage of Total Merchandise Imports, 1995-2012



Sources: Duxbury (2013), NAAMSA Annual Reports (various years), Automotive Export Manual (various years), SARS.

Figure 2: Automotive Trade Balance, 1995-2012 (R billion, constant 2012 prices)



Source: NAAMSA Annual Reports (various years).

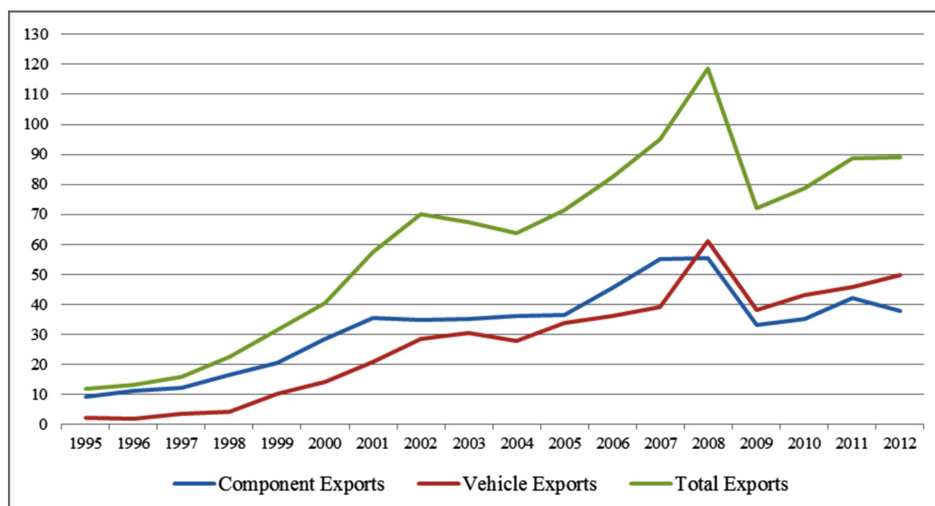
Minimising duty payments could be achieved in a number of ways. Firstly, firms could limit vehicle imports. Secondly, local content in domestically produced vehicles could be increased. Thirdly, vehicle producers could expand exports either of vehicles or components. As exports increased so did the ability to import automotive products without paying duty. In addition, carmakers undertaking specified investments which qualified under the Productive Asset Allowance, also received import credits although these were at a relatively low level in comparison to the credits earned via exporting. The value of Import Rebate Credit Certificates is therefore central to understanding the impact of exports on the ability to offset import duties. In this respect it is important to note the phasing down in the qualifying percentage of platinum in catalytic converter exports from 1999 and the phased reduction in the qualifying percentage of all exports from 2003 (Table 2). In spite of the phasing down of export assistance, vehicle manufacturers were able to offset nearly all import duties. From 1996-2011, the average level of duty paid by vehicle manufacturers was only 0.6% of the total value of their imports of vehicles and components over this period.

B- The Supply Response: Exports

The growth of automotive exports has been the most striking feature of the development of the automotive industry under the MIDP. Total automotive exports at the start of the Phase VI programme in 1989 were only R443 million. At the inception of the MIDP in 1995 they amounted to R4.2 billion and by 2012 had reached R86.9 billion (figure 3) . In real terms this represents a compound annual growth rate of 12.1% (Duxbury, 2013). In 1995, automotive exports accounted for just 4% of total exports. This increased sharply to nearly 15% in 2003 but has since declined to just over 12% in 2012 (Figure 4)

A number of factors have accounted for rapid export expansion. The most important has been the import- export complementation arrangements under Phase VI and the MIDP.

Figure 3: Automotive Exports, 1995-2012 (R billion, constant 2012 prices)

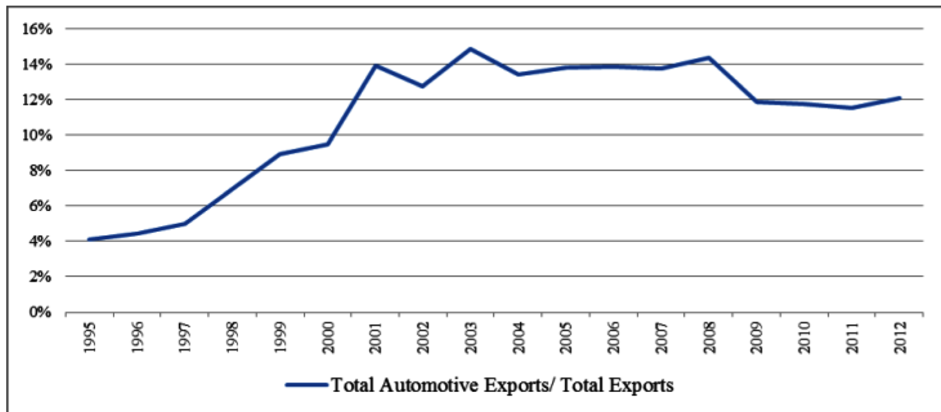


Source: NAAMSA Annual Reports (various years), Automotive Export Manual (various years), SARS, Duxbury (2013).

A second factor has simply been that falling protection and limited domestic market growth, until the mid-2000s, forced firms into the export market. Thirdly, the rand was quite weak over part of the period. The global downturn of 2009 led to a

sharp reduction of South African automotive exports. Component exports to South Africa's largest market, the EU fell from €3.38 billion in 2008 to €2.13 billion in 2009 and have been slow to recover.

Figure 4: Automotive Exports as a Percentage of Total Exports, 1995-2012



Source: NAAMSA Annual Reports (various years), Duxbury (2013).

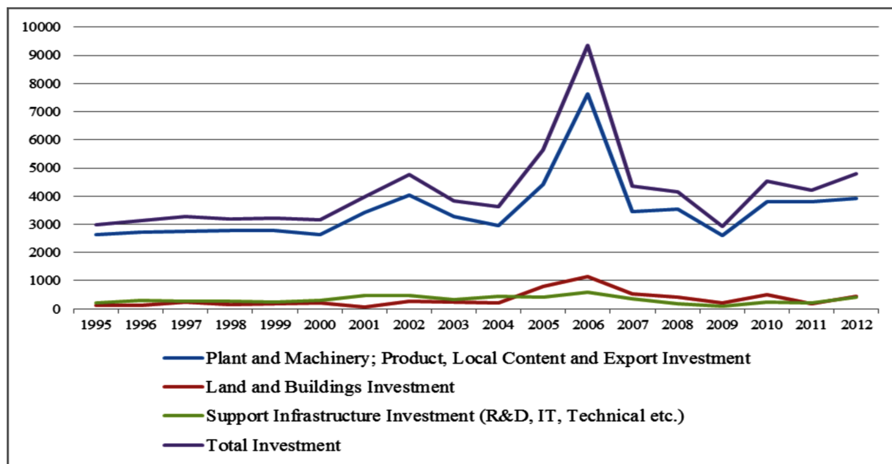
It is clear that the MIDP's incentive structure strongly favoured exports. But the very strong supply response to changes in the policy regime is also partly attributable to the nature of the automotive industry value chain. Because lead firms in the automotive value chain control global networks of assembly operations and linked supplier companies, they were able to rapidly facilitate exports either from their own South African operations or from South African based suppliers to their international operations.

C- Investment

While inflows of foreign direct investment into the South African economy have been moderate during the tenure of the MIDP, the automotive sector has been a significant recipient. But much of this FDI involved the purchase of partial or full ownership by Ford (in Samcor), Toyota Motor Corp. (in Toyota SA), Nissan Motor Corp. (in Nissan SA) and General Motors (in Delta).

Fixed investment by vehicle manufacturers increased slowly after the trough of the mid-1990s, when political and policy uncertainty together with a weak domestic market led to a serious slump in new capital expenditure. All firms have modernised and expanded their plants and firms such as Toyota and VW now have the capacity to produce at world scale. But as Figure 6 shows, in real terms there has only been a modest increase in investment in vehicle manufacture, apart from the spike in 2005-2006. In 2012rands, capital investment in 2010-2012 averaged R4.5 billion which is hardly an impressive increase on the low base of just over R3 billion for the first 3 years of the MIDP. The investments made in plants have continued to lag, both in a quantitative and qualitative sense, behind the massive investments that have been made in booming emerging market industries in Brazil, Thailand, China, India and central Europe over the last two decades.

Figure 5: Investment expenditure by vehicle manufacturers, 1995-2012 (R million, constant 2012 prices)



Source: Duxbury, (2013), NAAMSA Annual Reports (various years)

There has also been some expansion in investment in the component sector, while FDI has played an increasingly important role. While there have been a number of Greenfield investments, the take-over of existing firms has accounted for a large share of FDI (Gelb and Black, 2004). Since 2000, growing investment has taken place

in first tier suppliers locating close to assembly plants with vehicle export projects, but many of these involve assembly type operations with limited local content. As is the case with vehicle assembly, investment levels have been modest.

D - Productivity, competitiveness and employment

Economic theory would attribute growing exports by multinational corporations from a developing economy such as South Africa, to efficiency seeking FDI targeted at taking advantage of the comparatively low cost structure of the developing economy. Yet this was patently not the case under the MIDP. The boom in exports evident over the period of the MIDP was largely driven by the import-export complementation scheme, and hence by the strategic intent of exporting firms to earn sufficient import credits to offset their duty exposure in the domestic market. This does not mean that the South African automotive industry did not improve its competitiveness under the MIDP. The evidence for both vehicle assemblers and automotive component manufacturers is unequivocal in this regard. Automotive industry productivity in the early 1990s was very low in South Africa and improved rapidly. Data collected by the International Motor Vehicle Programme based on detailed 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 main reasons for this were ascribed to low levels of automation and the complexity of most assembly plants, which produced a range of models in relatively low volumes. A crude measure of assembly plant productivity is to measure vehicle output per employee. This increased from 9.7 in 1995 to 14.5 in 2005 and 16.9 in 2012. At the same time, a number of South African assemblers, such as Mercedes Benz and BMW, have received international awards for the quality of the vehicles sold in export markets.

An important factor impacting on assembly plant productivity has been increased specialisation with a reduction the number of models produced. For example the number of passenger car models being

domestically produced fell from 21 in 1995 to 12 in 2005 and seven in 2012. This was accompanied by a substantial increase in average model volumes, which in turn also encouraged higher levels of automation. Improved operational competitiveness drawing on lean production principles has also played a role (Black and Barnes, 2003).

Another major objective of the MIDP was to maintain **Employment** during the process of restructuring. Total employment in the vehicle manufacturing industry (assembly and components) increased quite strongly from 104,100 in 1995 to 112,300 in 2005 and then declined to 100,159 in 2012. While cyclical factors especially the impact of the global financial crisis have an important effect on employment levels, assembly plant employment has declined significantly since 1995. A degree of rationalisation, as well as outsourcing of certain activities previously performed in-house, account for this.

Table 3: Employment in the Automotive Sector, 1995-2012

	TOTAL	Component	Tyre	Motor trade	Assembly
1995	293,100	65,500	11,000	178,000	38,600
1996	294,200	65,600	10,000	180,000	38,600
1997	295,700	69,100	9,500	180,000	37,100
1998	282,500	69,700	9,100	170,000	33,700
1999	280,870	67,200	6,670	175,000	32,000
2000	288,375	69,500	6,575	180,000	32,300
2001	293,100	72,100	6,300	182,000	32,700
2002	297,470	74,100	6,000	185,000	32,370
2003	304,900	75,000	7,200	191,000	31,700
2004	307,500	74,500	7,200	194,000	31,800
2005	317,100	78,000	6,800	198,000	34,300
2006	324,900	80,000	6,900	199,000	39,000
2007	327,900	81,800	6,800	201,000	38,300
2008	316,100	74,000	6,200	200,000	35,900
2009	299,800	61,000	5,700	203,000	30,100
2010	299,728	65,000	6,600	200,000	28,128
2011	303,147	68,500	6,500	200,000	28,147
2012	306,659	70,000	6,500	200,000	30,159

Sources: NAAMSA Annual Reports (various years); Automotive Export Manual (various years)

There has also been significant rationalisation of sections of the component sector. Greater specialisation within firms in many cases led to job losses. A typical scenario would be the replacement of multiple lines using labour intensive methods with more automated and specialised production of a lower number of products. However, South African component suppliers have in many cases retained their flexible, low volume capacity in aftermarket production. In the component sector, where there have been declines in employment in 'traditional' suppliers, the rapid growth of exports has had a positive impact on employment especially in labour intensive sub-sectors such as automotive leather and wiring harnesses. But the problems in automotive leather over the last decade have adversely affected employment in a sub- sector that at its peak employed several thousand workers. The largest component export sector, catalytic converters, is highly capital intensive and generates relatively few jobs in relation to the huge values of exports being generated. The tyre sector has been extensively rationalised and employment has declined sharply.

It is important to note that the motor trade (servicing, distribution etc.) employs far more people than manufacturing. This has grown over the period, along with increasing car sales and a larger vehicle population. Lower vehicle prices partly as a result of trade liberalisation have also played a role.

5 - The transition to the Automotive Production and Development Programme

The 2007-2008 review of the MIDP, which led to its termination in 2012, and the subsequent establishment of the APDP in 2013, was shaped by three streams of government and broader stakeholder concern. The first related to the MIDP's potential challenge at the World Trade Organisation, with at least two national governments raising questions as to the status of the MIDP in respect

of South Africa's compliance with the WTO Agreement on Subsidies and Countervailing Measures. It was broadly accepted by all stakeholders that the MIDP was a potentially actionable subsidy, and that formal action against the MIDP was likely within the WTO unless its termination was announced and a more compliant policy framework created. Second, the distortions of the MIDP, which were principally created through the materials-inclusive calculation of export-based benefits, were of major concern to government, NUMSA and NAACAM. Low local content levels in exported vehicles were largely attributed to the ease of earning import credits through the export of 'peripheral' components such as catalytic converters. Correcting these types of unintended MIDP consequences was a major objective of the review process.

The brief of the 2007/2008 review was therefore to replace the MIDP with a WTO compliant development programme in 2013 that corrected the market and associated production distortions of the MIDP, and that was of similar overall benefit to the South African automotive industry. The 2007/2008 review was riven with tension from the outset. A number of the vehicle assemblers were in the process of planning the replacement of their locally manufactured models and demanded confirmation of government support prior to finalising the extent of their investments. This led government to provide verbal guarantees to the industry in respect of support levels post 2012. These guarantees were then used to influence the review process. The recommendations put forward by the review committee allowed for ongoing support for investment through the Productive Asset Allowance (now the Automotive Investment Scheme), replacing the domestic market only DFA with a market-neutral Volume Assembly Allowance (VAA), and implementing a

WTO-compliant, market-neutral Production Incentive in place of the export-oriented IRCC scheme.

The recommended architecture of the APDP was largely accepted by the industry, although intensive lobbying then took place to upwardly adjust the proposed levels of support within each of the support areas included within the new programme. As a result, significant changes were subsequently made to the programme. This included an increase in the VAA from a recommended 15% to 20%, the inclusion of certain standard materials in the calculation of value addition through domestic supply chains (e.g. platinum, leather and non-ferrous metals), and the declaration of certain component manufacturing sub- sectors as ‘vulnerable’ and therefore deserving of additional transitional support. The standard applied rate of the Automotive Investment Scheme also increased. The adjustments made were meant to ameliorate the costs associated with the transition of the industry from the MIDP to APDP operating environment, but they provided additional support in the form of Import Rebate Credit Certificates (now called Production Rebate Credit Certificates) that again make it far too easy to import vehicles into the South African market.

The APDP, which became operational in January 2013, is therefore only partly aligned with the factors that drove its establishment. While it is more aligned with the rules of the WTO, some of the distortions of the MIDP were not decisively dealt with (evident in the recognition of certain standard materials as local value addition), while the benefit afforded to the industry is potentially too generous, resulting in the continued expansion of vehicle imports which incur minimal duty, and limited pressure on vehicle assemblers to increase their local content levels.

6 - CONCLUSIONS AND POLICY IMPLICATIONS

In the early 1990s, the South African automotive sector was widely regarded as inefficient and uncompetitive, and ultimately dependent on heavy protection for its existence. South Africa was far from major markets and the small domestic market showed little sign of growth. In the face of the prospect of globalisation, the prognosis for the industry was poor.

The period 1995-2012 has been a phase of rapid change. This paper has sought to assess how policy has impacted on industry structure and how this process has been mediated by the strategic decision making of foreign and domestic firms. The long term performance indicators presented suggest a fairly positive development picture given the fact that the industry has been located in an underperforming economy. To date the costs of liberalisation have been quite low. The share of imports has grown sharply but there has been a very rapid increase in exports of both vehicles and components. Investment, including foreign investment has increased, albeit at a modest pace. Significant rationalisation has reduced the extreme proliferation of makes and models being assembled in very small, uneconomic volumes. While there has been some employment loss, the automotive sector has not fared badly compared to manufacturing as a whole. Vehicle prices have also declined in real terms although they remain higher than in most first world markets. Quality and productivity have improved significantly. So although the sector remains assisted, its structure is more robust, more competitive and more oriented to global markets.

However, policy has also produced distortions, encouraged uneconomic investments and led to unforeseen side effects. These impacts limit the gains that have been made and have caused complications in the transition process to the APDP. One of the most strik-

ing changes has been the rapid growth in exports and imports. The level of export assistance has been far too high, especially at the start of the MIDP. The orientation of the industry changed fundamentally away from its focus on the small domestic market. In fact it became 'ultra-export oriented. Growing exports facilitated specialisation and the achievement of economies of scale. But as yet this has had only a limited effect in terms of increasing 'economic' local content. More evident, especially in the early stages, was the expansion in exports of 'peripheral' components. The result was the growth of a large component export sector, which was not integrated with the low volume, low local content assembly industry supplying the domestic market. Another important effect of rapid export expansion was the increasing ability to rebate import duties, which added significantly to import pressure on the industry.

Greater international integration has led to growing foreign investment and ownership. The assembly sector is now completely foreign owned as is a large portion of the component sector. Foreign ownership has facilitated access to global networks. With few exceptions, domestically owned component firms neither possessed the technological capability to become independent first tier suppliers nor had ambitions in this direction. Many have been forced to reposition themselves as second tier suppliers, but may have gained from being reintegrated into the supply chain with much higher volumes.

The investments now being undertaken are generally on a larger scale than was the case previously and the industry is in a stable position with tariffs no longer declining under the APDP. Nevertheless, investments have in fact been quite modest in relation to most other major developing country vehicle producers. It is clear that there has been a substantial hedging of bets, for example, in the initial

reluctance to make major investments in the assembly sector. It is apparent too, in the somewhat footloose nature of investments in key component export sectors such as automotive leather and catalytic converters. The supply chain remains underdeveloped and heavily reliant on imports. Essentially, the evidence presented does not indicate that South Africa is en route to becoming a major new production hub or export platform for the global automotive industry.

There are a number of lessons for industrial policy:

1. ***The industry was liberalised too rapidly*** – A growth in imports was expected and was absolutely necessary to increase competition in the domestic market, as well as to allow for specialisation by domestic producers. However, it was too rapid and too extensive and this has undermined the prospects of the industry. This was not so much a problem of tariffs being lowered too far but [24]more the result of the ease with which import duties could be offset.
2. ***A value chain perspective is essential*** – In a producer driven value chain, the incentive structure needs to impact directly on producer firms. This was the case in the MIDP and the vehicle producers were in a position to orchestrate the rapid expansion of exports. It follows that in a buyer driven value chain like garments, it may make sense to target the large buyers, as opposed to the producers more directly.
3. ***Long term, credible incentives impact on firm behaviour*** - The establishment of a clear and transparent incentive structure encouraged multinational firms to make large long term investments. Before long, this formerly decrepit industry was exporting luxury cars to Japan. One lesson is that an appropriately designed incentive structure could be used to encourage more employment intensive growth in the manufacturing sector.

4. ***Policy changes should be predictable and gradual*** – Long term policy certainty is of extreme importance to investment decision making. Gradual policy changes are necessary because firms have fixed investments and cannot adjust overnight. The export incentives under the MIDP were too generous and led to a dramatic and sometimes costly shift from import substitution to an ultra-export orientation. This then also led to a more rapid increase in imports than expected.

5. ***Intervening to affect market outcomes has its place but requires a solid rationale*** – More prescriptive measures should have been used to encourage model rationalisation. However, disconnections between policy-induced and market-based outcomes can lead to adverse distortions and side-effects.

Finally, where does this leave the industry with regard to future policy support? Should government continue to support the industry and if so on what basis and for what reason? It is argued that the MIDP has cost the South African government (and hence taxpayers) many billions of rands. Why not reduce protection further and transfer support to more deserving sectors? After all, vehicles have been assembled in South Africa for nearly a century and the sector can hardly be characterised as an infant industry. Furthermore, there is little evidence to date that South Africa is becoming an export hub.

These questions must be answered and it is difficult to argue the case for ongoing high level support without providing an explanation of how greater dynamic comparative advantage might be developed and the gap reduced in relation to low cost rival producer countries. In this regard, three major points can be made.

1. The level of assistance provided the industry is frequently overstated and in any event was greatly reduced under the MIDP. The MIDP itself was a significant policy reform, with

its support levels and tariffs declining substantially from 1995 to 2012. The figures put out by National Treasury of budgetary assistance to the tune of R8 to R10 billion per annum are simply incorrect. They are based on South African Revenue Service (SARS) data on the import duties offset by exporting. However, if duties were not offset, imports would clearly be much lower. The ability to offset duties moreover reduced costs and increased imports. Consumers received access to lower cost vehicles and much greater choice. In fact our view is that the industry has been excessively liberalised in the sense that import credits were too easily earned under the MIDP. Making this more difficult would have curbed imports to some degree and been positive for automotive manufacturing and for the trade deficit. According to the Treasury calculus, this would amount to reduced support to the industry.

2. While the industry is not competitive with the lowest cost producing countries, it is much more efficiently structured and competitive than it used to be. This is evident in the more efficient industry structure, in productivity and quality improvements, and in the modernisation of plants. All this has been achieved with minimal dislocation in terms of major plant closures or employment losses.

The question remains as to what would enable the industry to catch up with the lowest cost producers. Historically, the Achilles heel of the South African industry has been its distance from major markets. South Africa has never constituted a viable 'automotive space' – which requires either a large domestic market, proximity to such a market or membership of a regional grouping that collectively constitutes such a market. Africa is now the world's fastest growing region and is also

characterised by extremely low rates of vehicle ownership. Sales are growing dramatically even though a high percentage of these new additions to the African vehicle population are used imports, mainly from Japan. Projections for economic growth and the increase in the size of the middle class point to massive expansion in vehicle ownership over the next few decades. The question is where will these vehicles be produced? With appropriate industrial policy arrangements together with ongoing regional integration it is possible to envisage the emergence of new poles of growth for the automotive industry alongside South Africa - in countries such as Nigeria, Kenya, Ethiopia and Egypt. Indeed, booming conditions in most the countries to the north means that South Africa has suddenly become well located as a production location for the last major untapped global market. If policy is appropriately managed there are considerable opportunities for long term growth.

The conditions for successful development of the automotive industry in developing countries remain the same as they always have been – a viable 'automotive space', ongoing improvements in competitiveness and the ability to attract investment and appropriate trade and other policies. With the booming market in the region, substantial efforts to improve competitiveness (both inside and outside the factory) and appropriate policies to regulate competition as well as our links to the region, the South African automotive industry has the potential for unprecedented growth over the next few decades. All the attributes are in place – good infrastructure, established firms and production capabilities, affordable wages - and now the prospect of a booming regional market. Government and industry stakeholders need to work towards achieving this objective.

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