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Localisation and Supply Chain Development in the SA Auto Industry

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The current state of the SA automotive supply chain

The production of the thousands of components which make up a vehicle comprise the heart of the automotive industry. All host country governments seek to promote greater levels of localisation of parts production. These efforts have a long history in South Africa (SA). The recently announced South African Automotive Masterplan (SAAM) sets ambitious targets in this respect, aiming to raise local content to 60% by 2035. This would represent a substantial increase on current levels of local content which are below 40%.

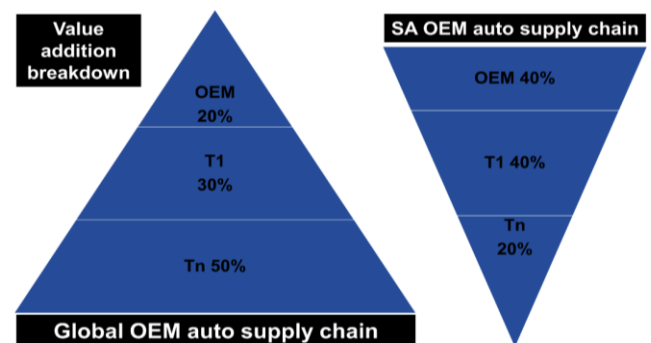
The SA automotive value chain is currently largely concentrated around OEMs (original equipment manufacturers i.e. vehicle assemblers) and their Tier 1 suppliers, with Tier 2 and 3 activity significantly underdeveloped. This is represented schematically in the figure below. Of the total value addition in the South African auto value chain, it is estimated that 40% is produced by the multinational OEMs, 40% by Tier 1 component manufacturers and only 20% by upstream firms. Such concentration also suggests the industry is



Source: <http://metalworkingnews.info/south-african-car-industry-economic-transformation-plan-revealed/>

structured like an island, with OEM and Tier 1 activity weakly connected to the rest of the domestic economy.

Figure 1: Value addition breakdown of global and South African automotive supply chains



Source: Barnes (2014)²

A large share of the components required for domestically assembled models are imported, and local content levels have been declining. This is depicted in the table below. In the period 2012 to 2015, South

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² Barnes, J. (2014) Localisation opportunities within OEM supply chains: What have we learnt from the AAS? Presentation at the National Localisation Indaba. International Convention Centre, Durban, 5 June 2014

African vehicle assembly sales substantially increased (from R75 billion in manufacturing sales to R137 billion), while auto component imports expanded by R44 billion, partly offsetting the assembly gains made.

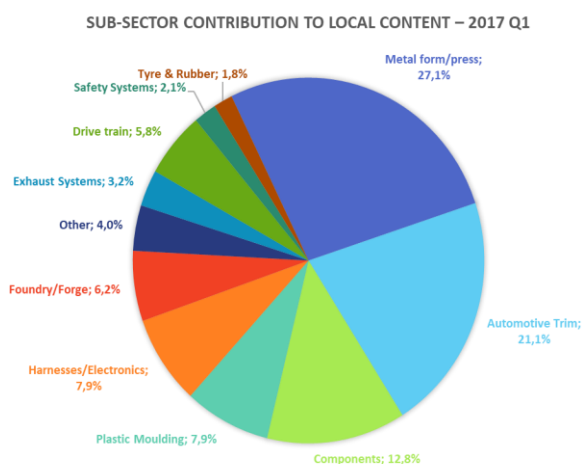
Table 1: South African OEM manufacturing sales and associated import and local content values (Rand billions)

Year	Vehicles	Local content	Imported content	Local content (%)
2012	R 75.3	R 35.2	R 40.1	46.6%
2013	R 92.5	R 37.9	R 54.6	40.9%
2014	R 113.5	R 47.1	R 66.4	41.5%
2015	R 136.7	R 52.9	R 83.8	38.7%
2012-15 % change	81.5%	50.3%	109%	-17.0%

Source: SARS (2012-2015)³

Structurally, one of the main challenges faced by the SA automotive value chain is the production/assembly of commodity type products that constitute declining shares of automotive value addition, e.g. metal pressings and plastic moulded products, as opposed to electronics, powertrain, telematics, and advanced safety products. In particular, out of the total local content feeding into the seven OEMs, 27% is derived from metal pressing activities, 21% from automotive trim (largely a sub-assembly activity), 13% from discrete components (windcreens, filters, etc.) and 8% each from plastic moulding and harness/electronics assembly. There is very limited powertrain and no telematics production.

Figure 2: Breakdown of local content within component supply to six of South Africa's seven OEMs, Jan-March 2017



Source: BMA Intelligent Systems (APDP Administration System), data for Quarter 1, 2017

Despite increasing imports, component exports have expanded rapidly, rising from R23 billion in 2005 to

R36.9 billion in 2012 and R49.6 billion in 2015. Such growth has been an outcome of export subsidies under the Motor Industry Development Programme (MIDP, to 2012) and continued support to automotive component manufacturers under the Automotive Production Development Programme (APDP). Policy efforts aimed at improving volumes and the efficiency of component suppliers, while supporting the specialisation and the rationalisation of production in the industry, appear to have had some impact based on the evidence presented below.

Table 2: Major component export categories, 1995-2015 (R million)

	1995	2005	2012	2015	% 2015 total
Total	3,316	23,000	36,867	49,641	100.0
Catalytic converters	389	9,935	16,347	20,326	40.9
Engine parts	102	1,000	2,875	3,941	7.9
Tyres	213	1,183	1,522	2,193	4.4
Automotive tooling	153	332	782	1,459	2.9
Engines	9	781	559	1,448	2.9
Radiators and parts	66	220	945	1,190	2.4
Transmission shafts/cranks	55	553	771	1,060	2.1
Stitched leather seat parts	1,019	2,693	1,719	993	2.0
Other	1,077	5,073	9,151	17,031	34.3

Source: Automotive Industry Export Council (2016) Automotive Export Manual 2016. Pretoria, AIEC.

However, the nature of the component industry's export expansion also raises concerns. Overall, the growth in component exports has only contributed to a limited extent to the realisation of economies of scale in the production of parts supplied to South African OEMs. By far the largest export product is catalytic converters. These large export contracts were arranged by OEMs. Under the MIDP, OEMs were able to offset import duties by exporting cars and components. The main driver in the export of catalytic converters was, therefore, the bid to offset import duties on parts (and vehicle) imports. So instead of promoting exports of parts in order to achieve economies of scale in the components which they were purchasing for their own assembly operations, the OEMs in many cases preferred to establish large scale component export programmes of products such as catalytic converters. These were for the most part disconnected from their own assembly operations. Another sub-sector that emerged in the early days of the MIDP was automotive leather. This labour-intensive, export based sector eventually went into decline with supply contracts being moved to Central Europe, and two large factories relocating to Lesotho. Such shifts

³ South African Revenue Service (2012, 2013, 2014, 2015). NAAMSA Customer Accounts

were influenced by decreasing policy support to highly export oriented sectors under the APDP and lower labour costs in neighbouring countries (i.e. Lesotho).

Overall, the expansion of component exports has been accompanied by a very low level of integration into the domestic industry, both in terms of supply to domestically assembled vehicles and in terms of local sourcing of sub-components.

Localisation, ownership, and supply chain development

Given its current structure, and the potential role it can play within the broader economy, the SA auto industry faces important challenges, which will have to be seriously addressed in the implementation of the 2035 Masterplan. Indeed, increasing local content and developing the supply chain have been set as major priorities.

Local content is currently below 40% and unless this can be raised, the prospects for industry growth will be severely compromised. The 60% target defined in the 2035 Masterplan is based on the recognition of substantial localisation opportunities, partly in high value added segments like drivetrain/powertrain, safety and telematics technology, but also more broadly. To seize such opportunities, multiple challenges will need to be overcome. These include SA's factor cost profile, logistics costs, government-administered service prices (e.g. electricity, water), and the need for technology and skills upgrading. Other key issues involve securing greater specialisation, to help firms secure economies of scale despite South Africa's comparatively small production volumes.

The effort to localise and deepen the existing auto chain must also be linked to the challenge of promoting industry transformation. The goal of raising the participation of black industrialists in the development of South Africa's automotive industry is receiving increasing attention and has generated a number of initiatives. However, the process has been slow.

Existing initiatives to promote development of the supply chain

The pressures to achieve transformation, localisation and supply chain development are increasing but much still needs to be done. Many initiatives have emerged, but the coordination between them needs to be significantly improved.

Presently, all major stakeholders operating in the industry are exploring localisation opportunities and have transformation programmes in place. The National

Association of Automobile Manufacturers of South Africa (NAAMSA) is currently running consultations on potential opportunities through the OEM Purchasing Council, and is testing the adoption of a black industrialists fund, and a transformation fund. The National Association of Automotive Component and Allied Manufacturers (NAACAM) has recently concluded a survey of BBBEE compliance amongst auto component suppliers, and is actively engaged in 'best practice education' via a black supplier development programme that is run jointly with the Automotive Supply Chain Competitiveness Initiative (ASCCI). NAACAM is also providing legal assistance to its members to assist in achieving compliance with the BBBEE scorecard. The ASCCI is endeavouring to target interventions aimed at building supplier capabilities, driving localisation and developing strategic insights into future opportunities for the value chain. All of these elements have transformation objectives. In Gauteng, the Automotive Industry Development Centre (AIDC) is promoting Automotive Incubation Centres linked to individual OEMs (the most advanced project being at Ford) and is also running a supplier development programme. In KZN, the Durban Automotive Cluster (DAC) is currently testing a supplier development model based on the formation of joint-ventures between established component manufacturers and emerging black suppliers.

Overall, numerous initiatives are in place, but they are not necessarily coordinated, and they face several challenges. These are mainly related to the financial feasibility of identified localisation opportunities and to technical barriers to localisation (inclusive of volumes, technology, global supply agreements, cost of testing, etc.). In addition, the uneven leverage of different stakeholders, pursuing diverse business strategies, does not facilitate the process, and further complicates the development of a common strategy for transformation.

Localisation, transformation and supply chain development are undoubtedly key priorities for the future of the South African auto industry. In this regard, the 2035 Masterplan sets targets that could potentially be achieved, but that will also certainly require a significant effort on behalf of all stakeholders to align business strategies with policy objectives. For localisation to be linked to supply chain development and transformation, support for skills development and the technological upgrading of local, black suppliers will be essential. In relation to black supplier development, ownership transactions, encouraging outsourcing to smaller suppliers and the establishment of joint-venture projects are all options worthy of further exploration. In

respect of government, the viability of stricter compliance criteria will have to be weighed against the industry's current multinational-dominated status. More effort to secure aligned policy implementation will also be required.

Localisation opportunities clearly exist, especially at the lower tiers of the chain, but a more serious assessment of how to realise them, and a solid commitment on behalf of the key drivers of the SA auto value chain, will be crucial to the realisation of these opportunities.