How is the South African State Promoting Investments that Increase Local Content in the Production of Automobiles?

A Critical Evaluation of Investment Promotion and Industrial Policy (1994-2014)

Mr Siyaduma Biniza

M.Com Graduand in Development Theory & Policy

University of the Witwatersrand

Supervisors: Prof Simon Roberts

Corporate Strategy and Industrial Development

Ms Sarah Meny-Gibert

Public Affairs Research Institute

Tel: +27(0) 12 315 5229

Email: sbiniza@gmail.com

siyaduma.biniza@students.wits.ac.za

Acknowledgements

I hereby acknowledge the Public Affairs Research Institute (PARI), Economic Research Southern Africa and the Department of Trade and Industry. This research would not have been possible without your academic, financial and personal support.

A special thanks goes to all the interviewees. I am grateful for the fact that you were able to set aside some time from your busy schedules to contribute towards this study. I certainly hope that some of the findings from this study may impact your industries positively as we develop "SA Inc.".

I also give special thanks to my supervisors who have been greatly insightful, patient and supportive throughout the research journey. Professor Simon Robert and Ms Sarah Meny-Gibert, your support and dedication has been indispensable in ensuring that I deliver quality research to meet my potential as a political economist. Thanks also goes to Dr Melanie Samson who ran the PARI Dissertation Programme which was essential in the development and theoretical rigour of this research study, your hard work has not gone unappreciated. I also want to thank Ms Nicole Tilson for your assistance with editing.

I also thank the Rethink Africa team, the National Treasury of South Africa and my family for your added support.

Special acknowledgement goes to Ms Nelisa Poni for your kind motivation and always seeing to it that I had snacks, water and comfort to assist me throughout this journey.

And I would not be much without the sacrifices and love I have received from my mother Ms Nobenela Biniza. I am forever indebted to you as the source of my strength, faith and self-belief. Ndiyabulele Tolokazi!

I dedicate this work to my mother.

And of course I would be nothing without my ancestors and uSomkhulu uQamata. Ndiyatharhuzisa nakuni ooTolo, ooDlangamadla, ooZulu, ooMchenge ndibulela ngazo zonke iintsikelelo.

Camagu!

Plagiarism Declaration

I, Siyaduma Biniza, declare that this research report is my own, unaided work.

This work is submitted in partial fulfilment of the requirements for the Master of Commerce in Development Theory and Policy degree at the University of the Witwatersrand, Johannesburg.

It has not, either in whole or in part, been submitted before for any degree or examination in this, or any other University.

Mr Siyaduma Biniza
29 February 2016

Contents

List of Tables

List of Figures

Glossary of Abbreviations

AIEC - Auto Industry Export Council
AIS - Automotive Investment Scheme
APDP - Automotive Production Development Plan
ASCCI - Automotive Supply Chain Competitiveness Initiative
B&M - Benchmarking and Manufacturing
BTI - Board of Trade and Industries
CCIG - Catalytic Converter Interest Group
CMEs - coordinated markets economies
the dti - Department of Trade and Industry
GATT - General Agreement on Trade and Tariffs
GVCs - global value-chains
IDBR - Inter-Departmental Business Register
IPAP - Industrial Policy Action Plan
IRCCs - import duty rebate credit certificates
ITAC - International Trade Administration Centre
LCP - Local Content Programme
LMEs - Liberal market economies
MBSA - Mercedes-Benz South Africa
MHCV-AIS - Medium and Heavy Commercial Vehicle AIS
MEIBC - Metal and Engineering Industries Bargaining Council
MIBCO - Motor Industry Bargaining Council
MIDC - Motor Industry Development Council
MIDP - Motor Industry Development Plan
MNCs - multinational corporations
MTEF - Medium-term Expenditure Framework
MTSF - Medium-term Strategic Framework
NAACAM - National Association of Automotive Component and Allied Manufacturers
NAAMSA - National Association of Automobile Manufacturers of South Africa
NUMSA - National Union of Metalworkers of South Africa
OEMs - original equipment manufacturers
SAPs - Structural Adjustment Programmes
SARS - South African Revenue Service
SATMC - South African Tyre Manufacturers Conference
SEZs - special economic zones
TSAM - Toyota South Africa Motors
UK - United Kingdom
VAMCOSA - Valve and Actuator Manufacturers Cluster of South Africa
VoC - Varieties of Capitalism
WTO - World Trade Organisation

Abstract

South Africa's industrial policy is fundamentally aimed at transforming the domestic economy into a labour-intensive growth path in order to create jobs (the dti, 2013a, p. 10). In pursuit of this aim the industrial policy takes a transversal approach to promote particular types of economic activity or particular economic sectors (the dti, 2013a, pp. 15-17; Zalk, 2014, p. 335). Using the case of the automotive sector, this study analyses the role played by the state and how institutional aspects of the industrial policy and investment promotion affected policymaking and the outcomes.

The findings were that, due to incoherent institutional support and informational asymmetry, industrial policy has supported export growth in spite of the continued dependence on imports; and did not support employment, because it was biased towards OEMs and did not differentiate between the different categories of components according to job-creation potential. Institutional aspects of industrial policy-making and implementation then – not the ownership power of multinational corporations – has entrenched unequal power relations within the automotive value-chain, which undermines the broader socio-economic goals of industrial policy. Hence, due to both the policy measures and the institutional design South Africa's industrial policy has not been oriented towards more labour-absorbing activities, especially in the impact on local components manufacturing.

The result has been growth in exports with limited integration of local producers into the global value-chains of multinational OEMs, except in the case of vertically integrated multinational component producers, at the expense of local value-addition and job-creation.

Chapter One: Introduction

Introduction

South Africa's automotive sector was established in the 1920s and, with concerted state support, the industry has grown and developed extensively over the last 94 years. In the discourse on industrial development and industrial policy, the automotive sector is seen as being attractive because its growth has a strong positive multiplier effect, or spillover effect, due the sector's backward and forward linkages. An often-cited example is that of the leather and hides industry which benefits from growth in the automotive sector as a result of its linkages through demand for leather and trim products used in motor vehicle interiors (Duncan, 1992a, p. 68; Black & Roberts, 2009, p. 221; Barnes & Black, 2013, p. 10). Other sectors that benefit from growth in automotives include logistics, finance, retail and marketing etc. (AIEC, 2013, p. 19). The automotive sector is therefore a strong candidate or target of industrial policy because its growth also generates growth to upstream and downstream industries linked to automotive value-chain.

South African industrial policy consists of various transversal and sector-specific policies and interventions as part of the Industrial Policy Action Plan (IPAP). Transversal policies offer support across sectors or for a particular aspect of manufacturing. This includes incentives such as tax deductions and rebates to encourage: plant and machinery upgrades (e.g. 12i tax incentive), research and development expenditure (e.g. 11d tax incentive), energy efficiency (e.g. S12L tax incentive), and exports (e.g. import rebate credit certificates and duty credit certificates) (the dti, 2013a, pp. 26-27). Firms can also apply for subsidies on capital equipment upgrade through the Manufacturing Competitiveness Enhancement Programme (the dti, 2013a, pp. 41-43). There are also sector specific interventions that are part of the Automotive Production Development Plan (APDP), which was preceded by the Motor Industry Development Plan (MIDP), including tariff protection under the special provisions of Chapter 98 in the Customs and Tariff Schedule, capital equipment and production subsidies such as the Automotive Investment Scheme and the Production Incentive (the dti, 2010, p. 55; the dti, 2013b, p. 39).

State support to industry and business is substantial and takes different forms beyond the abovementioned. It is difficult to calculate the total on- and off-budget support to industries, but the average annual on-budget incentives to business between FY2012/13 and FY2014/15 amounted to R5.42 billion per year and projected to be R6.08 billion between FY2015/16 and FY2017/18 (National Treasury, 2015a, pp. 597-601). And the latest available data on off-budget incentives such as foregone revenue from tax incentives and duty rebates amounted to R24 billion in FY2012/13 (National Treasury, 2015b, p. 134). But this excludes state support such as preferential procurement, sector support centres such as the Automotive Industry Development Centre and the Durban Automotive Cluster, and other support programmes. In light of the substantial estimated costs above and the further unknown costs associated with the quantum of state support, there is a need to evaluate the effectiveness and efficiency of the incentives in order to make recommendations for improvements where possible.

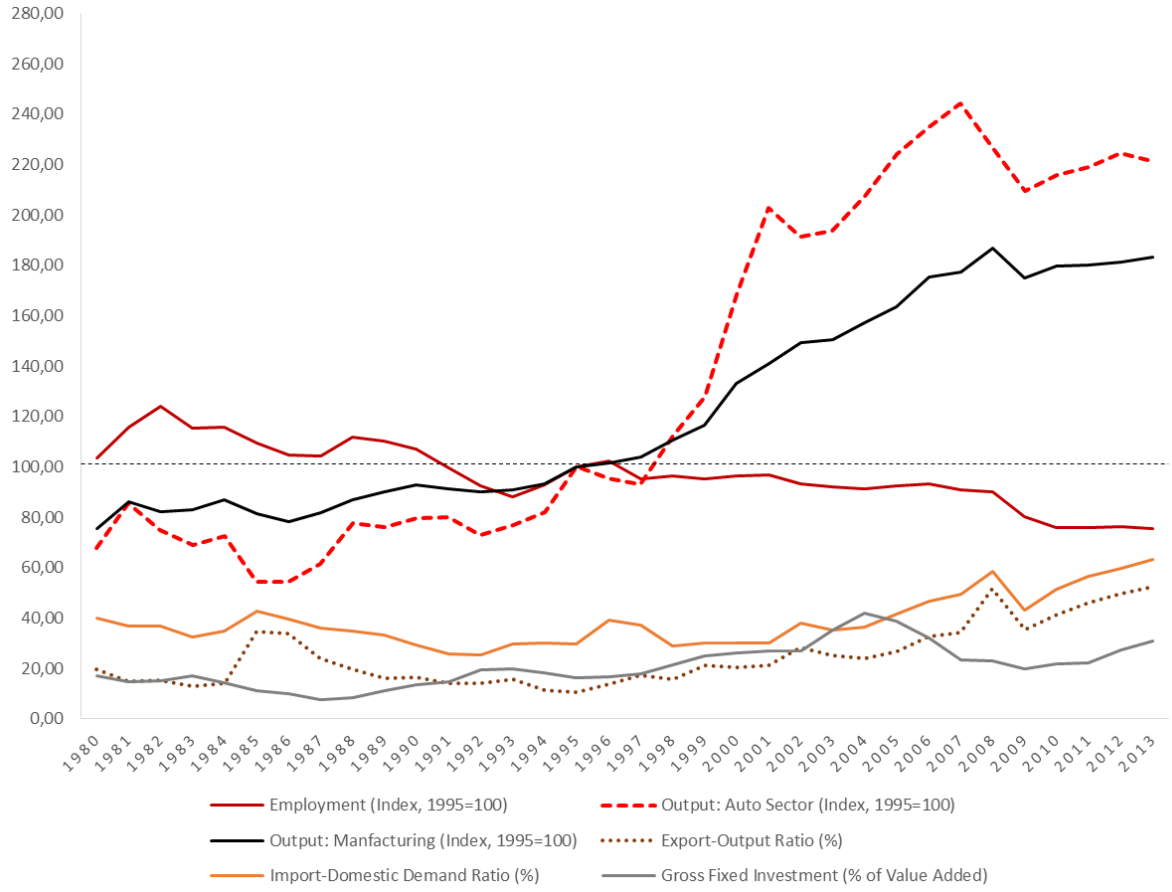
Through IPAP the state aims to transform the South African economy and set it on a more job-intensive growth path by supporting labour-intensive and higher value-added industries in order to reduce unemployment, poverty and inequality. Therefore, despite IPAP consisting of a broad range of interventions such as trade tariffs interventions, competition and regulatory policy, government subsidies and technical partnerships – the central focus is on job-creation (the dti, 2013a, p. 10). This creates a key criterion to evaluate effectiveness of industrial policy. Growth in output, investment and exports are other criteria to measure effectiveness of industrial policy as these are signs of improved productivity in local production and a source for foreign reserves and economic growth. However, growth should not be achieved at the expense of job-creation in order to achieve the central aim of South Africa's industrial policy.

Preliminary Assessment of the Automotive Sector Performance

The automotive sector output has grown considerably. Most notably, from about 1998, the automotive subsector's level of output grew significantly above the aggregate of the total manufacturing sector level of production (Figure 1 below). Despite the more than 200% increase in production, employment levels declined by a nett 25% since 1995 (Figure 1 below). This undermines the foregone introduction of the automotive

sector's contribution to job-creation and suggests that the automotive sector has been restructured toward more capital-intensive production.

Figure 1: Automotive Sector Trends (1980-2013)



(Author's Calculations & Depiction, Data Source: Quantec)

Investment as a share of domestic value added has grown modestly and slowly recovered from the 2007/08 slump. Nevertheless, investment as a percentage of domestic value added has declined by about 10% since 2004 (Figure 1 above). Other research has found that South African automotive firms have invested less than 6% of their sales revenues on average in the last decade (Barnes & Black, 2013, p. 24). This suggests that automotive firms' profits are being invested at a slower rate or, even worse, that when investment occurs it is in low value-added production. And even though slowing investment is a global trend, South Africa is in a worse position given its lower starting base.

Imports remained below 40% of domestic demand until 2005, even after the general trade tariff liberalisation from 1995 onwards (Figure 1 above). However, imports increased above 40% of domestic demand thereafter. Export growth has been highly correlated with growth in imports over the study period (91% correlation). Therefore the sector has had a persistent trade deficit because imports have grown along with increases in exports. This suggests that there has been limited, possibly declining, localisation hence the reduction in jobs despite considerable growth in output and exports. Imports penetration has therefore subverted the central aim of the state's industrial policy.

Thus, there are three discernible trends in the automotive sector over the study period. Firstly, employment has deteriorated over the study period despite considerable increases in output and exports, which suggests a restructuring of the sector towards more capital intensive production since the early 1990s. Secondly, despite outperforming the manufacturing production since 1998, the automotive sector has seen declining investment in recent years. Lastly, exports have increased but this has been met by an increased import penetration which suggests that localisation is a persistent challenge in the sector.

Problem Statement

In order to increase localisation, the state needs to promote investment and local sourcing of automotive components by motor vehicle manufacturers. This cannot be achieved through policy alone, and in fact depends on institutional aspects of investment promotion and the policy environment which together determine the political economy of industrial policy (Burke & Epstein, 2001, p. 3).

Institutional aspect of investment promotion arise from the formal and informal rules that govern the behaviour and decision-making of the relevant stakeholders such as original equipment manufacturers (OEMs), component producers, labour and the state itself through government departments and agencies involved in the development of the automotive sector. These institutional aspects form the institutional context which sets constraints on the shape and implementation of policy. Whilst on the other hand the policy environment, which consists of the formal contents of policy and enacted

laws, acts as a constraint that is set periodically or changed over time. Together these two elements interact to determine the political economy of industrial policy.

For example, firms may use the threat of divestment to bargain for greater state incentives or try to influence state officials who are constrained by fiscal norms such as the multi-year budgeting process under the Medium-term Expenditure Framework (MTEF) and the Medium-term Strategic Framework (MTSF). Despite being constrained by the MTEF and MTSF processes state officials may find ways to finance greater incentives through the annual planning process, reallocation of resources or using off-budget resources. Ultimately the state officials have a choice to make with respect to whether or not, and when, they may want to implement changes taking into account firms' lobbying. This is where the institutional aspects of investment promotion and the policy environment come into play resulting in the political economy of industrial policy and economic outcomes. Similarly, institutional aspects such as formal and informal rules on professional conduct and culture determine the investment patterns and performance of automotive firms (Duncan, 1992b). Therefore it is imperative to understand the state's engagement with automotive firms and how institutional factors of investment promotion and the policy environment affect policy-making and the outcomes.

However, a large part of the literature on the role of the state and the industrial policy in the automotive sector has been predominantly concerned with the formal contents of state policy and addressing shortcomings through policy-related recommendations, some of which were part of state-funded reviews of the industrial policy in 2006 (see Black, 2001; Flatters, 2005; Rustomjee & Hanival, 2008; Black & Roberts, 2009; Lamprecht, Rudansky-Klopper, & Strydom, 2011; Barnes & Black, 2013). Many previous studies overlook the institutional aspects which also contribute to the political economy of industrial policy. This is tantamount to implicitly assuming that policy alone or the political will to address shortcomings in policy will ultimately result in the desired outcomes.

The problem is not about the dichotomy between policy and the institutional aspects of development per se. Nor is it about the relationship between policy analysis and institutional analysis. Rather the problem, and focus of this study, is about policy-

making and implementation instead of an analysis of the formal contents of policy. Hence, in order to do this and contribute towards resolving the identified problem, this study undertakes an institutional analysis of the political economy of industrial policy as defined above.

The Research Question

Given that the critical challenge has been identified as inducing investment in stronger local production capabilities, this study is concerned with critically analysing the role played by the state in the development of the industry from 1994 until 2014. Therefore the study is primarily focused at responding to: how institutional aspects of the industrial policy and investment promotion affected policymaking and the outcomes; and what the role of the state has been in promoting investments that increase local content in the production of motor vehicles?

To answer these central questions the study focuses on institutions resulting from the social structures, social relations, power relations, and incentives which influence the formation and implementation of industrial policy and investment promotion; and the broader policy environment and its relation to the institutional context.

What follows is a discussion of the relevant literature and the methodology used to respond to the research question. This is followed by a presentation of the findings, a discussion of the policy implication and concluding remarks.

Chapter Two: Background and Literature Review

Background

Prior to the MIDP the state implemented a Local Content Programme (LCP) which was a set of local content requirements and high tariffs protection aimed at domestic producers in order to create jobs and reduce the automotive sector's dependence on imported parts (Barnes, 2013, p. 2). The South African state's justification for intervening in the manufacturing sector was to create jobs for the mass white unskilled and semi-skilled labour that had become a socioeconomic concern for the state based on evidence provided by the Board of Trade and Industries (BTI) in 1939 (Kooy & Robertson, 1966, p. 214).

The problem of white unemployment was partly caused by state involvement in mining and agriculture to establish a system of migrant labour which guaranteed cheap black labour for mining and led to extensive use of cheap coloured labour in agriculture (Kooy & Robertson, 1966, p. 214). The interest of white labour was reinforced through the use of a minimum protection tariff that was applied if the industry maintained "unsatisfactory labour conditions" - which meant more than just an unliveable wage and poor working conditions (Kooy & Robertson, 1966, p. 214). And most of the state support given to OEMs was on the mutual understanding that they would create jobs for white labour. In later years this narrow justification for the state intervention in the automotive sector was expanded with the growing concerns about the persistent trade deficit in the sector and its impact on foreign reserves.

The LCP was successful at creating jobs for white labour primarily. Even though in the latter stages of the LCP there was more extensive utilisation of coloured and black labour, the managerial and supervisory positions were still reserved for whites (Duncan, 1992b, p. 2). Employment had grown from about 9500 people in 1961 when LCP Phase I was implemented to 120 000 by 1982 during LCP Phase V (Dix, 1995, p. 29). However, the LCP did not succeed in reversing the trade deficit. As a result, by 1977 the BTI research's found that previous phases of the LCP had a limited impact on reducing the trade deficit and the BTI recommended increasing the minimum local content requirement to 66% during Phase IV of the LCP. However, unlike previous

phases of the LCP, the state did not define a time-frame for compliance with this local content requirement (Dix, 1995, p. 28; Barnes, 2013, p. 5).

The increased local content requirement was meant to serve a triple purpose. Firstly, the increased local content would lead to more job-creation for whites. Because, as OEMs increased their local content thereby increasing demand for some local components they would encourage more investment in local automotive components production. Secondly it was meant to reduce the trade deficit by encouraging localisation of components instead of importation. Thirdly, the increased local content was meant to lead to rationalisation as few OEMs would meet the requirements and some would exit thereby increasing the scale of production and efficiency of local production (Dix, 1995, p. 26). However these last two aims did not occur as envisaged.

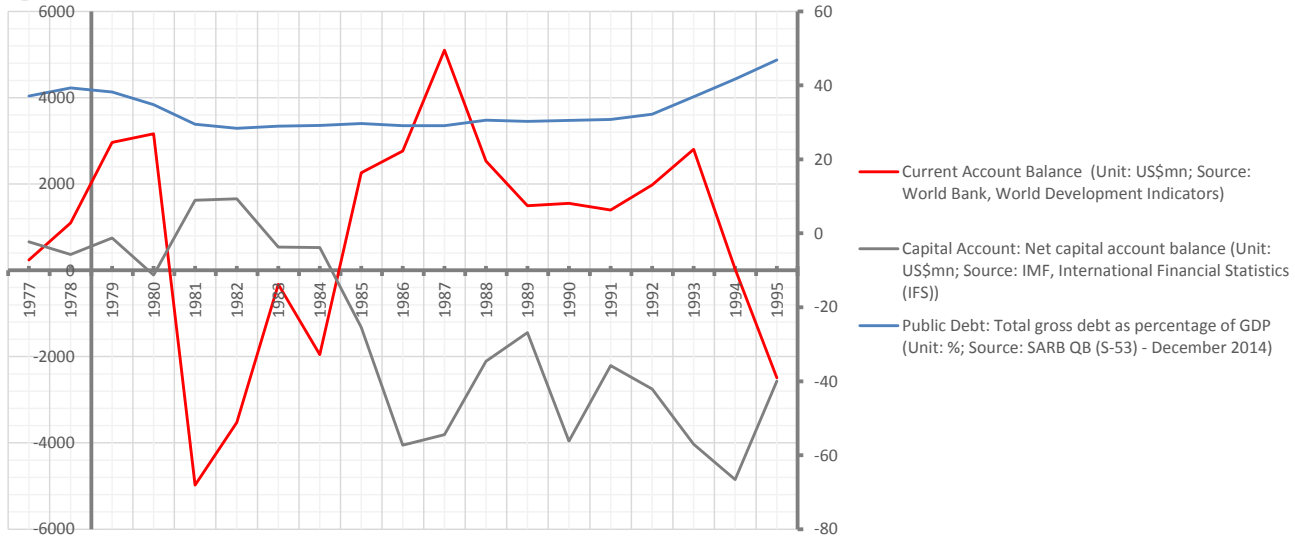
Dealing with Capital Constraints and the Challenges of ISI

In the late 1980s the state became aware of two negative impacts of the LCP. Firstly, the LCP led to market distortion because more OEMs sought to meet their local content requirements through local sourcing of heavy components as local content was measured by weight (Barnes, 2013, p. 5). This had the negative impact of incentivising investment in local production of heavy motor vehicle components which had little local value-added. Secondly, since OEMs were able to meet their local content requirement by sourcing heavy components locally, they increasingly met their demand for other light and higher-value-added components through importation which had a negative impact on foreign exchange and the balance of payments (Dix, 1995, pp. 34-36). Therefore, because of this, the LCP was unsuccessful in reducing the trade deficit and saving on foreign exchange. Moreover, it was realised that the LCP had placed high costs on local OEMs, most of which went to capital and equipment imports, which pushed up the cost of vehicles and deepened the trade deficit.

The state responded by changing the measure of local content from being weight-based to value-based as prompted by these last two outcomes. In addition to the measurement changes, the state allowed for exports to count as local content and increased the average import duty, and hence the level of protection, for automotive

components (Lamprecht, et al., 2011, p. 66). These were major changes in the state's position and industrial policy more generally which set the conditions for import-export complementation during the final stages of the LCP. Thus the state had gone from the understanding that the state directed development of the sector, to the state supporting the development of the sector. This was also partially due to the challenging and uncertain political and economic conditions caused by economic sanctions against South Africa and rising political violence against Apartheid in the mid-1980s, which led to a deterioration of the state's bargaining power.

Figure 2: Financial and Economic Indicators (1977-1994)



(Author's Depiction, Data Source: Quantec)

South Africa faced sanctions and major divestment in the mid- to late-1980s. This dried the country's access to foreign finance meaning the pressure on foreign reserves was even more challenging. And this meant that exports needed to be promoted more concertedly in order to finance the net capital outflows during this period. To some degree the promotion of exports was achieved as the state ran a current account surplus due to capital outflow from mid-1984 to 1994 (Figure 2 above). However, despite the wave of divestment by some local OEMs, there was no significant change, and later matters worsened, in terms of the proliferation of models. In 1960 there were 16 local OEMs were producing 24 models and by 1987 the remaining seven OEMs produced 20 models, which increased to 34 models by 1993 (Dix, 1995, p. 26; Pitot, 2010; Barnes, 2013, p. 7).

There are two reasons why the LCPs did not lead to rationalisation as had been intended. Firstly, every time manufacturers experienced negative market conditions they appealed for state support which was readily afforded (Dix, 1995, p. 33). This is not surprising given that researching the duration for needed state support and the point at which supported industries would be self-sufficient were not part of the BTI's mandate (Kooy & Robertson, 1966, p. 212). In addition, the LCPs undermined rationalisation because the LCP requirements disincentivised market exit. The capital equipment required by Phase V was so high that firms could not exit the market due to sunk costs and because they were overly invested (Dix, 1995, p. 34). Therefore, firms responded by increasing their investment in line with local content requirements of Phase V and VI. For example, the ratio of fixed to working capital increase from 20:80 in 1960 to about 37:63 in 1988 (Duncan, 1992a, pp. 63-64).

In addition to this, during the late 1980s and early 1990s OEMs introduced new models with progressively lower local content (Duncan, 1992a, p. 75) because a rebate facility established in Phase III of the LCP allowed lower local content on new models for a few years after their introduction. And OEMs focused on bolstering their interest position in the sector by investing in both internal capacity and vertical integration of some component production capacities. According to Duncan (1992a, p. 75) the firms responded in this way as a contingency to prepare for both export-orientated or import-substitution growth policies by the state because the political situation and policy stance was increasingly uncertain during this period. This move by OEMs was also in line with some of the developments in the global economy and the restructuring of local OEM production from national towards international arrangements which increased foreign ownership in the South African automotive sector.

South Africa's Reintegration into the Global Economy

By the time the MIDP was introduced the state had changed its approach to industrial policy dramatically. Historically the state would have responded by penalising non-compliance with local content requirements and reducing that firm's import rebate value; and by reducing tariff protection afforded to an industry in the case of "unsatisfactory labour conditions" (Kooy & Robertson, 1966, p. 214; Barnes, 2013, p.

3). However, by Phase VI of the LCP the state had an incentivising rather than punitive approach to its industrial policy.

The democratic era introduced various political and economic changes including the end of Apartheid and lifting of economic sanctions against South Africa. In 1995, South Africa signed the General Agreement on Trade and Tariffs (GATT) with strong commitments to reduce trade tariffs and the implementation of general trade liberalisation. In terms of industrial strategies, South Africa has followed the Australian "Button Plan" at the time of signing the GATT. This meant that the set of protective tariffs would progressively reduce to zero. Moreover, the industrial strategy went from focusing on demand-side interventions in the form of high tariffs to protect the domestic industry and disincentivise imports, to a system of supply-side interventions to promote exports and integrate the local industry into the global economy.

Under the MIDP the local content requirements were abolished, the tariff rate was progressively reduced, the state increased its support by offering finance through the Automotive Investment Scheme (AIS) and established a system of import-export complementation which allowed firms to claim import duty credits based on the value of their exports (Barnes & Black, 2013, pp. 3-4). The MIDP was also aimed at integrating the local automotive sector into the global economy following years of isolation due to sanctions under Apartheid.

The APDP picks up where the MIDP left off and is aimed at promoting rationalisation and localisation through similar policy tools as the MIDP. Due to budget-constraints, the state was forced to reduce its system of duty rebates to equal its regime of import duty protections (Lamprecht, et al., 2011, p. 66). This had a strong appeal since it reduced the cost of industrial policy and industrial development for the state in a context when public debt was rising (see Figure 2 above). The state continued using a system of duty rebates which offsets excise duties with customs duties under the MIDP and APDP. Thus, although there is continuity within the state, the state changed fundamentally from its previously racially-biased and state-directed import-substituting industrialisation strategy (supported through a protectionist tariff regime) to an export-orientated development strategy supported by a liberalised tariff regime.

Gap in the Literature

There has been limited analysis of how institutions in the South African automotive sector affect industrial policy and its outcomes, except in cases which involve the restructuring of labour demand as a result of policy changes (see Black, 2001; Masondo, 2003). And where there has been an explicit institutional analysis, the studies have been exclusively about the pre-MIDP period and mainly focused on corporate culture in relation to investment decision-making and management styles; instead of relating the institutions to industrial policy (see Duncan, 1992a; Duncan, 1992b). Other institutional analysis has been limited to structural and global value-chains (GVCs) analyses of transformation in the sector and automotive firms' sourcing decision as a way of explaining why industrial policy has been ineffective in increasing local content (see Barnes & Kaplinsky, 2000; Barnes & Morris, 2008; Barnes, 2013). Some studies have focused on a structural analysis of policy and recommend rationalising industrial policy as a means to overcome industrial policy coherence which has been cited as the primary challenge facing the state (Flatters, 2005, p. 17; Rustomjee & Hanival, 2008, p. 84).

Although some of these studies have considered the institutional aspects of industrial policy, the studies have not adequately interrogated the institutional aspects of the political economy of industrial policy. The emphasis has been on how institutions (primarily those related to OEMs) have undermined industrial policy due to the way in which incentives have been incoherently designed. The literature does not link institutions to actual policy-making nor has there been adequate analysis of how state institutions impact on industrial policy or how corporate strategy affects state institutions.

Elsewhere the literature is focused on comparative analysis of the policy choices and explains the choice of industrial policy focus in South Africa, which has been on supply-side inducement with little demand-side interventions since our trade liberalisation in 1995 (see Barnes & Black, 2011). By and large, the discourse is focused on the economic outcomes as a way of assessing shortcomings within the formal contents of policy and making policy-related recommendations, some of which were part of state-funded reviews of the industrial policy in 2006 (see Flatters, 2005; Rustomjee & Hanival, 2008; Black & Roberts, 2009; Barnes & Black, 2013). Nevertheless, this body of work

highlights three salient issues which point towards institutional aspects and coordination challenges as central factors that have hindered the development of the South African automotive sector.

Firstly there is the issue of the low-volume production of different vehicle models across all makes which has kept automotive production in a spiral of **low-volumes and high unit costs**; undermining specialisation and thus hindering the competitiveness of local production (Black, 2001, pp. 3, 6-7; Barnes & Black, 2011, p. 4; Lamprecht, et al., 2011, p. 68). Therefore, the choice of vehicle manufacturers (referred to as OEMs) to produce many different makes and models locally has locked local automotive production in a spiral of low volumes and high unit costs of production. The sector has not been able to reduce the unit costs of production through economies of scale associated with higher output volumes which also has an impact in terms of specialisation and competitiveness of local component producers. Moreover, this has hindered investment in the local components production and also increased competition from imports.

Secondly there is the issue of the **policy coherence**. The choice to liberalise the automotive industry by reducing the tariff protection has encouraged the global integration of the local industry, but also reduced the profits of the automotive firms due to limited domestic demand in the context of an internationally uncompetitive industry (Barnes & Black, 2013, p. 3). Moreover, given that South African component producers operate at inefficient scales of production, trade liberalisation has increased pressure from imports and possibly further entrenches the import-dependency of the sector (Barnes & Morris, 2008, pp. 8-9). Unlike the theoretical analysis that trade liberalisation leads to improved competitiveness of a local industry, the results of the trade liberalisation depend on the strategies of the multinational firms, the domestic market conditions and policy environment (Barnes & Black, 2013, p. 3).

So there are two issues here, firstly that trade liberalisation after 1994 was premature given the global competitiveness of the local industry. Secondly, that although the trade liberalisation has helped integrate the local industry into the global economy, the ease at which policy allowed for duty neutrality undermined the incentive to source

components locally thus further hindering development of the local automotive sector (Barnes & Black, 2011, p. 5; Barnes & Black, 2013, p. 34).

Thirdly, there is the issue of OEMs that had a **preference for importing** components or sourcing from multinational subsidiaries as opposed to investing in local component production (Barnes & Kaplinsky, 2000, pp. 802-804; Black, 2001, p. 11; Barnes & Black, 2011, p. 5). As highlighted above, because of the ease at which firms could achieve duty neutrality, the literature points to the fact that the MIDP import-export complementation (gaining duty credits for exports in order to finance imports) made importing components "easier than increasing local content in low volume locally assembled vehicles" for OEMs (Black, 2001, p. 11).

However it is unclear whether it was the **incoherencies of the MIDP policy or the inefficient scales of production** that led firms to import components as opposed to investing in local production. Nevertheless, these **both reinforce the low investment** in local components production. Therefore the sector continues to have a trade deficit despite considerable increases in the exports because OEMs have decided to meet their increased component demands through imports as opposed to local sourcing of components under the export-import complementation of the MIDP (Barnes & Black, 2013, p. 11).

The abovementioned developments and economic outcomes have been inimical to industrial development and the main objective of state intervention and industrial policy – which is to promote economic growth and create jobs. This means the nature of the exports and imports really matters; especially the extent to which more labour intensive components were being imported rather than being incorporated into local production. Thus it is imperative to examine the nature of the exports and the reasons behind low investment.

The foregone overview of the body of literature highlights the importance of institutional aspects and coordination challenges which have hindered the development of the South African automotive sector. This study argues that general shortcomings and failures to attain desired outcomes can be caused by incoherent policy design and, or, institutional factors in policy-making and implementation such

as poor state capacity or inimical corporate strategy. Economic outcomes also depend on the institutional aspects guiding the decisions of the relevant stakeholder which are constrained by the policy environment. In other words, one can study various iterations of the industrial policy and assess the outcomes by conjecturing on how the state influenced firms' decision-making through the formal contents of policy and the impact of affected policy changes. But a richer analysis would involve unpacking how and why the policy changes happened in the first place.

Therefore there is an epistemological gap because the strong focus on the contents of policy in the literature ignores the impact of the relevant institutions on the economic outcomes thereby implicitly assuming that policy alone or political-will determines outcomes of industrial policy. Thus it is important to analyse the institutional aspects of the political economy of industrial policy-making and implementation in order to understanding and resolve some of the problems faced; and propose tenable recommendations. This is what this study aims to offer.

Throughout the foregone discussion there is a clear, and sometimes implicit, understanding that the state has had an important role in the development of the automotive sector – and industrial development more generally. This is true despite the sometimes inimical outcomes that have resulted from the relation between industrial policy and corporate strategy. To further situate this research the study begins with a broader overview of the literature on the role of the state in economic development before analysing the literature on the relationship between industrial policy and corporate strategy.

Literature Review

For more than half a century, the focus of development economics has been on how the state can assist or direct economic growth. Although most economists see this as the central aim of the state, different economic schools emphasise different contributing factors and have maintained influence over different periods and geographic regions. Changes in the global economic environment have also affected the development of the discourse on the role of the state in development. The globalisation of capitalism and the rising dominance of firms influenced a shift in the

focus of the discourse from state-centred approaches to more firm-centred approaches. Nevertheless, the result of these changes have highlighted the importance of institutions and coordinating industrial policy with corporate strategy as the main determinants of economic outcomes.

Mainstream Thinking: State-Supported Growth and Development

In the period after the Great Depression of the 1930s until the late 1970s, the dominant mainstream economic views were informed by Keynesian economics. Keynesians emphasised the importance of aggregate demand as the determinant of the rate of savings and investment in the economy. For Keynes the state played an important role during economic downturn, or weak aggregate demand, because the state could boost aggregate demand by increasing public spending thereby reviving the economy (Keynes, 1936, p. 98; Greenwald & Stiglitz, 1987, pp. 131-132). This differed markedly from the neoliberal economics informing the Washington Consensus and post-Washington Consensus schools. These schools informed the Bretton Woods institutions such as the World Bank and International Monetary Fund that promoted austerity budgets and constrained state intervention from the 1980s onwards (Epstein & Heintz, 2006, p. 10; Fine, 2006). Therefore Keynesians promoted state-led models of economic growth and development whilst the Washington Consensus school of thought promoted market-led models of growth.

Throughout this period, policy-makers in Washington preoccupied themselves with the "right set of policies" that the state ought to adopt in order to assist economic development in the context of market failure (Adam & Dercon, 2009, p. 175). As such, state intervention was seen as a response to market failure. The Washington Consensus blamed market failure on excessive state intervention and prescribed various measures which were meant to resolve market failure by limiting state intervention as part of the Structural Adjustment Programmes (SAPs). Following the poor performance of the SAPs, the post-Washington Consensus had moved from blaming market failure on state intervention. Instead, the post-Washington Consensus blamed market failure on state failure, which justified the bureaucratic reforms (Saad-Filho, 2010, pp. 6-7). Post-Washington Consensus reforms were geared at institutional

restructuring through the introduction of new public management and "good governance" principles like accountability, democratic governance and transparency.

The post-Washington Consensus analysis of state failure or state "mismanagement" was founded on a Weberian conception of the state as a rational-bureaucratic actor in pursuit of public goods. The post-Washington Consensus school measured state 'strength' according to how effectively the state provided public goods to its citizens. Good governance principles were therefore prescribed as a remedy to resolve state failure, which was also taken as a resolution to market failures (Saad-Filho, 2010, p. 12).

Heterodox Thinking: State-Directed Growth and Development

The aforementioned mainstream economics schools stand opposed to structuralist and developmental state theory schools of economic thinking which had varying influence across different periods and geographic regions; and whose focus was explicitly politics or political economy (Adam & Dercon, 2009, p. 175; Fine, 2013). From the late 1940s, through their work for the United Nation's Economic Commission for Latin America, structural economists Celso Furtado and Raúl Prebisch highlighted the unequal terms of trade, divergence in income, and structural imbalance between core (former metropolis states) and peripheral states (former colonies).

Structural economists argue that numerous underdeveloped countries, especially post-colonial countries in Latin America and Africa, were facing developmental problems related to their colonial experience and unequal integration into the global economy. The argument is that peripheral countries' development was hindered by structural factors such as the periphery's dependence on primary commodity exports in order to import higher value-added industrial goods from core countries, which undermines industrialisation and economic self-determination in the periphery (Hunt, 1989). Various empirical studies have found that primary commodities are also characterised by volatile prices and lower income elasticity of demand which are other structural disadvantages facing peripheral countries (Todaro, 1996). So the structural school focuses is on how the distribution of power and the global political economy structure inhibited the economic growth and development of post-colonial countries (see Hirschman, 1981).

Structuralists argued that post-colonial or peripheral countries needed to focus on import-substituting industrialisation as a means for structural economic change and development. They saw industrialisation and technical upgrading as crucial to economic restructuring in order to shift the position of peripheral states to the semi-periphery. Industrialisation allowed higher value-added production and breaking of the dependency to core countries; resulting in better terms of trade, higher national income, economic growth and greater self-determination. Therefore economic planning and state intervention were required to avoid inimical trends inherent in the process of import-substituting industrialisation such as balance of payment problems, sustained underemployment and poor income distribution (Szmrecsányi, 2005, pp. 691-692; Bielschowsky, 2006, pp. 8-9).

The developmental state school however focused on explaining the successful industrialisation of what became popularly known as the 'Asian Miracle' states or Newly Industrialised Countries of South East Asia. The developmental state theory is often traced back to the seminal works of Chalmers Johnson on Japan during the late 1980s, but some of the literature predates Chalmers' work. Developmental state theorists were concerned with how the state could implement a strategy of targeted interventions in the economy, as constituted by industrial policy, and what the state needed to achieve the objectives of industrial policy (Fine, 2013, pp. 2-3).

The developmental state theory asserted a list of essential characteristics including: a strong politically-willed and technocratic elite that could intervene in the market and coordinate private economic interests in favour of national development goals, a civil society that could be subjugated, and a technocratic bureaucracy that can design and implement policies successfully (Gainsborough, 2009, pp. 1318-1319).

The list of prescribed characteristics requires a certain level of state autonomy from private economic interests. However the developmental state theorists argued that the state should not just seek autonomy from the private sector and civil society. Instead, the state needed to exercise "embedded autonomy" thereby harnessing a mutually beneficial relationship between private and public sectors to ensure development (Meyns & Musamba, 2010, p. 13). The idea of embedded autonomy emphasises the

importance of a strong state that can insulate itself against private economic interest in order to promote economic growth in favour of a national development project (Evans, 1995, p. 50). Therefore the idea of embedded autonomy asserts the necessity of interconnectedness between the state and private sector to ensure a two-way flow of ideas and learning that benefits both the state and private sector; and ultimately civil society through the provision of public goods[1]. Moreover, the relationship between the state and private sector should be such that the state can insulate its nationalist interests (Meyns & Musamba, 2010, pp. 13-15).

Methodologically, both the Keynesian and neoliberal economic schools employ deductive methodologies. However, the developmental state theory and structural economics are more eclectic and employ inductive methodology. The development of these discourses shows the changing and diverse views on the role of the state which have gradually moved from state interventionism, then "*anti-state-interventionism*", and finally towards *effective* state interventionism. By the early 1990s the discourse had become less about the appropriate role of the state and more about the state's ability to perform the role of either supporting economic growth or directing it. And related to this shift, great debate has been sparked by questions about how developments in global capitalism have affected the state role in development and how a country's political economy institutions affect economic growth.

A Nationalist State and Global Capitalism

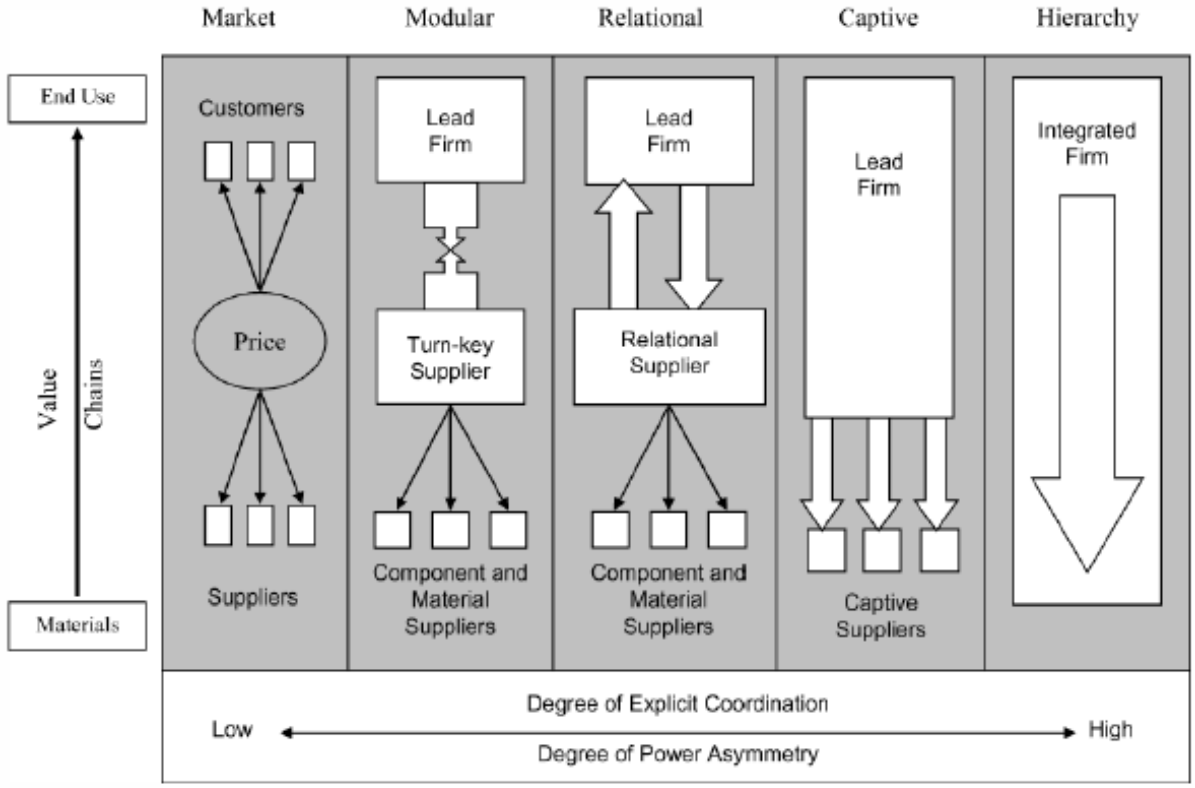
The globalisation of capitalism has influenced the emergence of the global value-chains and shifted the focus of economists away from the state towards firms. Literature on GVCs emphasises the fact that many firms have become internationalised and that industrial production no longer occurs within one country. GVCs consist of the entire process of production from the raw material to end product and may be contained within one firm or spread across different firms (Gereffi & Fernandez-Stark, 2011, p. 4). In the case of a multi-firm GVC, a unique governance structure emerged

[1] According to Gainsborough (2009, p. 1321) this is what underlies the distinction between 'weak' and 'failed' developmental states. This therefore gives the basis for grading developmental states according to how they are effective in designing and implementing policies for economic development as a means for providing the public goods which include public services and opportunities to earn an income.

characterised by a lead firm and follower firms with have varying degrees of vertical integration (Figure 3 below).

Lead firms are usually closer to the end product and focus strongly on design and marketing of the final product; whilst the follower firms focus on repetitive productive tasks based on lead firms' designs and intellectual property (Kaplinsky, 2000, p. 128; Gereffi & Fernandez-Stark, 2011, p. 10). Through varying degrees of vertical integration the lead firm may use suppliers of turnkey inputs, or relational suppliers which produce inputs according to the lead firm's specifications, or captive suppliers which only supply the lead firm, or even fully integrated suppliers that are subsidiaries of the lead firm (Figure 3 below).

Figure 3: Five Global Value-Chain Governance Types



(Source: Gereffi & Fernandez-Stark, 2011, p. 11)

GVCs have resulted in an asymmetrical balance of power which tends to favour lead firms and the development of follower firms often depends on the lead firms it supplies. Therefore industrial policy will almost always benefit lead firms more than it does follower firms, and it has to be so given that follower firms depend on the lead

firms. Therefore to develop follower firms the state should direct its effects to developing lead firms which has a knock-on effect of developing follower firms through the supply demands from lead firms. However, given that lead firms can source inputs internationally depending on the location of follower firms within their GVC, lead firms' sourcing decisions often undermine industrial policy aimed at developing follower firms if there are no policy control mechanisms to discourage foreign sourcing of inputs.

In addition, GVCs diminish the possible impact of industrial policy and the means for technological upgrading of follower firms. Firms upgrade by achieving the ability to supply multinational corporations or by accessing infrastructure, expertise and capacity necessary to establish a production relationship with lead firms. On the other hand, firms also upgrade by participating in different value-chain activities with higher value-added (Kaplinsky, 2000, p. 127). This undermines industrial policy aimed at follower firms because there is little feedback from follower firms' production on what production processes would lead to upgrading since the only feedback is based on lead firms' demands. Given the dependence of follower firms upon lead firms, technological upgrading of follower firms depends on the supply demands of lead firms. Therefore industrial policy needs to support research and development by lead firms, but this doesn't guarantee technical upgrading for local follower firms because that depends on whether lead firms decide to source inputs locally or not. And this means that industrial policy unfairly benefits multinational corporations because the state directly or indirectly subsidises intellectual property investment by multinational corporations.

The most beneficial industrial policy response for a developing country's economy is to establish "local champions" which will enter the global economy as lead firms and establish their own GVCs. But the prospects of doing so are slim for most developing countries since developing countries often provide the labour and raw materials, whilst developed countries usually focus on design and marketing (Gereffi & Fernandez-Stark, 2011, p. 7). This structural dynamic of GVC firm relations makes it difficult for follower firms to upgrade to high value-added activities and determines the relative gains amongst countries (Kaplinsky, 2000, p. 127).

Institutional Political Economy

Some strands of the developmental state theory school discussed above fall within a broader category of the Varieties of Capitalism (VoC) literature which has sparked much debate in institutional political economy. The VoC approach emphasises that capitalism has taken on various forms depending on the society and its institutional make-up. The main thrust of this theoretical strand is that institutions are instrumental in determining the performance of capitalism (Adam & Dercon, 2009, pp. 174-175).

Earlier variations of the VoC literature focused on the institutional make-up of the state to explain its capacity to implement economic policies aimed at industrial development, which ostensibly influenced the developmental state literature. Although this state-centred approach was crucial in placing the state as the main actor, it has been criticised for understating the role and influence of non-state actors and their corresponding impact on the society's institutional make-up. This resulted in the emergence of a society-centred analysis which highlighted that non-state actors influenced policy through individual interest articulation or through lobbying as members of associations or trade unions in the case of labour (Kang, 2006, pp. 4-5).

Noting changes in the global economy and the growing influence of firms, the VoC shifted focus towards firm-centred analysis. It is understood that individual firms' behaviour aggregates into "national economic performance" (Hall & Gingerich, 2004, p. 7). In this view of the VoC, the main challenge of firms is coordination. The institutional make-up of the economy is defined by the interaction of firms, which can be market-orientated or strategic interaction, and the overall market conditions that are either liberal or coordinated. Liberal market economies (LMEs) are characterised by greater deregulation, asset fluidity, competitive inter-firm relations and the operation of supply and demand dynamics moderated through the price mechanism. Whereas coordinated markets economies (CMEs) are characterised by a greater reliance on non-market interactions, strategic relations, cooperation and credible commitments which often need to be institutionally supported (Kang, 2006, p. 3). The VoC literature asserts that, in a LME with little support for credible commitments, relations amongst firms and other actors will be coordinated by competitive market interactions; whereas in a CME with support for credible commitments the relations will be coordinated by strategic interactions (Hall & Gingerich, 2004, p. 8).

The literature uses the examples of the United States and Germany to explicate the difference between a CME and LME, and firms' interaction and coordination. The United States is argued as a typical LME with weak trade unions and greater asset fluidity, therefore managers are more sensitive to current profitability because equity markets are public information and firms compete and access finance based on their market valuation. In addition, because labour markets are fluid, workers find the incentive to invest in their own upskilling and professional development in order to compete for and secure work. And managers have the prerogative to hire and fire at will, prefer labour with general skills due to asset fluidity, and spend less on training. Relations between management and labour are competitive and contractually driven. On the other hand, Germany is argued as a typical CME with strong trade unions and firms invested in specific assets. In addition, because firms are members of influential associations and there is a greater firm interconnectedness. Managers are less sensitive to current profitability because their membership to various networks gives them access to greater market information and access to finance based on their connectedness and reputation (Hall & Gingerich, 2004, pp. 8-9).

In addition there are various arguments as to how institutions affect economic outcomes. For the VoC, a shock resulting in declining returns in a CME will lead owners of movable assets to reinvest elsewhere whilst owners of immovable assets will be compelled to lobby for the current productive activities they are invested in. Whereas, in a LME, the response to a decline in returns will be to shift assets towards other productive activities. And the state will rely on market mechanisms such as adjusting prices and wages to adjust to the shock; leading to greater inequality which is likely to result in 'class struggle' in the form industrial action (Hall & Gingerich, 2004, p. 33). What matters is the dynamic response and the relations between firms which determine the economic outcomes.

There have been various critiques of the VoC literature. Firstly it has been criticised for lacking variety because most countries do not completely or strictly fit the characterisation as an LME or CME (Kang, 2006, pp. 11-12). Secondly, what can be said of hybrid states which are best characterised as a mixture of LME and CME? Lastly, the predominantly firm-centred approach of the contemporary VoC discourse places pre-

eminence on the firm as the key agent of change in the economy, completely overlooking the power of the state and labour. And state- and society-centred approaches also understated the role of firms in economic coordination (Kang, 2006, p. 10). However, because the VoC literature emphasises coordination, the literature provides invaluable insights regarding the dynamic aspects of industrial policy-making and implementation. The VoC insight that **economic policy challenges are challenges of coordinating actors** is crucial. This is relevant for South Africa's industrial policy which is essentially challenged by the coordination of key stakeholders around a certain desired policy outcome.

The VoC literature uses a very broad definition of institutions as any formal or informal man-made rules that organise interactions and exchange. This makes it challenging to understand what exactly institutions are given this broad definition. Nevertheless, the VoC literature uses three frameworks for understanding institutions, namely that: **institutions determine social relations** by establishing a set of norms or rules governing social behaviour; secondly that **institutions are derived from the power given to certain actors by virtue of organisational hierarchical hegemony**; and lastly that **institutions arise from a complex set of incentives to which agents respond** (Hall & Soskice, 2001, p. 5).

Contribution of this Study

The objective of this study is to understand how specific institutions have impacted the economic outcomes and performance of the state's attempts to promote investment and increase local production in the automotive sector through its industrial policy. In understanding institutions the research draws from the VoC literature discussed above. By so doing the study contributes a vital perspective in the body of literature on the role of the South African state in industrial development.

In addition this study seeks to examine the coherence of the automotive sector industrial policy in relation to the broader policy environment and in relation to the institutional context. This is necessary to provide a deeper evaluation of the industrial policy that is sensitive to the coordination problems facing the state. Moreover, this is

necessary to understand certain outcomes of the nexus of industrial policy and corporate strategy.

Lastly, the study was undertaken as the state implements its new phase in the automotive sector's industrial policy which started in 2013. This allows the study to critically reflect on the previous period, make an assessment of the changes made in the current period and conjecture on the outlook given the current conditions.

Chapter Three: Methodology and Method

Methodology

This study takes on methodological holism as its theoretical perspective in answering its key questions. The central argument is built on the premise that structures are preeminent over agents, but not necessarily excluding the impact of the agents on the structure (Milonakis & Fine, 2009, p. 13). Therefore the economy is made of institutions and social structures that define social relations prescribing the way individuals behave, and those institutions and structures are also created and affected by individuals.

Institutions are sets of formal and informal rules defining the social relations amongst people, whilst organisations are social structures that administer these rules and react to needs (Goetz, 2006, p. 71). In the context of the economy, examples of institutions and social structures could be: a tariff rate policy and the South African Revenue Service (SARS) which exercises tariff rules its Customs; or principles of solidarity in the form of collective action and trade unions[2]. The inquiry into the role of the state in the development of the South African automotive sector is informed by this theoretical foundation.

In the discussion, however, this is contrasted with some of the VoC approaches founded on methodological individualism, which emphasises the pre-eminence of the agent over the structure in defining society and human behaviour; making the structure, such as society, an aggregation of individuals (see Milonakis & Fine, 2009, p. 109).

Method

The research examines the institutional political economy of industrial policy within the automotive sector by specifically focusing on labour, OEMs, automotive component producers, the Department of Trade and Industry (the dti) which administers the automotive sector's industrial policy, and one state agency involved in

[2] See Gernetzky, 2014. "Seven of COSATU's Affiliates Threaten to Leave Federation over NUMSA Expulsion", *Business Day*, 27 November 2014.

industrial policy at various levels. This is done through primary and secondary research. The primary research involved unstructured and structured interviews with representatives from organised labour, automotive firms, government agencies and departments, academics, and consultants working on the sector. The secondary research involved analysis of the literature, government policy documents and performance reports.

Context of the Research Study

The study takes place within the Republic of South Africa, specifically in Gauteng, Eastern Cape and KwaZulu Natal. And the study is limited to the analysis of passenger and light commercial vehicle segments of the automotive value-chain, which excludes medium and heavy commercial vehicles since there has been little focus on this segment in terms of industrial policy until 2014 with the introduction of the Medium and Heavy Commercial Vehicle AIS (MHCV-AIS)[3].

Interviewees of the study are representatives from: the dti, OEMs, component producers from top-six exported component categories, the National Union of Metalworkers of South Africa (NUMSA) which represent most of the labour force employed by OEMs, sector improvement and benchmarking clubs, the National Association of Automobile Manufacturers of South Africa (NAAMSA), academia and civil servants. This sample of representatives from all the key stakeholders allows for a thorough and critical analysis of the institutions of the political economy of industrial policy in the automotive sector.

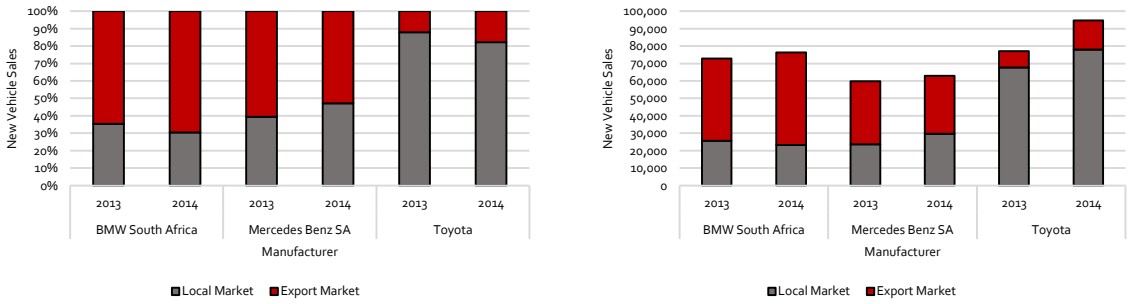
OEMs

The OEMs below have been chosen because the firms have diverse characteristics and target markets as indicated by the disaggregated data on new vehicle sales over the past two years. Toyota South Africa Motors (TSAM) has high local market penetration in passenger vehicles and yet has almost equal distribution between export and domestic market sales for light commercial vehicles (Figures 4&5 below). TSAM is also mainly focused on the lower income consumers. On the other hand, Mercedes-Benz

[3] See Kolver, 2014. "Davies Approves MHCV-AIS Guidelines", *Engineering News*, 24 November 2014.

South Africa (MBSA) produces for the higher income consumers and MBSA is export-focused. Both OEMs produced above 50 000 units in the past two years (Figure 4 below).

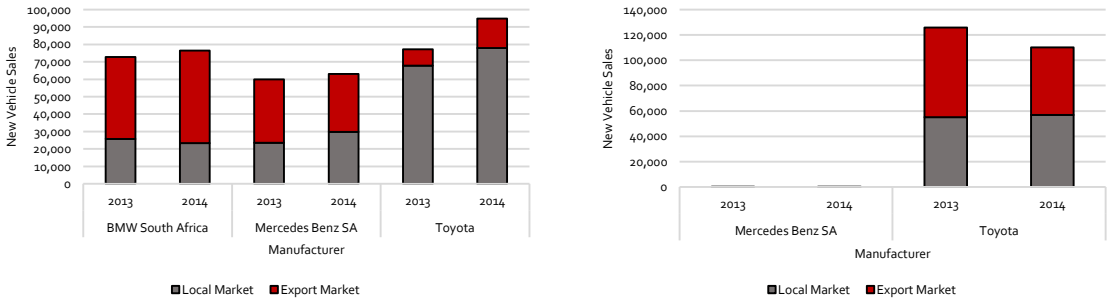
Figure 4: New Passenger Vehicle Import/Export Numbers (Relative Share/Units)



(Author's Calculations, Data Source: NAAMSA, 2013/14a)

MBSA produces negligible volumes of LCVs exclusively for the domestic market whilst TSAM produces a substantial volume for bother domestic and export markets (Figure 5 below). This sample allows for an interrogation of the common argument that there hasn't been significant investment in local component production because local producers are uncompetitive and cannot meet global standards and consumer demands.

Figure 5: New LCV Import/Export Numbers (Relative Share/Units)



(Author's Calculations, Data Source: NAAMSA, 2013/14a)

In addition, in terms of ownership, these companies show the full spectrum of ownership that has also changed over time. MBSA used to be owned under a joint venture between Daimler AG and Volkskas Bank, from 1988 until 1995, and was then wholly-owned by Daimler AG with headquarters in Germany (Barnes, 2013, p. 9).

Meanwhile TSAM went from 100% local-ownership to being wholly-owned by Toyota Motor Corporation with headquarter in Japan through its holding company Toyota South Africa (Barnes, 2013, p. 9; TSAM, 2013, p. 4).

This allows for a thorough analysis of the true impact of the state's investment incentives on a firm that has had a long-standing capital structure. And given the changed structure of capital in TSAM and MBSA, it would be useful to examine the role played by the state – if any – in the sales of assets to foreign investors. The study only analyses two of the seven OEMs with productive capacity in South Africa. But this is not an insurmountable shortcoming because the study covers both German and Japanese producers which are the currently predominant influences in the automotive sector. The predominant influences change slowly over time depending on the dominance of certain sources of foreign capital (Duncan, 1992b, p. 7).

Component Producers

This study considers component manufacturers producing catalytic converters, engine parts, stitched leather parts, transmission shafts, and automotive tooling. This group of components has been chosen because it represents over 50% of the automotive component exports, and they are amongst the top ten component imports accounting for over 30% of all component imports (see Table 1 and Table 2 Below). In addition, this grouping includes categories of components that are predominantly imported such as automotive tooling, and some that are mostly exported such as catalytic converters and other intermediate variations (Figure 6 below).

Table 1: Top 10 Component Exports by Category (R Million, 2010-2013)

Component Category	2010	2011	2012	2013	% of Total Export Value	2013 Ranking
Catalytic Converters	**14 761**	**19 639**	**16 347**	**17 641**	**41,8%**	**1**
Engine Parts	**1 505**	**2 058**	**2 875**	**3 189**	**7,6%**	**2**
Tyres	**1 133**	**1 675**	**1 522**	**1 842**	**4,4%**	**3**
Stitched Leather Parts	**2 898**	**2 190**	**1 719**	**1 530**	**3,6%**	**4**
Silencers / Exhausts	**1 696**	**2 139**	**1 730**	**1 225**	**2,9%**	**5**
Transmission Shafts / Cranks	**415**	**569**	**771**	**926**	**2,2%**	**6**
Automotive Tooling	447	438	782	777	1,8%	7
Shock Absorbers / Suspension Parts	329	430	440	474	1,1%	**8**
Road Wheels / Parts	383	494	466	455	1,1%	**9**
Gauges / Instruments/ Parts	241	319	401	435	1,0%	10

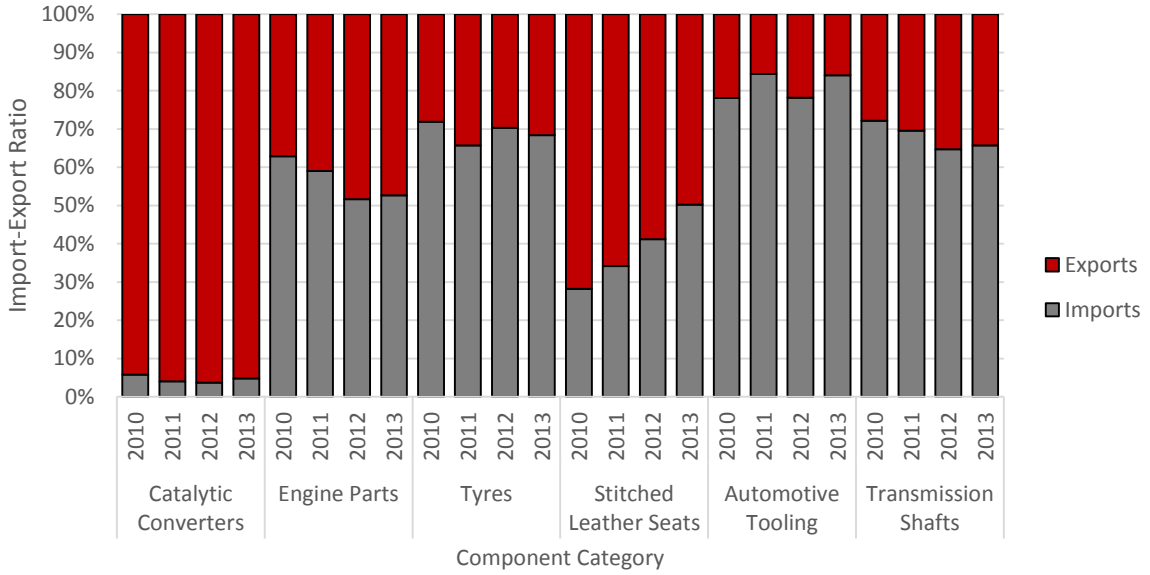
(Source: AIEC, 2014, p. 49)

Table 2: Top 10 Component Imports (R Million, 2010-2013)

Component Category	2010	2011	2012	2013	% of Total Export Value	2013 Ranking
Automotive Tooling	1 596	2 369	2 798	4 090	9,48%	**1**
Tyres	2 900	3 206	3 610	3 990	9,25%	**2**
Engine Parts	2 549	2 960	3 074	3 546	8,22%	**3**
Transmission Shafts / Cranks	1 076	1 302	1 414	1 774	4,11%	**4**
Gauges / Instrument Parts	984	1 244	1 303	1 607	3,72%	**5**
Stitched Leather Parts	1 139	1 138	1 206	1 543	3,58%	**6**
Engines	705	1 181	1 243	1 361	3,15%	7
Brake Parts	774	918	887	1 116	2,59%	**8**
Lighting Equipment / Parts	746	805	746	933	2,16%	**9**
Catalytic Converters	903	823	627	892	2,07%	10

(Source: AIEC, 2014, p. 74)

Figure 6: Relative Import-Export Ratios by Component Category (2010-2013)



(Author's Calculation, Data Source: AIEC, 2014)

The following list of producers was chosen: Microfinish (automotive tooling), Benteler South Africa (Pty) Ltd (catalytic converters), C & J Services (engine parts), Aunde Tap (Pty) Ltd (stitched leather parts), GKN Sinter Metal (transmission shafts), Ramsay Engineering (Pty) Ltd (stitched leather parts).

Labour

NUMSA is the primary trade union representing over 330 000 metalworkers in the automotive and related sectors. NUMSA's membership is concentrated in OEMs and, according to NUMSA, over 90% of wage-earning OEM employees being NUMSA

members[4]. In the components segment of the sector there has been some deindustrialisation, and much smaller levels of unionisation due to size of firms which discourages labour from organising[5].

NUMSA sits on the Motor Industry Development Council (MIDC) and the MIDC Monitoring Committee where various stakeholders give quarterly reports on the performance of the automotive sector[6]. NUMSA also has influence in the policy space as a stakeholder on the MIDC, the National Economic Development and Labour Council and the various bargaining councils. This makes NUMSA an important stakeholder in the automotive sector.

Government, Associations and Scholars

Given that the dti is mandated to control the country's industrial policy, this study also interviews representatives from the dti. However, the dti is not the only state agency working on development of the automotive sector. There are other various provincial and local government departments and government agencies involved as well. Therefore this study interviewed representatives from the Durban Auto Cluster in KwaZulu Natal and the Automotive Industry Development Centre and Automotive industry Supplier Park in Gauteng. This study has also interviewed former academic and current Chief Director: Industrial Cluster at the Gauteng Department of Economic Development, Dr David Masondo.

Automotive associations are also very important in the sector. Therefore this study has interviewed Dr Norman Lamprecht who is the Executive Director at NAAMSA. NAAMSA is an automotive association for OEMs in South Africa. And NAAMSA's membership base now includes major importers and distributors of new vehicles as well as local manufacturers and assemblers[7]. However, due to various constraints the study was not able to interview a representative from the National Association of Automotive Component & Allied Manufacturers (NAACAM). Nevertheless, the variety in

[4] Interview with Mrs Neo Bodibe, NUMSA: Strategic Support to the General Secretary. 19 November 2014, *Johannesburg.*
[5] Interview with Mr Tengo Tengela, NUMSA: Senior Researcher: Industrial and Trade Policy. 31 October 2014, *Johannesburg*
[6] Interview with NUMSA, 19 November 2014, *Johannesburg*.
[7] Interview with Dr Norman Lamprecht, NAAMSA: Executive Director. 29 September 2014, *Centurion*.

interviewees' firms provides the spectrum of inputs directly from the different segments of industry.

In addition, this study interviewed Professor Justin Barnes who is one of the key academics and consultants working on the automotive sector. As a co-founder of Benchmarking and Manufacturing (B&M) Analysts, Barnes's work focuses on the development of benchmarking and cluster facilitation models and methodologies so as to enhance the competitiveness of manufacturing firms; whilst also reviewing and developing new industrial policies for local, regional and national governments. Barnes was interviewed in his capacity as the Executive Director at B&M Analysts and an Adjunct Professor at the University KwaZulu Natal.

Each interviewee was treated as a 'key informant', as someone who has worked for a significant automotive firm, association or state agency which has had various engagements with the state and its industrial policy administration; whose knowledge and opinions may provide some insight into the wider organisational and institutional environment in which the state operates. However, the interviewees were not uncritically assumed to be a simple conduit for data. Despite this, the interviewees were not able to provide extensive quantitative data on firms because some of the information is confidential. This was a major drawback of the interviews conducted – however the study has relied on public data as an illustration and justification for most of the arguments put forward.

And although the number of interviews and the details provided are constraints, this is natural for institutional political economy research. The study still provides some intriguing insights which can be further interrogated or confirmed with the availability of firm-level data. Nevertheless, the number and range of interviews covering most of the relevant organisations is sufficient for the qualitative institutional analysis pursued in this study.

Beyond these challenges, which the study has tried to mitigate, there is also a drawback in the level of "freedom" that interviewees had during the interview. Interviewees cannot be assumed to have responded to questions freely and with full honesty. In fact some interviewees requested to be "off the record" before providing some of the

crucial yet confidential information related to the study. In addition to this, interviewees cannot be assumed to have freely and honestly provided information that jeopardises their personal interests, violates contractual commitments or compromises strategic relationships. As such, the research faced institutional challenges to attaining full information. However, where possible, the study gained access to enough documentation and information from other sources to triangulate and corroborate some of the information received from interviews. Where this was not possible, the study has avoided drawing strong positions from insufficient or biased information.

Table 3: Interviews Conducted

	Date	Interviewee	Organisation	Position/Title
1	14 August 2014	Mr Mkhululi Mlota	Department of Trade and Industry	Chief Director: Automotive
2	14 August 2014	Mr Coenraad Bezuidenhout	Manufacturing Circle	Executive Director
3	1 September 2014	Dr David Masondo	Gauteng Department of Economic Development	Chief Director: Sector and Industry
4	25 September 2014	Prof Justin Barnes	Benchmarking and Manufacturing Analysts (Pty) Ltd/ University of KwaZulu Natal	Executive Chairman/ Adjunct Professor
5	29 September 2014	Dr Norman Lamprecht	National Association of Automobile Manufacturers of South Africa	Executive Manager
6	15 October 2014	Mr Deshan Naidoo	Factocode (Pty) Ltd T/A Microfinish	Marketing & Strategy Manager
7	15 October 2014	Mr Ralph Streitbürger	Benteler South Africa (Pty) Ltd	Director of Sales
8	15 October 2014	Mr Jon Kerr	GKN Sinter Metals Cape Town (Pty) Ltd	Director of Sales and Marketing
9	15 October 2014	Mr Angus Anderson	Ramsay Engineering (Pty) Ltd	Joint CEO
10	15 October 2014	Mr Samuel Mooketsi	Automotive Industry Development Centre	Business Development Officer: Infrastructure
11	20 October 2014	Mr Stuart Naysmith	Aunde Tap (Pty) Ltd	Manager: Production and Key Accounts
12	21 October 2014	Ms Laurie Coyle-Dowling	Durban Auto Cluster/ B&M Analysts	Cluster Manager
13	23 October 2014	Mr Mitch Cowie	C&J Services (Pty) Ltd	Manager: Market, Sales and Export
14	23 October 2014	Mr Sham Ramdas	Toyota South Africa Motors	Senior Co-ordinator: Purchasing, Engineering and Planning
15	30 October 2014	Mr Tengo Tengela	Nation Union of Metalworkers of South Africa	Senior Researcher: Industrial and Trade Policy
16	10 November 2014	Mr Logan Naidoo, Mr Theo Govender, Mr Julian Pillay	Toyota South Africa Motors	Senior Manager: Purchasing, Engineering and Planning
17	19 November 2014	Ms Neo Bodibe	Nation Union of Metalworkers of South Africa	Strategic Support to the General Secretary
18	5 December 2014	Mr Mkhululi Mlota	Department of Trade and Industry	Chief Director: Automotive
19	18 December 2014	Mr Tiyo Kakaza	Mercedes Benz South Africa	Robotics Support Technician

Chapter Four: Findings and Discussion

Institutional context of industrial policy-making

The social structures for industrial policy-making and implementation are built on the CME institutional structure using a corporatist approach to articulate different stakeholder interests. An example of this would be the MIDC and the MIDC Monitoring Committee which meet quarterly to give reports on the different segments of the automotive sector, i.e. labour, components production and vehicle manufacturing. This form of consultative approach which limits state engagement to the level of associations was done as a way to overcome collusion or politically expedient bias[8]. These associations therefore engage with the state in reviews and development of the industrial policy. The state also privately consults with NAAMSA and NAACAM to find out what sort of policy changes and state support would best benefit the automotive sector as a whole. Collaboratively the state and automotive associations set various targets and development focuses such as production, assembly, infrastructure etc.

Figure 7: Members of the MIDC

MIDC	Catalytic Converter Interest Group (CCIG)
	International Trade Administration Centre (ITAC)
	NAAMSA
	NAACAM
	NUMSA
	SARS
	South African Tyre Manufacturers Conference (SATMC)

(Source: Interview with the dti, 14 August 2014, *Sandton*.)

The CCIG, as the name suggests, is a lobby group for catalytic converter producers, some of whom have a stake in platinum mining. The group also represents a majority

[8] Interviews with: Mr Mkhululi Mlota, Department of Trade and Industry: Chief Director: Auto Sector. 14 August 2014, *Sandton*; Mr Coenraad Bezuidenhout, Manufacturing Circle: Executive Director. 18 August 2014, *Johannesburg*.

of the local OEMs. The CCIG entered the MIDC along with the SATMC as "vulnerable components" which made them eligible for the greatest value of state incentives during the transition from MIDP to APDP[9]. The SATMC is a producer-group of market and environmental lobbyists. The SATMC entered the MIDC as a results of strong lobbying after repeatedly losing a dumping case against cheaper Chinese tyre imports[10]. ITAC administers the tariff and trade regime along with all applications for tariff rate changes. The rest of the MIDC members have already been introduced.

Industrial policy arises from strategic interactions between the state and other parties involved. The state often engages with auto firms through associations and collective platforms such as the MIDC and the Automotive Supply Chain Competitiveness Initiative (ASCCI). The MIDC is chaired by the dti and focuses on sector-wide issues through consultation. The MIDC consortium also participates in the ASCCI platform, which is facilitated by B&M Analysts, coordinating all competitiveness issues in the industry focused on firm-level upgrading, skills development, market access and sharing of expertise[11]. ASCCI's other work includes coordination of automotive sector special economic zones, focus areas from the Automotive Purchasing Council such as retention of current local content and resolving competitiveness challenges of local suppliers, and global developments in the sector[12]. ASCCI is co-funded by government and other stakeholders. Beyond this, the dti creates ad hoc forums which convene on case-by-case basis, i.e. the APDP Review.

The final industrial policy and its parameters are determined by the power relations between all stakeholders. Even though all stakeholders in the sector have an input through the MIDC, OEMs have a lot of weight and a strong voice. Other stakeholders are constrained by South Africa's position in the global economy and geopolitics[13].

---

[9] See Cokayne, 2012. "Policy Vacuum Knocks Exports", *Indepedent Online*, 19 June 2012; Venter, 2014. "Catalytic Converter Industry 'Dying', Platinum Tax Possible Saviour – NAACAM", *Engineering News*, 17 February 2014

[10] See The Supreme Court of Appeal of South Africa, 2010; Payne, 2011. "Tyre Industry Left Threadbare", *Mail and Gaurdian*, 26 August 2011; Payne, 2011. "Tyre Industry Reels from 'Blowout'", *Mail and Guardian*, 7 October 2011.

[11] Interview with Prof. Justin Barnes, Benchmarking and Manufacturing Analysts: Executive Director & University of KwaZulu Natal: Adjunct Professor. 25 September 2014, *Skype™*.

[12] Interview with the dti, 14 August 2014, *Sandton*.

[13] Interview with the dti, 14 August 2014, *Sandton*. The WTO complaint against Australia's support to automotive leather producers and the relocation of all OEMs from Australia are some of the global economy and geopolitical influences that have affected the state's approach to industrial policy.

OEMs

OEMs have the strongest influence on industrial policy as a result of their organising ability and their position in the hierarchy of the automotive sector. All OEMs producing in South Africa are members of NAAMSA which represents around 43 manufacturers and importers of light motor vehicles and various types of commercial vehicles. The association represents the collective interest of its constituency[14]. Industrial policy has been strongly influenced by OEMs lobbying[15]. However, the fact that, until recently, industrial policy only supported the production of light motor vehicles shows that the interests of all NAAMSA members are not always met and that there might be internal bargaining for voice on which issues NAAMSA lobbies for. Nevertheless, industrial policy now supports investment in passenger vehicles through the People-carrier AIS and supports medium and heavy commercial vehicles through the MHCV-AIS[16]. This also shows the effectiveness of the organising and lobbying ability of OEMs which has resulted in the introduction of key state incentives to serve a wider spectrum of NAAMSA members.

The state's policy-making process and approach to resolving industry challenges faced is always consultative[17]. NAAMSA comes up with a solution, then consults with NAACAM to draw up a collective solution before consulting the state (the dti). However, OEMs have a stronger influence on industrial policy due to the resources and position in the hierarchical organisation of the sector. OEMs' resources allow them to make relatively larger investments therefore by default they extract the largest value from resources relative to component producers. Given that the value of investments by OEMs is relatively larger, directly resulting in relatively more jobs, and indirectly creating jobs in component production – OEMs have much greater bargaining power with the state[18]. Hence the threat of relocation or halting plans for expansion are often

---

[14] Interview with NAAMSA, 29 September 2014, *Centurion*.
[15] Interviews with: Manufacturing Circle, 18 August 2014, *Johannesburg*; B&M Analysts (Pty) Ltd/ University of KwaZulu Natal, 25 September 2014, *Skype™*; Mr Mitch Cowie, C&J Services (Pty) Ltd: Manager: Market, Sales and Export. 23 October 2014, *Durban*; NUMSA, 31 October 2014, *Johannesburg*; NUMSA, 19 November 2014, *Johannesburg*. The influence of OEMs in the automotive sector is well-researched. Primary interviews also revealed that industrial policy proposals providing greater benefits for the domestic producers and the economy have been adjusted to favour the interest of OEMs during the review process resulting in the APDP. Moreover, the incentives structure has always been skewed towards favouring OEMs because state subsidies are commensurate with the value of investment.
[16] Interview with Manufacturing Circle, 18 August 2014, *Johannesburg*. See South African Government News Agency, 2014. "SA Stimulates Investment in Vehicle Production", *SAnews.gov.za*, 24 November 2014; South African Government News Agency, 2015. "DTI Welcomes Launch of Toyota Plant", *SAnews.gov.za*, 23 June 2015.
[17] Interviews with: the dti, 14 August 2014, *Sandton*; NAAMSA, 29 September 2014, *Centurion*.
[18] Interviews with: the dti, 14 August 2014, *Sandton*; Manufacturing Circle, 18 August 2014, *Johannesburg*; NAAMSA, 29 September 2014, *Centurion*; NUMSA, 19 November 2014, *Johannesburg*.

tools used by OEMs to settle bargains with both labour and the state[19]. The bargaining power of OEMs is also reinforced by their position in the hierarchical structure of the automotive sector.

The automotive industry is internationalised and organised according to the GVCs of multinational parent OEMs. All OEMs producing in South Africa are now subsidiaries of multinational parent companies[20]. Local OEMs' sourcing decisions are made by parent OEMs based on the retail price of the car and where it is exported - they are much less interested in the health of local subsidiary assemblers or localising inputs[21]. As such local OEMs are positioned as lead firms whilst the all component producers are integrated as follower firms in the OEMs' supply chain. Most component producers supplying OEMs are either fully integrated subsidiaries of OEMs, multinational sourcing partners to OEMs, or in a few cases locally-owned suppliers[22].

In the past component producers were able to access government incentives for their exports and investments but this led to adverse effects of continued reliance on imports and trading of import duty rebate credit certificates (IRCCs)[23]. Consequently, government incentives were not resulting in greater localisation and further job-creation. Hence, as a way to try and ensure localisation and job-creation, the state responded by administering industrial policy through OEMs and now exclusively offers production incentives to OEMs based on their level of local value-addition[24]. However, the state is already facing challenges regarding the definition and measure for local value-added that OEMs are claiming which undermines the policy objectives[25].

---

[19] See Reuters, 2013. "NUMSA Rejects BMW 'Blackmail'", *fin24.com*, 7 October 2013; SAPA, 2013. "Davies: BMW Not Going Anywhere", *fin24.com*, 9 October 2013.

[20] Interviews with: the dti, 14 August 2014, *Sandton*; Manufacturing Circle, 18 August 2014, *Johannesburg*; NAAMSA, 29 September 2014, *Centurion*; NUMSA, 19 November 2014, *Johannesburg*.

[21] Interviews with: NAAMSA, 29 September 2014, *Centurion*; NUMSA, 19 November 2014, *Johannesburg*.

[22] Interviews with: Mr Angus Anderson, Ramsay Engineering (Pty) Ltd: Joint CEO. 15 October 2014, *Midrand*; Mr Deshan Naidoo, Factocode (Pty) Ltd T/A Microfinish: Marketing & Strategy Manager. 15 October 2014, *Midrand*; Mr Jon Kerr, GKN Sinter Metals Cape Town (Pty) Ltd: Director of Sales and Marketing. 15 October 2014, *Mirdand*; Mr Ralph Streitbürger, Benteler South Africa (Pty) Ltd: Director of Sales. 15 October 2014, *Midrand*; Mr Stuart Naysmith, Aunde Tap: Production Manager/Key Accounts. 20 October 2014, *Durban*. Component producers supplying OEMs usually operate under "build-to-print" licences from OEMs which means they produce components according to specifications and designs provided and owned by OEMs. In instances where component producers are involved in research and development, the OEM usually bares the cost in return for ownership of the intellectual property. However, generally, component producers are not involved in product design.

[23] Interviews with: the dti, 14 August 2014, *Sandton*; NAAMSA, 29 September 2014, *Centurion*; NUMSA, 19 November 2014, *Johannesburg*.

[24] Interviews with: the dti, 14 August 2014, *Sandton*; NAAMSA, 29 September 2014, *Centurion*. The state's justification for administering the APDP incentives through OEMs is that this will ensure localisation. On the other hand the state also does not have capacity to administer incentives for all component producers through the dti therefore there is an efficiency justification as well.

[25] Interviews with: Mr Sham Ramdas, TSAM: Senior Coordinator - Purchasing, Engineering and Planning. 23 October 2014, *Prospecton*; Mr Julian Pillay, Mr Theo Govender & Mr Logan Naidoo, TSAM: Senior Coordinators - Purchasing, Engineering and

More importantly this has inadvertently improved the bargaining power of OEMs and their influence on industrial policy. For instance some smaller OEMs do not produce the required level of 50 000 units per annum but the state still provides incentives to them because of their indirect impact on jobs through their supply-chain[26]. Therefore OEMs have strong bargaining power because of their direct importance for domestic jobs and indirect job-creation through their supply chains. This suggests that OEMs' threat of relocation or halting planned expansion is seen as credible by the state. In addition the state relies on OEMs for information on the sector which is crucial for monitoring and evaluating the automotive sector's industrial policy[27]. Therefore these institutional aspects of industrial policy-making and implementation further bolster the bargaining power and influence of OEMs.

Hence, OEMs have the strongest influence on industrial policy as a result of their organising ability, financial resources and their position in the hierarchical structure of the automotive sector.

Component Producers

NAACAM represents approximately 190 component producers from first-tier suppliers to OEMs and suppliers to the aftermarket. Some parts of the automotive component industry also have experts and lobby groups dealing with sub-sector specific industry challenges such as the South African Automotive Tooling Association, the SATMC, the CCIG, and the Auto Industry Export Council (AIEC). The AIEC is an umbrella body linking production to export for the entire automotive sector, and NAAMSA has part-time presence on its council[28].

Planning. 10 November 2014, *Conference Call*. OEMs use a price-measure which means the level of local content depends on the price of the parts and components used. This practice also runs the risk of underpricing components and parts from OEM subsidiaries, imported or otherwise, in order to achieve a higher level of local content (higher value-added) and extract greater value from the incentives.

[26] Interview with the dti, 5 December 2014, *Pretoria*.

[27] The Automotive Sector Chief Directorate at the dti only has access to NAAMSA-provided disaggregated OEM production data, and relies on the Automotive Export Manual which is also produced from disaggregated components production data provided by NAAMSA affiliates. Moreover, during the course of this study, most useful responses to requests for sector data from NAACAM and the dti were referrals to aggregated data sourced from NAAMSA.

[28] Interview with NAAMSA, 29 September 2014, *Centurion*.

The component producers have varying bargaining power and organising ability depending on their specific market size and the nature of production. Components with few local producers have had greater organising ability and industrial policy lobbying influence; especially components produced by multinational firms. For example, the SATMC and CCIG have presence on the MIDC which is unusual given that the state prefers engaging industry at the association level[29]. However these two lobby groups, which consist of a small number of multinational producers[30], have been able to assert their interest at the individual component group level and encourage a pluralistic approach to industry-state engagement. At the association level there is a competition for voice on industrial policy influence. NAACAM ultimately prioritises issues faced by component subgroups represented by third-party associations like the SATMC, CCIG and Valve and Actuator Manufacturers Cluster of South Africa (VAMCOSA) which have the strongest voice and influence over industrial policy amongst component producers.

With regards to the distribution of gains and the outcome of bargaining for policy influence or state support, component producers have come second-best to OEMs. And, because the state's approach to industrial policy has not differentiated amongst automotive component, when benefits have been withdrawn from the component industry all producers have been affected. The state's undifferentiated approach to dealing with automotive components in industrial policy has resulted in strong competition for policy influence and state support. However, the strong voice of some interest groups have been able to capture state support from different sources beyond the automotive sector industrial policy.

Through strong lobbying some component groupings such as the VAMCOSA have been able to capture state support through preferential procurement, or designation[31]. Under the Preferential Public Procurement Financial Management Act the state can designate vulnerable components with varying levels of required localisation[32].

---

[29] Interview with the dti, 5 Decemeber 2014, *Pretoria*.
[30] These two lobby groups represent industries that mostly dominated by foreign multinational automotive firms. See Doneva, 2009. "SA Autocat Sector Calls for Help", *fin24.com*. 11 February 2009; SATMC, n.d. "Our Members", *South African Tyre Manufacturers Conference*.
[31] Interview with Microfinish, 15 October 2014, *Midrand*.
[32] Some of the products that are designated for local procurement (but at different levels of localisation) includes: Bus Bodies; Textile, Clothing, Leather and Footwear; Steel Power Pylons; Rail Rolling Stock; Set Top Boxes; Office Furniture; School Furniture; Solar Water Heater Components; Electrical and telecom cables; Valves products and Actuators; Prepaid Electricity Meters; Post

Therefore the VAMCOSA benefits from having a certain portion of state procurement of valves and actuators being allocated towards local producers. Meanwhile the CCIG has argued that catalytic converter manufacturers contribute towards industrial development through the beneficiation of the platinum group metals used to produce automotive catalytic converters. This is the a CCIG's justification for approaching the Department of the Mineral Resources for state support to the catalytic converter industry which has struggled to recover since the dti's removal of state support for automotive component producers[33]. In addition, some component producers have gone beyond the automotive sector associations to secure their interest, especially smaller and diversified producers who could not afford the wage determined through the Metal and Engineering Industries Bargaining Council (MEIBC)[34].

Given this pluralism in the way component producers articulate and lobby for their interest, the gains have accrued unequally in favour of component groups with the strongest voice. Nevertheless, when compared to OEMs, component producers have much less bargaining power. Hence component producers have less influence on industrial policy and capture less state support.

Labour

Labour influences policy at various levels. NUMSA has direct influence on the automotive sector's industrial policy, as the major trade union in the sector representing labour interests on key platforms such as the MIDC and MIDC Monitoring Committee. Trade unions bargain for wages through the Motor Industry Bargaining Council (MIBCO) and MEIBC. Through MIBCO the industry sets wages for the automotive sector triennially and working conditions are bargained for at individual firm-level[35].

The interviews reveal that the labour lobby has had moderate successes and continues to face challenges due to the dynamic and competitive nature of the automotive

---

Paid Electricity Meters; SMART Meters; Working Vessels/Boats. See the dti, n.d. "Industrial Procurement". Department of Trade and Industry: Pretoria.

[33] See Venter, 2014.

[34] See SEIFSA, 2014a. "48 Hours' Notice of Lock-Out Action", *Steel and Engineering Industries Federation of Southern Africa*. 26 June 2014.

[35] Interviews with: NUMSA, 31 October 2014, *Johannesburg*; NUMSA, 19 November 2014, *Johannesburg*.

sector. Labour has succeeded in influencing policy design to take localisation as an important policy objective[36]. This serves the interest of labour because ensuring, and increasing localisation, would result on more job-creation. However, labour has not been able to influence policy to the extent that the state makes a specific job-related obligations or requirements to accessing state support or incentives.

Labour is mostly organised in the OEMs and large component producers. There is little unionisation in small component producers, and the majority of labour working in automotive component production is not unionised[37]. The automotive sector's diversity with regards to the how it is located within current sector classifications and state organisation also undermines the influence of labour in many key components. For example, the automotive sector demands: leather for vehicle trim which is classified under agricultural products and affected by policies administered through the Department of Agriculture, Forestry and Fisheries; steel products for vehicle bodies and parts which are classified under primary or manufactured products and affected by policies administered by the dti and the Department of Mineral Resources. Bargaining for wages in the components industry is also complicated by fractured representation of the components producers because some are in the MIBCO, whilst some are in Retail Motor Industry Organisation and the MEIBC[38]. As a result even when labour has achieved a favourable wage bargain through MIBCO those benefits do not accrue to all labour working in the automotive sector which undermines the organising ability and influence of labour on industrial policy.

In addition loose policy design and inimical corporate strategy also undermine the quality of jobs created. This is an inadvertent result of the state's attempt to secure jobs through conditional added state support if firms maintain their current employment levels, for an undefined period of time, which has encouraged labour brokering and casualisation of labour[39]. Because government incentives to the

---

[36] Interview with NUMSA, 19 November 2014, *Johannesburg*.
[37] Interview with NUMSA, 19 November 2014, *Johannesburg*. Majority of OEM employees are NUMSA members, making NUMSA an important stakeholder in the automotive sector. However, the same is not true with the component production firms due to the segmented nature of automotive component production which results in some producers being classified under different economic sectors.
[38] Interview with NUMSA, 19 November 2014, *Johannesburg*.
[39] Interview with NUMSA, 19 November 2014, *Johannesburg*. Firms can apply for government subsidy to the value of 20% of the investment value under the AIS. The only requirement for a firm to increase the incentive above 20% is retaining employment. However there is no specification of the kind of employment to be retained. In OEMs, where NUMSA has most of its bargaining power due to high unionisation of labour, there has been no labour brokering because there is coordination of labour unions at

automotive industry do not stipulate the kinds of jobs to be retained in order to access greater state support; corporate strategy to access greater value from incentives has resulted labour brokering and casualisation of labour. This also undermines the interest of labour by establishing worse working conditions and lower wages.

Lastly, labour also influences industrial policy and corporate strategy through industrial action and strikes. In July 2014 there was a seven-week strike at metals and engineering firms which resulted in job-losses and lockouts after NUMSA made an agreement with employers in the MEIBC[40]. Industrial action and strikes are often a last resort due to contradictory outcomes such as higher wages and job-losses. The Labour Relations Act now also requires compulsory balloting before a strike and now allows the state to force parties into arbitration[41]. Hence labour has achieved only moderate successes and continues to face challenges due to the dynamic and competitive nature of the automotive sector.

Discussion

Institutions defining social relations

The vast interest and continually growing space for pluralistic interest articulation in the form of vulnerable and unique products like catalytic converters, valves and tyres increases the tendency towards competitive rather than cooperative interactions between the various stakeholders. In addition, the pluralistic articulation of interest undermines the prospects of the collaborative approach to industrial policy. And asymmetric bargaining power which results from firm size and influence within the collaborative policy-making platforms further increases competition for having the "definitive voice". Therefore, although the state tries to establish a coordinated industrial policy framework, internal competition amongst and within stakeholders for a definitive voice diminishes the potential for successful coordination. And where coordination is achieved the gains are unequally shared because of the power

---

the international level as well due to the multinational nature of automotive production. But in components where NUMSA has limited bargaining power, NUMSA has not been able to curb labour brokering.

[40] See NUMSA, 2014. "Notice of Strike on Wage Issues and Other Substantive Issues", *National Union of Metalworkers of South Africa*. 25 June 2014; SEIFSA, 2014a; Gernetzky & Furlonger, 2014. "NUMSA Told Job Losses Probably Unavoidable in Pay Deal", *Business Day Live*. 24 July 2014.

[41] Interview with NUMSA, 19 November 2014, *Johannesburg*.

imbalance amongst stakeholders. In order for the state to resolve this, the state needs to develop non-economic institutions which require a certain level of shared knowledge, collaboration and credible commitments between stakeholders.

The social relations amongst the different stakeholders are not driven by CME-type social relations and institutional functions, instead the relations amongst stakeholders are competitive. Institutions function to improve competitiveness and movement of inputs. This is due to the strong state support for LME-type institutions in terms of implementing widespread liberalisation. South Africa's trade liberalisation was based on the premise that increased competition from imports would be an impetus for improved efficiency which would result in higher exports from domestic producers of competing goods[42]. Even though the structures for collaboration like the MIDC exist, the fact that the state has supported institutions that encourage competitive social relations undermines the objectives of industrial policy. Because the state has supported LME-type institutions instead of CME-type institutions such as collaboration and cooperation. This is the source of the policy incoherence problem highlighted in Chapter 2.

The state has given strong support to LME-type institutions which are administered through compulsory formal and informal rules associated with the tariff regime, the system of import-export complementation and competitiveness targeting policies. In addition the state has inadequately supported CME-type institutions. The only policies supporting collaboration amongst firms are clustering and special economic zones (SEZs) – which are transversal policy interventions with voluntary participation. This why some firms feel that, although they have gained from participation in clustering at the Durban Auto Cluster and the Auto Industry Development Centre, their best benefit has been low rent costs at clustering facilities[43]. This undermined collaboration and inter-firm relations became more competitively-driven. This developed as a result of formal and informal rules "institutions" or policy adopted by the state.

---

[42] Interviews with: the dti, 14 August 2014, *Sandton*; Manufacturing Circle, 18 August 2014, *Johannesburg*; NAAMSA, 29 September 2014, *Centurion*.

[43] Interview with Ramsay Engineering, 15 October 2014, *Midrand*. It may be argued that the firm may have reach its peak competitiveness or close to its level of diminishing or constant returns to clustering as it were. However, given the primary aim of these SEZs, this case either shows a failure to achieve the full aims of clustering or that the programmes have inadequate means of selecting firms that would benefit the most. If this is the case there needs to be a stronger effort to improve state support for SEZs and CME-type institutions more generally. On the other hand, perhaps firms have chosen to participate as way to reducing their costs thereby improving cost competitiveness. This would not be the case without state support of LME-type institutions.

Table 4: Summary Comparison of Institutional Structures

	LME	CME	SA Auto Sector
Social relations	Competitive market relations	Non-market relations	Competitive, price and cost-efficiency-driven social relation.
Equilibrium	Demand, supply and hierarchy	Strategic interaction amongst firms and other actors	Demand, supply and hierarchy (e.g. market share).
Inter-firm relations	Competitive	Collaboration and cooperation	Limited collaboration through cluster; GVC relations with some vertical integration, responsive suppliers and captive follower firms[44].
Institutional functions	Competitiveness, greater fluidity of inputs	Monitoring and retribution for defectors	Competitiveness driven, focused on cost competitiveness and some expertise.
Employment	General skills, short-term, fluid	Specific skills, long-term, immobile	General with focus on technical skills, more labour fluidity within components segment[45].
Wage bargaining	Firm-level	Industry-level	Industry-level but strong lobbying for firm-level bargaining within components segment[46].
Policies	Deregulation, anti-trust laws, tax-breaks	Encourages information sharing and collaboration of firms	Liberalisation (trade deregulation), duty rebates (trade "tax-break"), investment subsidies.

(Source: Hall & Gingerich, 2004, pp. 32-33; Kang, 2006, pp. 8-11; Fieldwork interviews with various stakeholders)

Although it is defensible to argue that it is the competitive nature of the global automotive production industry which makes firms more market-orientated; this is not entirely true. Firstly, the extent to which the state liberalised by reducing its applied tariff rates was unnecessary. Even though it has been argued that South Africa has various powers which it cannot exercise given that it acceded to World Trade Organisation (WTO) membership as a developed country due to sunset clauses during the transition from Apartheid to democracy. Empirical research shows that the state went beyond the required stipulations of the WTO and still has policy space to protect

[44] Interviews with all component producers show that all component producers supply "build-to-print" components to OEMs whilst Benteler South Africa is a subsidiary of Benteler AG which is a captive worldwide supplier of catalytic converters for General Motors Company.
[45] Interviews with: NUMSA, 31 October 2014, *Johannesburg*; NUMSA, 19 November 2014, *Johannesburg*; Mr Kakaza, MBSA: Robotics Support Technician, 18 December 2014, *East London*.
[46] See SEIFSA, 2014b. "Press Release - 2014/07/22: SEIFSA Accepts Minister's Proposal on Wages but Not on Section 37", *Steel and Engineering Industries Federation of Southern Africa*, 22 July 2014

local industry through higher tariffs without contravening WTO requirements[47]. Secondly without this policy decision by the state, the exposure to global competition would have been much less therefore there would be less incentive for competitive relations amongst firms; if it is indeed true that the nature of the global automotive industry incentivises competitive inter-firm relations.

Therefore this study argues that it is the institutions that the state chose to support which determined the relations amongst firms rather than the inherent nature of the globally integrated automotive sector. As we shall discover in relation to the institutions arising from the incentive structure of industrial policy, the support for LME-type institutions incentivised the growth in export despite little deepening and growth of local value-addition and the persistent trade deficit. This is the institutional basis for the policy coherence problem[48], which shows a fundamental misunderstanding or misinterpretation of the types of institutions required to fulfil the industrial policy objectives. This institutional incoherence manifested itself as the type of policy tools utilised and the inimical incentives and outcomes which resulted from poor coordination of private economic interest to achieve the national interest of job-creation.

Institutions arising from the incentives that individuals respond to

As things stand, South Africa's industrial policy subsidises the cost of capital strongly. Many incentivises are aimed at subsidising the cost of capital equipment and machinery for firms. For instance, the AIS provides up to 30% cash grants for qualifying capital investments[49]. Most incentives, especially in the automotive sector, support capital-intensity because the state subsidises the cost of capital as opposed to labour. National incentive programmes are primarily aimed at the firm-level and geared towards capital equipment subsidisation with only a few incentives aim at labour

---

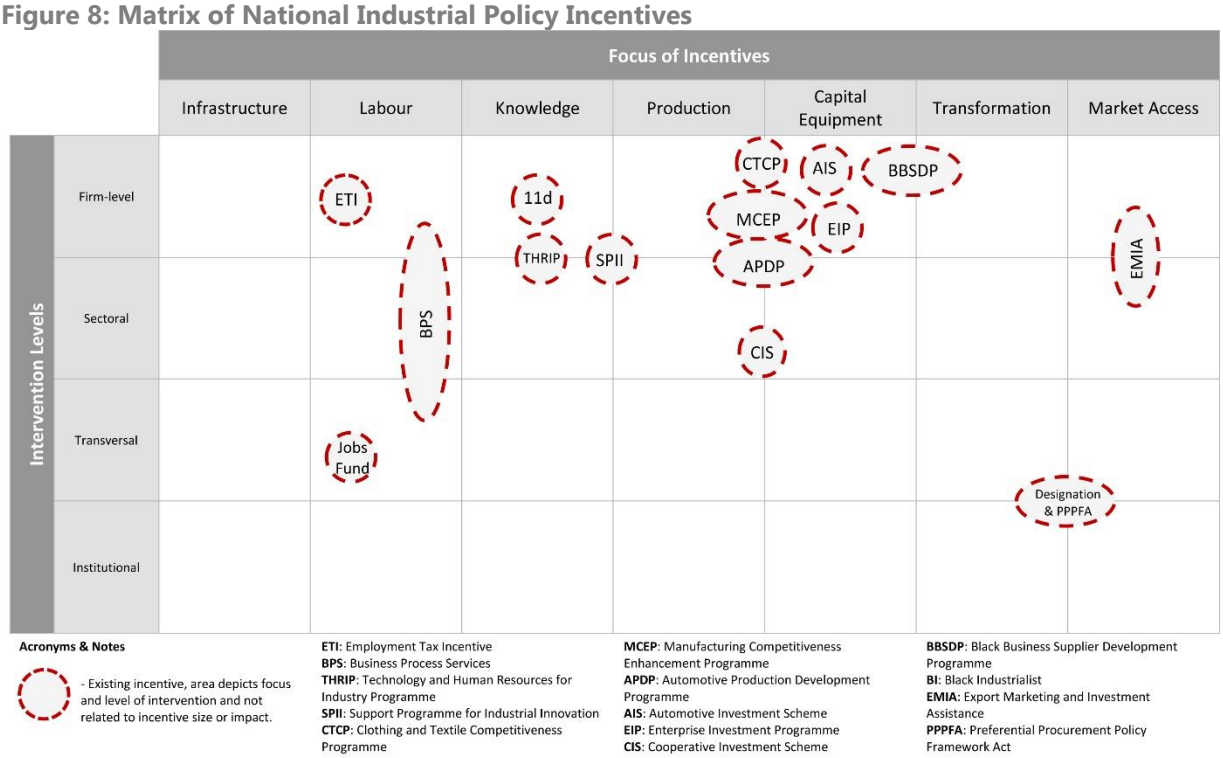
[47] Interview with B&M Analysts, 25 September 2014, *Skype™*. Sandrey (2013: p. 16) found that all the special designation motor vehicles and parts under chapter 98 and 64.8% of tariff lines unders chapter 87 have an average policy space of 9.7% which means their applied tariff rate is on average 9.7% below the WTO-required bound rates.

[48] The policy coherence problem point to the issue that South Africa's liberalisation was premature given the global competitiveness of local production. And secondly that the system of import-export complementation undermined the development of local component producers by making it easier for firms to reach duty neutrality which incentivised greater imports. Thus state policy was incoherent with the intended purpose which was to develop the local industry, raise exports and bring about rationalisation because it increased pressure from imports too rapidly and excessively reduced the price preference towards locally-sourced components (see Barnes, 2013, pp. 3, 34).

[49] Interview with the dti, 5 December 201, *Pretoria*. See the dti, 2013b, p. 39.

subsidisation or skills development (Figure 8 below). This is the first policy incoherence that is a structural obstacle to job-creation. Firstly, this promotes mechanisation resulting in less labour demand. Secondly, if poorly managed this may result in excess demand for skilled labour or a structural skills mismatch if the labour market has mostly unskilled labour as is the case in South Africa.

Figure 8: Matrix of National Industrial Policy Incentives



(Author's Depiction, Source: Various Interviews[50])

In conventional economic theory, the number of inputs considered is limited to labour, capital and technology. The adoption of new technology, which requires more capital, allows firms to improve the quality and quantity of their output if that the new technology is efficiently utilised. There are various policy implications here because on the one hand the state has stated its industrial policy focus as employment growth whilst it has chosen incentives that subsidise the cost of capital, thereby encouraging capital-intensity over labour-intensive production. Whilst this may improve productivity in the automotive sector – this has a trade-off for the number of workers

[50] Interviews with: Manufacturing Circle, 18 August 2014, *Johannesburg;* B&M Analysts (Pty) Ltd/ University of KwaZulu Natal, 25 September 2014, *Skype™*; NUMSA, 31 October 2014, *Johannesburg*; the dti, 5 Decemeber 2014, *Pretoria*.

employed, as new technology may include machinery that increases output whilst requiring fewer workers to operate. For example, despite the more than 200% increase in production, the automotive sector has shed over 20 000 jobs and employment levels declined by a nett of 25% since 1995 (see Figure 1 above). This fundamental economic mechanism highlights the policy incoherence arising from the institutional incoherence.

In addition to capital subsidies, the MIDP supported export growth. The MIDP was intended to integrate the local industry into the global economy, improve competitiveness of the local industry, and reverse the proliferation of models in the economy[51]. To deal with the problem of rationalisation and competitiveness the state used a system of IRCCs to promote exports and allow OEMs to import components for their low volume models produced locally. But to export, the firms need to be close to the GVCs. Many locally-owned firms, some of which went through divestment during the 1980s, had to sell-off large stakes to foreign parent companies because global OEMs wanted closer ownership over the intellectual property and other aspects of production[52].

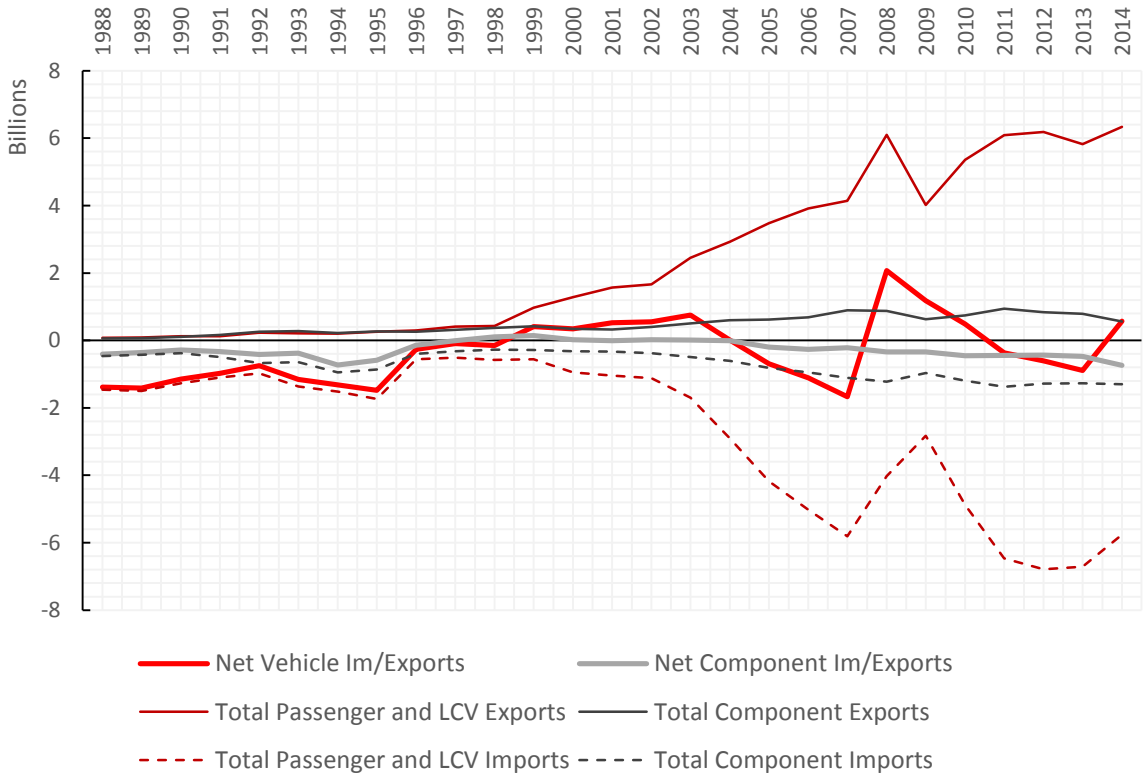
Trade liberalisation and exposure to competition from imports did not incentivise rationalisation as had been hoped because the liberalisation did not lead to a coordinated increase in localisation of the components used for the high-volume models produced locally. Instead some local firms sold out to OEMs and foreign component producers[53]. Moreover, the IRCCs did not incentivise localisation because it made it too easy for firms to reach duty neutrality[54]. In addition, the IRCCs and liberalisation policies incentivised exporting highly-priced low-value-added exports to earn the highest import duty value so as to pay for high value-added imports. This was done as a way to increase rents and also more easily finance imports for production.

---

[51] Interviews with: the dti, 5 December 2014, *Pretoria*; TSAM, 23 October 2014, *Prospecton*; NAAMSA, 29 September 2014, *Centurion*. Also see Barnes, 2013.
[52] Interviews with: the dti, 5 December 2014, *Pretoria*; TSAM, 23 October 2014, *Prospecton*; NAAMSA, 29 September 2014, *Centurion*. Also see Barnes, 2013.
[53] Interview with Aunde Tap, 20 October 2014, *Durban*.
[54] Interview with B&M Analysts (Pty) Ltd/ University of KwaZulu Natal, 25 September 2014, *Skype™*. Also see Barnes & Kaplinsky, 2000; Kaplinsky, 2000; Barnes & Black, 2013.

As a result there was a rapid growth in local catalytic converter production because catalytic converts are highly-priced due to their platinum content instead of their local value-added. After 1995, catalytic converters rapidly grew as a form of exported local content because they have a very high export value which meant that firms could claim high import duty rebates (Figure 10 below). The catalytic converter industry was completely export focused and closely linked to OEMs as component. The system of IRCCs was very lucrative for component producers because, apart from the import duty rebate benefits, they also sold the IRCCs to other firms in the sector, including OEMs[55]. However, following research by Black and Barnes, the dti applied for a phasing down of the eligible rebate value of IRCCs to incentivise localisation of higher value-added components. But the state failed to coordinate OEMs' behaviour around this outcome. Instead OEMs acted as lead firms by either establishing in-house production of catalytic converters or acquiring external diversified catalytic converters producers and logistic to export catalytic converters for them globally.

Figure 9: Automotive Sector's Impact on Balance of Payment (US$, 1989-2014)

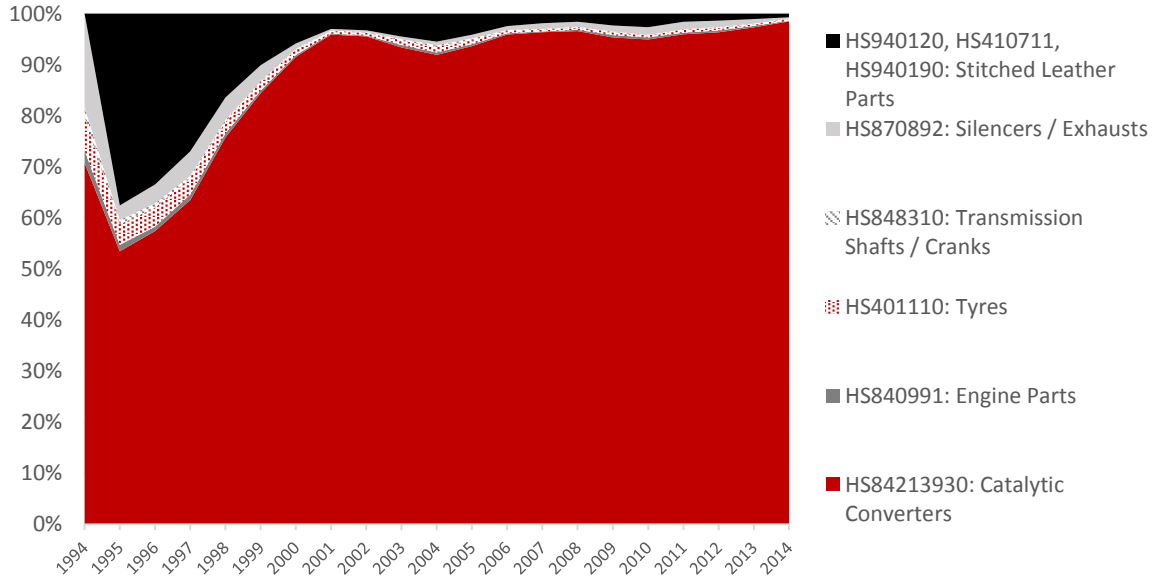


(Author's Calculations, Data Source: Quantec)

[55] Interview with NUMSA, 19 November 2014, *Johannesburg*.

One example of full integration is Toyota Tsusho Africa in the case of TSAM; whilst Benteler South Africa is an example of a captive follower firm that exports catalytic converters worldwide for General Motors Company. Benteler South Africa also exports some loose components for engine and exhaust systems, but this is negligible in comparison to its catalytic converter exports[56]. Investment in catalytic converters does not support employment growth because the production of catalytic converters is capital intensive and has little local value-added. In the current APDP period there have been various calls for greater support and concern from the catalytic industry that it cannot survive without state support[57]. Thus, instead of incentivising increased investment in specific productive activities like the development of other local productive capacities, the state has incentivised unsustainable and short-term focused investment in some components to capture rents from the state because the state supported LME-type institutions through its industrial policy.

Figure 10: Sample Component Exports (Relative Share in US$, 1994-2014)



(Author's Calculations, Data Source: Quantec)

[56] Interview with Benteler South Africa, 15 October 2014, *Midrand*.
[57] Interview with Benteler South Africa, 15 October 2014, *Midrand*. Also see Venter, 2014; Dewar, 2012, p. 898.

Other industries in specific activities like raw skin and hides industry which is considerably more labour-intensive than catalytic converter production, have contracted significantly as auto firms moved their assets towards activities with higher returns like catalytic converter production (Figure 10 above). This is consistent with firms' responses in the context of institutional support for LMEs. In addition, with the transition from the MIDP to the APDP, the state brought on changes aimed at resolving part of this problem. But many foreign component producers were led to divest as a result of the vertical integration of some local components production and the growth in OEM influence due to policies and institutional support which favours OEMs. The remaining component producers had to adjust their strategy from being export-focused towards supplying OEMs[58].

The state has not established ways of developing strategic relations between OEMs and component producers. Most of the state interventions are often geared at individual firm efficiency improvements through plural forms of state support. For example, the Council for Scientific and Industrial Research's Technology Assistance Programme offers skills development, operational efficiency and investment assistance to firms. Whilst the Manufacturing, Engineering and Related Sector Education and Training Authority offers technical training and skills development programmes. However, these interventions are not aimed at developing strategic relations between OEMs and component producers; as a result these relations are still predominantly market-orientated.

The implications of LME-type institutional support in the automotive sector is that relations between OEMs and component producers remain market-orientated; forcing the sector into an obsession with price. NUMSA's view, which is partly true, is that competitiveness remains a major challenge for the sector because remedies focus only on labour cost competitiveness which ignores other factors reducing competitiveness such as cooperative industrial relations and skills deficits[59]. Therefore, despite the broad support programmes offered by the state, competitiveness is still just about cost

[58] Interviews with: Manufacturing Circle, 18 August 2014, *Johannesburg*; Aunde Tap, 20 October 2014, *Durban*.
[59] Interview with NUMSA, 19 November 2014, *Johannesburg*.

effectiveness or beating your competitor's price. As aptly described by Mr Deshan Naidoo who is the Marketing and Strategy Manager at Microfinish:

> "When it comes to this sector, it's all about price. If something is cheaper overseas, it will be imported. People only buy locally if it makes economic sense."[60]

The implication of this is that local component producers continue playing "catch up" to external demands on quality, delivery and price from OEMs. And collaboration is minimised, and when it does occur it is market-driven rather than being driven by strategic cooperation. For example TSAM has a monthly performance management system in place along with a cross-functional team that gets involved in helping its suppliers depending on the area of failure which often includes cost, quality, sustainable delivery and technical capacity[61]. These type of supplier-development systems are however aimed at minimising supply interruptions at OEMs rather than developing the local industry.

Nonetheless, the benefits of this system are amongst the greatest benefit that the state wants to accrue to local component producers, which justifies administering incentives through OEMs. But this exclusively focused on component producers supplying local OEMs. Yet there are many component firms that supply the aftermarket and OEMs abroad instead of local OEMs[62] which shows international competitiveness of some of the local component producers that are not supplying local OEMs. Thus there are some component producers that could possibly be relatively more competitive than those supplying local OEMs, who could show greater return for state incentives aimed at promoting rationalisation, but the state has completely abandoned them given its implementation of industrial policy. This also undermines the common assertion that limited investment in local higher value-added component production is due to local producers being uncompetitive and not meeting global standards and consumer demands.

In terms of investment and returns in terms of jobs, it makes sense why the state would support OEMs but in terms of the aftermarket the state should support component

---

[60] Interview with Microfinish, 15 October 2014, *Midrand*.
[61] Interview with TSAM, 10 November 2014, *Conference Call*.
[62] Interviews: Microfinish, 15 October 2014, *Midrand*; Aunde Tap, 20 October 2014, *Durban*.

producers. Moreover, the state should also focus on supporting those local component producers that are exporting to foreign OEMs as well since they have already proven to be competitive by the common benchmark of supplying OEMs. But the state has no support for the aftermarket and, under the APDP, state support for component producers is limited to those supplying the seven local OEMs.

In addition, because the state had not differentiated component producers according to labour-intensity of their production process, the state was not able to prioritise component industries which would create the greatest local value-added and jobs. As a result of the undifferentiated approach to applying incentives to component producers, OEMs and multinational component producers were able to undermine industrial policy objective as discussed above.

On the other hand, the state has not intervened in critical areas like power relations between OEMs and component producers in order to resolve power-related issues undermining the development of local component producers. Some of these include: the downward pressure on component producers' supply prices by OEMs which require annual reduction in the price of components from local suppliers, delays and non-payment of local component producers by local OEMs, bureaucratic red-tape associated with supplying OEMs, and the passing of wage increases onto component producers through OEMs 'revisiting' supplier contracts[63].

Institutions arising from organisational hierarchical hegemony

Developments in the global economy and the integration of South Africa's automotive sector occurred in a way that empowered OEMs. The rising dominance of GVCs meant that OEMs could assume the position of lead firms which placed them in a strategic position to determine the direction of development for follower component producing firms. And because exporting required closeness to GVCs, local component producers were automatically integrated as follower firms. In addition, the position of OEMs within the GVC allowed them a privileged position in terms of access to global and domestic quantitative data on the sector because of the business processes of bidding

[63] Interviews with: Microfinish, 15 October 2014, *Midrand*; Aunde Tap, 20 October 2014, *Durban*; C&J Services, 23 October 2014, *Durban*; NUMSA, 31 October 2014, *Johannesburg*.

for OEM-supplier projects. This meant that OEMs could bid down the price of its suppliers by reviewing contracts and demanding annual supplier price decreases. And this allowed OEMs to use "domestic competitiveness" as a reason for sourcing imported components[64].

Firstly, OEMs dominate through their hierarchical position in the automotive sector GVCs. As lead firms, OEMs dictate the process of industrial development based on the demands they place on follower firms that are part of their GVC. By tying in local component producers into OEM GVCs through the industrial policy, the state is subjugating the industrial development process of technological upgrading and growth of local firms to that of OEMs. This is evidenced by the fact that local OEM sourcing decisions are made by their foreign parent companies based on the retail price of the car and where it is exported with less interest in the health of local subsidiary assemblers, let alone local component producers[65]. In addition OEMs are also in a strategic position to bid down the price of components, thereby partially determining the possible profit margins for OEM-supplying component producers. Interviews with different component producers testify to the well-research fact that profit margins have always been higher in the aftermarket[66].

The implications of this is that industrial policy will not be able to deal with any issues of rationalisation directly because the production of local component firms will be dictated by OEM demands. And as mentioned in Chapter 3, local component producers would upgrade by acquiring the ability to supply local OEMs, however this has natural limitations given the level of domestic vehicle manufacturing. The development of follower firms depends on their integration into lead firms' GVCs. Thus the state had implemented a critical change under the APDP in that only OEMs can apply for state support claims.

According to the dti this makes practical sense given that the state cannot administer incentives to over 500 producers who could potentially claim under the APDP[67]. This

---

[64] Interviews with: C&J Services, 23 October 2014, *Durban*; NUMSA, 31 October 2014, *Johannesburg*.
[65] Interviews with: NAAMSA, 29 September 2014, *Centurion*; TSAM, 23 October 2014, *Prospecton*; NUMSA, 19 November 2014, *Johannesburg*.
[66] Interviews with: Microfinish, 15 October 2014, *Midrand*; C&J Services, 23 October 2014, *Durban*. Also see Board of Trade and Industries, 1981, pp. 17-19;
[67] Interview with dti, 5 December 2014, *Pretoria*.

may be true given that the Automotive Sector Chief Directorate within the dti has 9 employees, two of which are administrators (Team Assistant and a Personal Assistant) with the remaining 7 being direct line responsibilities (i.e. a Chief Director, a Deputy Chief Director, three Directors, and two Assistant Directors)[68]. In addition there are 3 other people within the Industrial Development Incentive Administration Division who are in-charge of administering the AIS which includes receiving applications, providing information on rules, and disbursing funds etc.[69]. And even with the consolidation of the APDP through OEMs, firms still feel that processing of applications is still slow and overly bureaucratic[70] so even if the dti Automotive Sector Chief Directorate were to build capacity by increasing its employees, it would still not be able to establish the capacity needed.

Although the APDP administration choice is understood as a practical choice due to limitations in state capacity, this policy choice is also attractive for the state if it seeks to coordinate automotive firms through OEMs. So instead of having to coordinate plural interests, the coordination problem is reduced by mediating coordination through OEMs. In addition, given the GVC structure of the automotive sector, OEMs have experience in coordinating various firms or vastly distant operations. As such the APDP policy choice is doubly attractive because of its practicality and efficiency. And since OEMs are making claims based on local value-added associated with their locally-sourced components, local producers that are not exporting do not claim for any APDP incentives. So now under the APDP, OEMs claim based on local value added from their sourcing strategy which guarantees a market for local component producers supplying OEMs. But given the dominant position of OEMs and their historically established behaviour as lead firms, this guarantee may be challenged.

The practical choice of the state to administer industrial policy through OEMs further entrenches this structural imbalance through economic institutions of state support. Already, the state finds itself having to offer concessions to the industrial policy requirement to produce 50 000 vehicles per annum, for some OEMs. This further

---

[68] Interview with dti, 5 December 2014, *Pretoria*.
[69] Interview with dti, 5 December 2014, *Pretoria*.
[70] Interviews with: Ramsay Engineering, 15 October 2014, *Midrand*; Benteler South Africa, 15 October 2014, *Midrand*; Aunde Tap, 20 October 2014, *Durban*.

entrenches the challenges associated with rationalisation and maintains inefficiencies through state support. And by administering the APDP in this way, under an LME institutional support established during the MIDP, the state is at high risk of its industrial policy being deteriorated through international sourcing. But since OEMs claim incentives based on components sourced locally, this challenge is partially resolved. However, this does not resolve the long-standing challenge of the automotive sector trade deficit unless there are policy provisions that require progressively higher levels of local content.

However, a major weakness of the APDP is that it does not require local content. According to the dti this is due to the position of South Africa in the global political environment. South Africa could not go in the direction of some other emerging countries like Brazil which has many disputes against it for contravening WTO rules in favour of local development policy. However, this has already been discredited by the tariff policy space available and the availability of other protective measures like non-tariff barriers which are not currently used in the automotive industrial policy[71]. Thus there is an asymmetry in bargaining power in favour of OEMs over local component producers because of the GVC arrangement of the automotive sector, the social relations, and inter-firm relations associated with GVCs. This implies that there is negligible sharing of information, which is the missing key institution required by the CME-based industrial policy structure.

Secondly, OEMs are dominant as a result of asymmetric information between the OEMs and component producers, and between the state and automotive firms. There is asymmetric access to quantitative firm-level data, which is only shared with the state by firms when they are applying for tariff protection or industrial policy programmes (ITAC, n.d.). This creates a challenge for the state because its industrial policy responses are based only on aggregated sector data. The Automotive Sector Chief Directorate at the dti only has access to NAAMSA-provided disaggregated OEM production data, and relies on the Automotive Export Manual which is also produced from disaggregated components production data provided by NAAMSA-affiliates[72]. Firm-

[71] Interview with NUMSA, 31 October 2014, *Johannesburg*.
[72] Requests for data from NAACAM and the dti yielded recommendations to aggregated data sourced from NAAMSA. Moreover, this data is only available from 2008 onwards.

level data analysis is rare in South African industrial policy, this is often limited to single or small groups of firms who are applying for the revision of tariff through ITAC. Generally industrial policy is not guided by rigorous firm-level data analysis as the dti and other state agencies and departments do not have sector-wide firm-level data. The implication of this is that policy-making is practically not sensitive to more nuanced adverse economic outcomes of industrial policy. Moreover, the state is unable to see the source of income for automotive firms in order to support economic growth that is consistent with the national interest of job-creation.

In addition to the bargaining power derived from OEMs' GVC position, this informational asymmetry has political implications which benefit OEMs and component producers unequally whilst disadvantaging the state. OEMs' bidding processes for component suppliers to their various models places OEMs in a strategic position to bid their costs down. But this is also constrained by considerations about quality and supplier performance. Therefore OEMs have a very privileged position in the automotive value-chain on two accounts. OEMs are at the helm of a sector reporting structure with informational asymmetry as members and office-bearers of NAAMSA, which provides limited disaggregated data to both the state and scholars researching the sector. This bolsters the strategic position of OEMs allowing them to influence more than just the price of inputs. And administering the APDP through OEMs reinforces the strategic position of OEMs with respect to their access to information and bargaining power within the automotive value-chain.

Moreover, the strategic placement of key OEM personnel in various structures also increases their access to information. For example, TSAM has representatives on the OEM Council, regional clusters and ASCCI with the main aim of influencing the market at a strategic level[73]. The implication of all this is that OEMs will grow their influence to the point that industrial policy is needed indefinitely because OEMs will have the voice to lobby for it regardless of the implications on economic efficiency. And given that the state tries to maintain CME-type social structures for policy-making, which requires shared knowledge and collective learning, the asymmetry of information sustained through the current administration of the APDP will further entrench

[73] Interview with TSAM, 10 November 2014, *Conference Call*.

pluralism as opposed to corporatist interest articulation. Thus OEMs will continue having a critical advantage in the bargaining process which follows from their position in the automotive GVC and informational asymmetry that benefits OEMs.

Informational asymmetry is a major challenge for the state and its process of industrial policy-making. South Africa has a small share of global motor vehicle production, and since the OEMs are multinational corporations that can meet their production demand needs with other competitor markets like Thailand and Brazil, the threat of relocation is a real possibility. Moreover, the complete withdrawal of OEMs in Australia, despite concerted state support, which informed the South African automotive industrial policy further confirmed the credibility of this threat to the South African state[74]. This explains the progressive skewing of industrial policy parameters to increasingly benefit OEMs over time. The impact of this informational asymmetry is that it justifies the perceived threat of relocation by OEMs. Through lobbying or strategic use of economic rhetoric mixed with "expert advice" on how to develop and administer industrial policy, OEMs have succeed in influencing industrial to serves the interest of OEMs above national interest. For instance, through strategic lobbying, OEMs were able to influence implementation and final parameters of the APDP from being skewed to favour components to being strongly in their favour by persuading the minister to reject the initial APDP policy suggestions by private consultants[75].

Thus there is a need to balance the power of OEMs by legislating a certain model of reporting about the industry which must require all automotive industry firms to submit data to a central state agency. This is necessary because of the complex system of administering the APDP which makes it complicated for the state to consolidate all its industry data because the administration is spread across different departments. For example, information on the quantum of incentive each OEM has received over the past years is close to impossible to collate because the dti administers the AIS, ITAC administers the Vehicle Assembly Allowance, and SARS administers the IRCCs etc[76]. Therefore getting information on the incentive programmes involves accessing one agency of the National Treasury and a parliamentary body. Collating this

[74] Interview with dti, 5 December 2014, *Pretoria*.
[75] Interview with B&M Analysts, 25 September 2014, *Skype™*; NUMSA, 31 October 2014, *Johannesburg*.
[76] Email correspondence with Ms Gugu Nkosi, dti: Deputy Director – Auto Sector, 8 February 2015.

information would involve a myriad of approvals and it is likely that the information is confidential which would further complicate the process. Moreover, because many state departments and agencies are decentralised, the state does not know the full quantum of incentives the firms have received from the state which increases the risk of "double-dipping" and inefficient use of state resources.

Why has there been no differentiation between components?

The foregone analysis explains why the automotive sector has supported growth in terms of exports, despite a reliance on imports, but not supported employment. This is explained through analysis of key findings from interviews and secondary research on the institutions defining the political economy of industrial policy. The foregone analysis reveals that, due to both the policy measures and the institutional context, implementation of the automotive sector industrial policy has not been oriented towards more labour-absorbing activities. Especially in the impact on local components manufacturing industry. Although this explains why component producers were not the focus of industrial policy; this does not fully explain why the state has not differentiated between components based on their impact on employment before providing state support.

This study argues that the state did not differentiate in favour of relatively more labour-intensive components because of the power and influence of interests over the policies and the resulting institutional factors of policy-making and implementation. The asymmetry of information does not only affect the bargaining power of OEMs and the state as discussed above. Asymmetric information also affects state capacity and the interventions chosen by the state. As already discussed, the strategic position of OEMs in terms of their access to industry information through their bidding process and control of NAAMSA which provides the state with data on the industry presents a challenge to industrial policy.

One of the most critical effects of the informational asymmetry is that policy-makers believe the threat of relocation by OEMs is credible despite the scant evidence that is

used to justify the threat[77]. Given that the state only has access to highly aggregated data and the fact that OEMs would have only provided firm-level data on subsidiaries if they ever submitted tariff requests to ITAC; the state does not have full information about the current financial and productive status of OEMs beyond publicly disseminated financial reports. And the focus of information used to track the performance of the sector focuses on output only. Critical firm-level data like the current profit rates and capital amortisation rates is not accessible to the state and seldom forms part of policy-making[78]. It might very well be that OEMs are overly invested and the cost of amortising capital might be too high to divest from South Africa and the stat would not know such information[79]. Yet the state takes the threat of relocation as being credible despite the lack of evidence. This impact the perceived policy space and the development industrial policy.

Secondly, this informational asymmetry has impacted the state's ability to design and implement industrial policy. The fact the IRCCs ended up costing the state too much is evidence that industrial policy design was not guided by clear evidence. Without speculating about the accuracy of information that NAAMSA provides through its monthly reports and data services that the state subscribes to for data on the sector[80], one can unpack the impact of the informational asymmetry with regards to monitoring sector performance. The state has limited access to data on the sector and most proprietary reports from NAAMSA and AIEC provide highly aggregated data on the components industry.

Lastly, the informational asymmetry put the state at risk of selective use of economic evidence mixed with "expert advice" on how to develop and administer industrial policy in a way that serves the interest of OEMs above national interest. Hence, the

---

[77] Interview with the dti, 14 August 2014, *Sandton*. Because the South African automotive industrial policy is modelled on the Australian Button Plan, developments there have always alerted policymakers about the imminent dangers they might face even though the perceived threats have not manifest. Part of the justification to remove subsidies to local component producers in South Africa was the case against Australia's subsidies for automotive leather producers. The subsequent announcement that all OEMs in Australia would relocate by 2017 due to failure of the Button Plan is further "evidence" justifying the threat of relocation. Also see the dti, 2014, p. 87.

[78] Requests for data from NAAMSA and the dti yielded recommendations to aggregated data sourced from NAAMSA reports. Moreover, this data is only available from 2008 onwards. And the only data source provided by NAACAM was the annual AIEC report which only details components to the level of component groups as displayed in Tables 1 and 2 above.

[79] This was the case in Phase V of the LCPs. Due to high capital equipment requirements firms could not exit the market because they were overly invested and had high sunk costs (Dix, 1995, p. 34).

[80] The dti Auto Sector Desk subscribes to Lightstone Auto for more disaggregated data on OEM vehicle sales. Beyond that the state relies on highly aggregated data from the AIEC and NAACAM annual reports for the components industry.

informational asymmetry limited policy space perceived by policy-makers affecting the state's bargaining power and ability to design and implement industrial policy. This study argues that the informational asymmetry affected the state's political and administrative capacity to monitor, evaluate and enforce industrial policy – which is why the state did take a differentiated approach to the components industry. In addition, OEM lobbying and institutional aspects of industrial policy-making also reinforced the interest of OEMs over local component producers.

The result has been an investment support strategy that is aimed at OEMs and secondarily at component producer. The state's perspective is to support OEMs through supply-side interventions with the hope that the OEMs will create the domestic demand required to develop local component producers. Reliance on GVC structures for coordination has also led the state to coordinate incentives aimed at component producers through OEMs. Therefore, there has not been any differentiation in support offered to components producers is because the state lacked detailed dynamic information on the sector; especially the components industry. Moreover, lack of evidence underpinning policy and resource constraints have limited the ability of the state to intervene and support local component producers.

This is why establishing an additional stream of industry data through a central database accessible to all state departments may be a required part of resolving the challenges faced. But this cannot be done through Statistics South Africa alone given that they only report of highly aggregated production and sales which would be less useful for industrial policy. SARS may be best placed to establishing this central database of firm-level data on all sectors. The United Kingdom's Inter-Departmental Business Register (IDBR) presents some lessons and best-practice lessons for the South African. The IDBR is a database of United Kingdom (UK) firms from all sectors. This database is constructed from firms' submissions to the HM Revenue & Customs (UK SARS equivalent), different departments and regular surveys to support the updating of firms' information[81]. Essentially South Africa could establish such a database and allow all national and provincial government departments and agencies to collect data and submit it on this database. This could include more than just the firms'

[81] See ONS, n.d. "Introduction to the The Inter-Departmental Business Register", *Office for National Statistics*.

performance data but also include firms' track record of all state subsidies and incentives received across all departments and agencies. Therefore the state would have much more rigorous, nuanced and effective industrial policy.

In addition, changes to the current system of administration would not be advisable given that the business process involved are already well entrenched and a new administrative system would cause disruption and take time to establish. But it is necessary for the state to balance the informational asymmetry. The informational asymmetry benefits OEMs by making the threat of relocation credible given the limited of industry data and insights within the state. Thus the state has not successfully balanced the asymmetric bargaining power through its current initiatives to improve internal capacity.

Recommendations

This study recommends that the state's challenges can be partly resolved through simple institutional changes would allow the state to consolidate its bargaining power and use it to coordinate private economic interest in pursuit of national interest. The study recommends that the state should:

1. establish the quantum of support to industry and business;
2. understand and engage with the political economy aspects of GVCs; and
3. establish political bargains with multinational lead firms.

The coordination problems of industrial policy can be partly resolved by establishing the fundamental condition of shared knowledge, at least to the point that the state has full knowledge and access to disaggregated data on the domestic automotive sector.

Establish the Quantum of Support to Industry

Although consolidating and coordinating the administration of industrial policy through OEMs is practical and efficient, this decision by the state further entrenched the unequal and hierarchical structure that has a high risk of undermining industrial policy. Institutional structures and policy then – not the ownership power of multinational corporations (MNCs) – has entrenched unequal power relations within

the automotive value-chain, which undermines the broader socio-economic goals of industrial policy.

Thus it is imperative that the state establish its own central databank of all automotive firms' data with inputs from all state departments and agencies. This will not only assist in ensuring that industrial policy is nuances and more rigours to inter- and intra-sectoral difference, but it will also provide a more substantive base to monitor and evaluate industrial policy. Moreover, this would greatly reduce the negative political economy implications by reducing the asymmetric bargaining power of OEMs which is a crucial mechanism for disciplining foreign capital and multinational firms more specifically.

Understand and Engage with the Political Economy Aspects of GVCs

GVCs remain an elusive challenge for most policy-makers primarily because firms' sourcing and investment decisions in global, and even regional, value-chains have a strong political element despite being driven by economic considerations. This often requires a fundamental shift in the underlying justification for policy-making and the policy-tools used when dealing with industries that are integrated into GVCs.

For example, the move by Johnson Controls (and other automotive textile companies) was primarily aimed at exploited lower wage conditions in Lesotho[82]. This may seem like a threat to job-creation in South Africa given a nationalist approach to policy-making. However, with a regional approach to policy-making South Africa could exploit regional advantages and produce sophisticated high-value-added goods whilst integrating smaller neighbouring economies' industries as follower firms. This requires an integration of political policy-making like international relations with economics which is the focus of industrial policy. Moreover, this requires greater intra- and inter-departmental coordination on policy. For example within the dti the Southern African Customs Union Directorate in the International Trade and Economic Development Division would need to work more closely with the Automotive Sector Desk in the Industrial Development: Policy Development Division.

---

[82] Interviews with: Manufacturing Circle, 14 August 2014, *Johannesburg*; NUMSA, 19 November 2014, *Johannesburg*. Also see Cokayne, 2015. "Labour Drives Firm's Relocation", *Independent Online*, 11 May 2015.

GVCs diminish the possible impact of industrial policy and the means for technological upgrading of follower firms. Firms upgrade by achieving the ability to supply multinational corporations or participating in different value-chain activities with higher value-added. Hence, industrial policy benefits to the local industry can be maximised by assisting to develop local lead firms or preparing local follower firms to supply lead firms both locally and globally. Although the necessary support that follower firms need in order to supply lead firm is illusive, some of the insights from interviews shows that supplying OEMs is not simply about capability and that political aspects such the inter-firm relations are important. This study has revealed that some local firms have a preference to supply foreign OEMs due to less cumbersome administration and existing inter-firm relations. Hence, simply focusing on economic aspects such as price competitiveness will not guarantee OEM-supply.

Therefore, policy-making should be built on a regional or GVCs perspective on industry and economic sectors. In addition, the state should find ways to either restructure its business processes such that political and economic aspects of trade and industrial policy reinforce each other. This also requires the state to consolidate national interest with bilateral and multilateral interests within the region. Moreover, the globalisation of capital demands that policy-makers take a regional outlook on policy-making which requires an acute understanding and engagement with political economy aspects of GVCs.

Establish Political Bargains with Multinational Lead Firms

GVCs and lead firms' sourcing decisions are the primary obstacle facing industrial policy objectives in internationalised sectors. If multinational lead firms do not integrate local firms in their value-chains any support offered to multinational lead firms (such as OEMs) will not benefit local industry. Hence, dealing with internationalised sectors should be treated differently from domestically-located industries.

The observation is supported by existing research such as the political economy analysis of Burke and Epstein (2001) who argue that the dominance of neoliberal rules

of international finance and the asymmetric bargaining power between MNCs, governments and labour mean that investment often results in developmentally detrimental outcomes that favour MNCs. The dominance of the neoliberal trade paradigm in the multilateral rules set by organisations such as the WTO means that MNCs engage in foreign direct investment under a rules that disproportionately favour MNCs at the expense of governments and labour in the host countries. Furthermore, MNCs have an advantage because there are few MNCs actually engaged in foreign investment whilst there are many countries competing to attract that investment (Burke & Epstein, 2001). Therefore in the current international rules of foreign investment and global competition foreign investment leads to outcomes that tend to favour MNCs at the expense of labour and governments.

Thus the only way to ensure benefit to local industry is to tie in state support to local content requirements. Alternatively the state may choose to make incentives conditional on a certain level of local value-addition. This may require the state to forfeit some foreign investment which would have been attracted under different conditionalities. In addition, the state would have to have extensive monitoring and evaluation of economic outcomes in order to avoid market failure or distortion. Hence, under current conditions a more plausible would be for the state to strike political bargains with multinational lead firms in order to ensure mutual benefit from incentives.

Chapter Five: Conclusion

This research had set itself an ambitious task. Having noted that much of the discourse lacked an institutional analysis of the political economy of industrial policy, this study set out to contribute one such a study on the matter. Three salient issues were identified to examine using the institutional framework drawn from the relevant literature.

Firstly there is the issue of the choice of OEMs to produce many different makes and models locally, which has locked local automotive production in a spiral of low volumes and high unit costs of production. Secondly there is the issue of the policy incoherence related to the state's choice to liberalise the automotive industry too extensively and prematurely given the global competitiveness of the local industry. Lastly there was the issue of the preference for importing components as opposed to investing in local component production. Thus the central problems challenging industrial policy were institutional and resolved around the issue of failed coordination to influence the decision of different stakeholders by the state.

The study then examined these issues and explained them according to the social structures, social relations, power and incentives that result from the political economy of industrial policy within the automotive sector. The findings were that industrial policy has supported export and production growth in spite of the continued dependence on imports, and did not support employment, because it was biased towards OEMs and did not differentiate between the different categories of components according to job-creation potential. The study then explained this through institutional framework grounded in the VoC, GVCs and political economy literature.

The findings were that the state coordination failure was caused by the fact that the state had established CME structures like the MIDC, ASCCI and SEZs. However, within these structures the social relations amongst the stakeholders were competitive rather than cooperative and collaborative which is required for CME-type social structures. In addition to this the state had spent more focus on establishing and supporting LME-type institutions like the preoccupation with improving competitiveness. The state

encouraged rationalisation which meant reducing the marginal cost of production by increasing the economies of scale, and increasing exports. Therefore the state was encouraging competitive social relations amongst the different stakeholders within the automotive sector. As a result, the corporatist approach to interest articulation, which the structures are meant to encourage, was replaced by pluralism resulting to the competition to establish the definitive voice within the sector.

Even though the structure for industrial policy-making emphasised the need for CME-type institutions like clustering, shared learning and greater collaboration. The state thus established incentives that were inimical to industrial policy objectives through its support for LME-type institutions in the form of widespread liberalisation. As a result the state was unable to coordinate the various actors and affect their decisions in favour of what was needed to create more jobs.

Firms responded by further entrenching their interest. OEMs behaved as lead firms within the automotive sector GVCs which meant they were less cared about the wellbeing of the domestic industry and more concerned about maximising returns. Therefore OEMs integrated with the domestic component industry for the single purpose of extracting rents in the form import duty credits from the state as opposed to the development of local higher value-added components' production. Moreover, as opposed to establishing common knowledge, share learning and open access to information, the result was an informational asymmetry and asymmetry of bargaining power in favour of OEMs over local component producers, and OEMs over the state. Thus the resulting hierarchy within the automotive sector has OEMs at the helm.

Industrial policy now serves the explicit interest of OEMs giving them the ability to: dictate the price of components, determine the profit margins within the first-market (OEM-supply) segment of the automotive sector, and direct the development and upgrading of local firms which are integrated into the various OEMs' GVCs as follower firms. In addition, the implication of this hierarchical restructuring means that industrial policy is at the mercy of multinational OEMs' decision-making. And the state has limited administrative and political capacity to influence the decision of OEMs because the state cannot differentiate between the different impacts of various components on

employment. Lastly, the state cannot fully discredit credibility of the OEM threat to relocate. Thus industrial policy is "captured" in a way.

Hence, due to both the policy measures and the institutional design South Africa's industrial policy has not been oriented towards more labour-absorbing activities, especially in the impact on local components manufacturing.

This study therefore builds on the previous body of work to assess the specific impacts of the institutional factors. The study has therefore contributes a more nuanced understanding of the political economy of industrial policy and the role of the state in industrial development. Moreover, as a way of avoiding the common and foregone criticism that development economics work inevitably becomes an analysis of policy (Adam & Dercon, 2009, p. 179), this study incorporates both policy and institutional analysis in attempt to fully understand the political economy of investment in the automotive sector.

Beyond contributing an institution study, through doing this, the study has provided a far more nuanced account of the power of OEMs that goes beyond the simple explanation of this power deriving from the position of OEMs as multinational corporations in a neoliberal policy and global context[83].

As highlighted in the recommendations in Chapter 4 this has various implications for policy-makers. Firstly that state coordination and policy coherence will continue to be a challenge without a consistent dataset for all departments to work from in evaluating and consolidating state support to industry. This not only undermines the state objectives of policy, but also affects the bargaining power of the state in its relations with industry. Secondly, policy-makers need to treat internationalised sectors differently from domestically-located industries. GVCs require an institutional political economy understanding of industries in order to consolidate and coordinate private economic interests in pursuit of national interests. Moreover GVCs, in the context of globalised capital, require the state to consolidate national interest with bilateral and multilateral interests within the region.

[83] See Burke & Epstein, 2001; Flatters, 2005, p. 13; Barnes & Morris, 2008, pp. 8-9; Barnes, 2013, pp. 12-13.

Unless we are aware of the institutional aspects of investment we will continue making policy changes with little impact. Because there may be crucial institutional factors undermining the gains.

Bibliography

Adam, C. & Dercon, S., 2009. The Political Economy of Development: An Assessment. *Oxford Review of Economic Policy,* 25(2), pp. 173-189.

AIEC, 2013. *Automotive Export Manual: South Africa 2013,* Pretoria: Automotive Industry Export Council (AIEC).

AIEC, 2014. *Automotive Export Manual: South Africa 2014,* Pretoria: Automotive Industry Export Council.

Barnes, J., 2013. Capital Structure of the South African Automotive Industry: Historical Perspectives and Development Implications. *Transformation,* 81(2).

Barnes, J. & Black, A., 2011. *Multinational Strategy, Industrial Policy and Local Capability: A Comparison of Automotive Industry Development in South Africa and Thailand.* Paris, GERPISA.

Barnes, J. & Black, A., 2013. *The Motor Industry Development Programme 1995-2012: What have we learned?.* Johannesburg, Trade and Industrial Policy Strategies.

Barnes, J. & Kaplinsky, R., 2000. Globalization and the Death of the Local Firm? The Automobile Components Sector in South Africa. *Regional Studies,* 34(9), pp. 797-812.

Barnes, J. & Morris, M., 2008. Staying Alive in the Global Automotive Industry: What can Developing Economies Learn from South Africa about Linking into Global Automotive Value Chains?. *The European Journal of Development Research,* 20(1), pp. 31-55.

Bielschowsky, R., 2006. *Celso Furtado's Contributions to Structuralism and their Relevance Today,* Santiago, Chile: Economic Commission for Latin Amerca and the Carribean.

Black, A., 2001. Globalisation and Restructuring in the South African Automotive Industry. *Journal of International Development,* 12(6), pp. 3-31.

Black, A. & Roberts, S., 2009. Chapter 8: The Evolution and Impact of Industrial and Competition Policies. In: J. Aron, B. Kahn & G. Kingdon, eds. *South African Economic Policy under Democracy.* Oxford & New York: Oxford University Press, pp. 211-243.

Board of Trade and Industries, 1981. Investigation into Monopolistic Condition in the Supply and Distribution of Motor Vehicle Parts, Components and Materials in the Republic of South Africa. In: *Regulation Gazette No. 3126.* Pretoria: Government of the Republic of South Africa.

Burke, J. & Epstein, G., 2001. *Threat Effects and the Internationalization of Production,* Amherst: Political Economy Research Institute.

Cokayne, R., 2012. *Policy Vacuum Knocks Exports.* [Online] Available at: http://www.iol.co.za/business/news/policy-vacuum-knocks-exports-1.1321913
[Accessed 18 January 2015].

Cokayne, R., 2015. *Labour Drives Firm's Relocation.* [Online] Available at: http://www.iol.co.za/business/companies/labour-drives-firms-relocation-1856473
[Accessed 27 February 2016].

Dewar, K., 2012. *The Catalytic Converter Industry of South Africa,* Johannesburg: The Southern African Institute of Mining and Metallurgy.

Dix, K. A., 1995. The Motor Car Assembly/Manufacturing Industry in South Africa: Phases I to V. *South African Journal of Economic History,* 10(1), pp. 21-37.

Doneva, S., 2009. *SA Autocat Sector Calls for Help.* [Online] Available at: http://www.fin24.com/Economy/SA-autocat-sector-calls-for-help-20090211
[Accessed 14 January 2016].

Duncan, D., 1992a. Foreign and Local Investment in the South African Motor Industry 1924–1992. *South African Journal of Economic History,* 7(2), pp. 53-81.

Duncan, D., 1992b. *"We Are Motor Men": Management Culture and Consciousness in the South African Motor Industry.* Johannesburg, University of the Witwatersrand African Studies Institute.

Epstein, G. & Heintz, J., 2006. *Monetary Policy and Financial Sector Reform For Employment Creation and Poverty Reduction in Ghana,* Amherst, Massachusetts: Political Economy Research Institute.

Evans, P., 1995. Chapter 3: States. In: *Embedded Autonomy: States and Industrial Transformation.* New Jersey: Princeton University Press, pp. 43-73.

Fine, B., 2006. IMF Financial Programming. In: B. Fine & K. Jomo, eds. *The New Development Economics: After The Washington Consensus.* New Delhi: Tulika, pp. 87-100.

Fine, B., 2013. Beyond the Developmental State: An Introduction. In: B. Fine, J. Sarawati & D. Tavasci, eds. *Beyond the Developmental State: Industrial Policy ito the 21st Century.* London: Pluto.

Flatters, F., 2005. *The Economics of MIDP and the South African Motor Industry.* Johannesburg, Trade & Industrial Policy Strategies.

Gainsborough, M., 2009. The (Neglected) Statist Bias and the Developmental State: the case of Singapore and Vietnam. *Third World Quarterly,* 30(7), pp. 1317-1328.

Gereffi, G. & Fernandez-Stark, K., 2011. *Global Value Chain Analysis: A Primer,* Durham, North Carolina: Centre on Globalization, Governance and Competitiveness (CGGC).

Gernetzky, K., 2014. *Seven of COSATU's Affiliates Threaten to Leave Federation over NUMSA Expulsion.* [Online]
Available at: http://www.bdlive.co.za/national/labour/2014/11/27/seven-of-cosatus-affiliates-threaten-to-leave-federation-over-numsa-expulsion
[Accessed 8 March 2015].

Gernetzky, K. & Furlonger, D., 2014. *NUMSA Told Job Losses Probably Unavoidable in Pay Deal.* [Online]
Available at: http://www.bdlive.co.za/national/labour/2014/07/24/numsa-told-job-losses-probably-unavoidable-in-pay-deal
[Accessed 14 January 2016].

Goetz, A. M., 2006. Institutionalising Women's Interests and Accountability to Women in Development (Introduction). *IDS Bulletin,* 47(4), pp. 71-81.

Greenwald, B. & Stiglitz, J. E., 1987. Keynesian, New Keynesian and New Classical Economics. *Oxford Economic Papers,* 39(1), pp. 119-132.

Hall, P. A. & Gingerich, D. W., 2004. *Varieties of Capitalism and Institutional Complementarities in the Macroeconomy: An Empirical Analysis,* Cologne, Germany: Max Planck Institute for the Study of Societies Cologne.

Hall, P. A. & Soskice, D., 2001. An Introduction to Varieties of Capitalism. In: P. A. Hall & D. Soskice, eds. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage.* Oxford: Oxford University Press, pp. 1-68.

Hirschman, A. O., 1981. *Essays in Trespassing: Economics to Politics and Beyond.* Cambridge, New York, Melbourne: Cambridge University Press.

Hunt, D., 1989. Chapter 5: The Structuralist Paradigm. In: *Economic Theories of Development: An Analysis of Competing Paradigms.* London: Harvest Wheatsheaf, pp. 121-161.

ITAC, n.d. *Tariff Investigations.* [Online]
Available at: http://www.itac.org.za/tariff.asp
[Accessed 7 February 2015].

Kang, N., 2006. *A Critique of the "Varieties of Capitalism" Approach,* Nottingham, United Kingdom: International Centre for Corporate Social Responsibility.

Kaplinsky, R., 2000. Globalisation and Unequalisation: What Can be Learned from Value Chain Analysis. *The Journal of Development Studies,* 37(2), pp. 117-146.

Keynes, J. M., 1936. Chapter 8: The Propensity to Consume - The Objective Factors. In: *The General Theory of Employment, Interest and Money.* London: Macmillan, pp. 89-98.

Kolver, L., 2014. *Davies Approves MHCV-AIS Guidelines.* [Online] Available at: http://www.engineeringnews.co.za/article/davies-approves-mhcv-ais-guidelines-2014-11-24
[Accessed 4 December 2015].

Kooy, M. & Robertson, H. M., 1966. The South African Board of Trade and Industries: The South African Customs Tariff and the Development of South African Industries. *South African Journal of Economics,* 34(3), pp. 205-224.

Lamprecht, N., Rudansky-Klopper, S. & Strydom, J. W., 2011. South African Automotive Policy Intervention (1924-2008): The Case of an Intelligently Designed Automotive Support Structure. *Journal of Contemporary Management,* Volume 8, pp. 54-75.

Masondo, D., 2003. Trade Liberalisation and the Restructuring of Work in post-Apartheid South Africa: A Case Study of BMW. *Society in Transition,* 34(2), pp. 295-319.

Meyns, P. & Musamba, C., 2010. *Introduction: Recent Debates on the Developmental State in Africa,* Duisburg: University of Duisburg-Essen.

Milonakis, D. & Fine, B., 2009. *From Political Economy to Economics: Method, the Social and the Historical in the Evolution of Economic Theory.* London: Routledge.

NAAMSA, 2013. *Jan-Dec 2013 Industry New Vehicle Sales,* Centurion and Port Elizabeth: National Association of Automobile Manufacturers of South Africa/ RGT SMART Market Intelligence Ltd.

NAAMSA, 2014a. *Jan-Dec 2014 Industry New Vehicle Sales,* Centurion: National Association of Automobile Manufacturers of South Africa/ Lightstone Auto.

NAAMSA, 2014b. *Quarterly Review: 3rd Quarter 2014,* Pretoria: National Association of Automobile Manufacturers of South Africa.

National Treasury, 2015a. *Estimates of National Expenditure 2015,* Pretoria: National Treasury of the Republic of South Africa.

National Treasury, 2015b. *Budget Review 2015: Annexure C,* Pretoria: National Treasury of the Republic of South Africa.

NUMSA, 2014. *Notice of Strike on Wage Issues and Other Substantive Issues.* [Online] Available at: http://www.seifsa.co.za/images/Documents/MA_Negs_2014_NUMSA_Strike_Notice.PDF
[Accessed 14 January 2016].

ONS, n.d.. *Introduction to the The Inter-Departmental Business Register (IDBR).* [Online]
Available at: http://www.ons.gov.uk/ons/about-ons/products-and-services/idbr/index.html
[Accessed 10 March 2015].

Payne, T., 2011. *Tyre Industry Left Threadbare.* [Online] Available at: http://mg.co.za/article/2011-08-26-tyre-industry-left-threadbare [Accessed 19 February 2015].

Payne, T., 2011. *Tyre Industry Reels from 'Blowout'.* [Online] Available at: http://mg.co.za/article/2011-10-07-tyre-industry-reels-from-blowout [Accessed 19 January 2015].

Pitot, R., 2010. *The South African Automotive Industry,* Johannesburg: Automechanika Johannesburg.

Reuters, 2013. *NUMSA Rejects BMW 'Blackmail'.* [Online] Available at: http://www.fin24.com/Economy/Numsa-rejects-BMW-blackmail-20131007
[Accessed 9 February 2016].

Rustomjee, Z. & Hanival, S., 2008. *A Review of Industry Policy, Instruments and Support Programmes: 1994-2008,* Pretoria: Presidency of the Republic of South Africa.

Saad-Filho, A., 2010. *Growth, Poverty and Inequality: From Washington Consensus to Inclusive Growth,* New York: United Nations.

Sandrey, R., 2013. *Policy Space in South Africa's non-Agriculture Imports,* Stellebosch: Trade Law Centre.

SAPA, 2013. *Davies: BMW Not Going Anywhere.* [Online] Available at: http://www.fin24.com/Companies/Industrial/Davies-BMW-not-going-anywhere-20131009
[Accessed 9 February 2015].

SATMC, n.d.. *South African Tyre Manufacturers Conference.* [Online] Available at: http://www.satmc.co.za/content/our-members [Accessed 14 January 2016].

SEIFSA, 2014a. *48 Hours' Notice of Lock-Out Action.* [Online] Available at: http://www.seifsa.co.za/images/Documents/Strike/doc02600320140701160822.pdf
[Accessed 14 January 2016].

SEIFSA, 2014b. *Press Release - 2014/07/22: SEIFSA Accepts Minister's Proposal on Wages but Not on Section 37.* [Online] Available at: http://www.seifsa.co.za/15-industry-news/317-press-release-2014-07-22-seifsa-accepts-minister-s-proposal-on-wages-but-not-on-section-37.html
[Accessed 3 March 2015].

South African Government News Agency, 2014. *SA Stimulates Investment in Vehicle Production.* [Online] Available at: http://www.sanews.gov.za/business/sa-stimulates-investment-vehicle-

production
[Accessed 15 January 2016].

South African Government News Agency, 2015. *DTI Welcomes Launch of Toyota Plant.* [Online]
Available at: http://www.sanews.gov.za/south-africa/dti-welcomes-launch-toyota-plant
[Accessed 15 January 2016].

Szmrecsányi, T., 2005. The Contributions of Celso Furtado (1920 – 2004) to Development Economics. *The European Journal of the History of Economic Thought,* 12(4), p. 689–700.

the dti, 2010. *2010/11 – 2012/13 Industrial Policy Action Plan,* Pretoria: The Department of Trade and Industry.

the dti, 2013a. *Industrial Policy Action Plan: IPAP 2013/14 – 2015/16,* Pretoria: The Department of Trade and Industry.

the dti, 2013b. *2012/13 Incentive Performance: Selected Projects,* Pretoria: Department of Trade and Industry.

the dti, 2014. *Industrial Policy Action Plan 2015: Economic Sectors, Employment & Infrastructure Development Cluster IPAP 2015/16-2017/18,* Pretoria: The Department of Trade and Industry.

the dti, n.d.. *Industrial Procurement.* [Online]
Available at: https://www.thedti.gov.za/industrial_development/ip.jsp
[Accessed 15 January 2016].

The Supreme Court of Appeal of South Africa, 2011. *International Trade Administration Commission v SA Tyre Manufacturers Conference (738/2010) [2011] ZASCA 137 (23 September 2011),* Pretoria: South African Legal Information Institute.

Todaro, M. P., 1996. Chapter 12: Trade Theory and Development Experience. In: *Economic Development.* 6th ed. London: Pearson Addison-Wesley, pp. 407-446.

TSAM, 2013. *Sustainability Report 2013,* Johannesburg: Toyota South Africa Motors.

Venter, I., 2014. *Catalytic Converter Industry 'Dying', Platinum Tax Possible Saviour – NAACAM.* [Online]
Available at: http://www.engineeringnews.co.za/article/catalytic-converter-industry-dying-platinum-tax-possible-saviour---naacam-2014-02-17
[Accessed 19 February 2015].

Zalk, N., 2014. Industrial Policy in a Harsh Climate: The Case of South Africa . In: J. M. Salazar-Xirinachs, I. Nübler & R. Kozul-Wright, eds. *Transforming Economies: Making Industrial Policy Work for Growth, Jobs and Development.* Geneva: International Labour Office, pp. 327-354.