



TRADE & INDUSTRIAL POLICY STRATEGIES

ANALYSIS OF EXISTING INDUSTRIAL POLICIES AND THE STATE OF IMPLEMENTATION IN SOUTH AFRICA

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Trade & Industrial
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List of abbreviations

AGOA	African Growth and Opportunity Act
ANC	African National Congress
APDP	Automotive Production and Development Programme
APORDE	African Programme on Rethinking Development Economies
AsgiSA	Accelerated and Shared Growth Initiative of South Africa
BBBEE	Broad Based Black Economic Empowerment
BRRR	Budget Review and Recommendations Report
CCRED	Centre for Competition, Regulation and Economic Development
dti (the)	Department of Trade and Industry
DST	Department of Science and Technology
DSBD	Department of Small Business Development
EIEC	Economic, Investment and Employment Cluster
EDD	Department of Economic Development
EMIA	Export Marketing & Investment Assistance Scheme
FDI	Foreign Direct Investment
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GEAR	Growth, Employment and Redistribution
IDAD	Incentive Development and Administration Division
IDC	Industrial Development Corporation
IDD	Industrial Development Division
IDZs	Industrial Development Zones
IPAP	Industrial Policy Action Plan
IPP	Import Parity Pricing
ITAC	International Trade Administration Commission of South Africa
ISI	Import Substitution Industrialisation
MCEP	Manufacturing Competitiveness Enhancement Programme
MEC	Minerals-Energy Complex
MIDP	Motor Industry Development Programme
NEDLAC	National Economic Development and Labour Council
NIPF	National Industrial Policy Framework
PPPFA	Preferential Procurement Policy Framework Act
R&D	Research and Development
RDP	Reconstruction and Development Plan
SADC	Southern African Development Community

SAMAF	South African Microfinance Apex Fund
SEDA	Small Enterprise Development Agency
SEFA	Small Enterprise Finance Agency
SETAs	Skills Education Training Authorities
SEZs	Special Economic Zones
SOEs	State Owned Enterprises
SIPs	Strategic Integrated Projects
SQAM	Standards, Quality Assurance and Metrology system
TDCA	Trade and Development Co-operation Agreement
TIPS	Trade & Industrial Policy Strategies
TISA	Trade and Investments South Africa
TPSF	Trade Policy and Strategy Framework

Executive summary

Supporting industrial development has been a key component of the South African government approach to economic development. It has taken place alongside and has been inextricably linked to the extraction of minerals. During both World Wars, as well as the interwar years, supporting local industrial development was driven by global shortages as well as the need to have local capacity to supply much-needed products for an increasingly prosperous white middle class. Apartheid used the levers of industry to further entrench the economic power of the white population and oversaw the establishment of an Afrikaner industrial class that was more loyal to the apartheid state and the English industrial firms. The post-war apartheid state was able to draw on mineral rents and levers of the state to embark on massively ambitious projects in the energy and chemical sector, which saw the establishment and growth of Sasol and Mosgas (later PetroSA) as well as significant investment in electricity generation (mainly through coal-fired power stations). The latter was necessary to unlock the vast mineral resources deep underground, support the energy-intensive synfuels process, and allowed significant capacity to be developed in processing minerals into steel and later aluminium. The term Minerals-Energy Complex (MEC) was used to describe the inter-relationship between the minerals sector and the energy sector that typified South African industry in the decades before democracy in 1994.

The isolation of South Africa under apartheid and the need to replicate the lifestyle of the developed world for the white population saw unusual industrial patterns emerge in South Africa – for example multiple models of motor vehicles with small batch runs of each make. This pattern of small, usually uncompetitive, batch runs of multiple product lines was prevalent across many industries during the apartheid period. With the turn to democracy in 1994 and the opening up of South Africa politically, socially and economically, these industries proved to be uncompetitive and with the lowering of tariffs during the Uruguay round of the General Agreement on Tariffs and Trade (GATT) were forced to restructure or face closure. The lower tariffs and opening of borders, combined with increasing competition from countries such as China and India, led to a decline in South Africa's manufacturing sector. The number of jobs in manufacturing increased from 1,5 million in 1994 to peak at just over two million by 2008 before declining to 1,7 million in 2016. The contribution of manufacturing to Gross Domestic Product (GDP) has equally been in decline. Those industries that could restructure, modernise and/or benefit from significant state support have been able to grow significantly. They have not, however, been able to create the much-needed jobs required by the country to reverse the massive unemployment emanating from significant job losses starting in the mid-1980s in mining and agriculture, and later from employment-intensive industries such as clothing and textiles and steel fabrication, among others. The 2009 recession stemming from the global financial crisis saw a further million jobs lost.

The democratic government faced a number of demands in the immediate post-1994 period, all requiring urgent attention – healthcare, education, water, electricity, housing, sanitation, transport infrastructure all needed to be provided to the majority of South African citizens, many of whom had been denied these basic rights under

apartheid. The need to transform the economy and increase the participation of black people within the existing massively concentrated corporate structure was also an urgent priority. With limited resources at its disposal the post-1994 Department of Trade and Industry (the dti) also needed to restructure the incentive system in place, the bulk of which was geared towards “sanctions busting” and promoting uncompetitive exports at great cost to the state, which in 1994 was unaffordable.

Over the next decade the dti (a) overhauled the incentive mechanisms in place to support restructuring Industry to become more competitive, (b) supported the modernisation of the economy through restructuring the companies registration office, companies legislation, and technical support institutions, (c) ensured transformation within industry through implementing Broad-Based Black Economic Empowerment (BBBEE), and (d) contributed to a more inclusive economy through support to small businesses and co-operatives.

These actions took place against a backdrop of the bulk of state resources being allocated to much-needed social transformation and a conservative fiscal stance in the form of the government’s Growth Employment and Redistribution (GEAR) strategy¹, which adopted a Washington consensus approach of low fiscal debt. Mining aside, the much-promised foreign direct investment (FDI) that was expected post-apartheid did not materialise except in sectors that were linked to state procurement or licensing (such as telecoms). South African industry also took the opportunity of an open economy to expand into new markets, with several taking dual stock exchange listings as a springboard to diversify their operations.

By 2007, when parliament approved the National Industrial Policy Framework (NIPF)² there were already signs of a manufacturing industry in crisis. The process of economic restructuring had only been positive in certain industries while others were in free fall and on the brink of collapse. The commodity boom had also seen the currency strengthen to a level that made much of South Africa’s industry uncompetitive. The growth in the mining sector provided some stimulus for local industry but increasingly the conglomerates operating in the manufacturing sector were becoming international players with global sourcing strategies, which usually meant procurement from China or other markets.

The objectives of the NIPF, among others, included facilitating diversification beyond the reliance on traditional commodities and non-tradable services, promoting broad-based and labour-absorbing industrialisation, and long-term intensification of South Africa’s industrialisation process and movement towards a knowledge economy. The NIPF encapsulates the framework and rationale for supporting industrial growth in South Africa and the Industrial Policy Action Plan (IPAP)³ concretises this through strategic interventions (and customised support) to priority industries, especially within manufacturing and value-adding services.

The launch of NIPF and IPAP in 2007 coincided with the onset of the global financial crisis of 2008/2009 and subsequent recession of South Africa’s economy. An

¹ National Treasury (1996).

² the dti (2007)

³ the dti (2016)

overview of industrial developments shows manufacturing being the hardest hit by the crisis. The end of the commodity boom in 2011 coupled with other factors such as currency volatility, shortfalls in electricity, increasing political tension in the country, massive growth in China's exports and a general global slowdown in growth resulted in a decline in the annual growth rate from 3,6% in 2007 to 1,9% in 2015. Employment opportunities in industry were also severely affected and this saw manufacturing shed over 131 500 net jobs between 2008 and 2015.

The South African state adopted a number of supply-side interventions as instruments to implement industrial policy in South Africa as well as demand-side interventions, including through the Preferential Procurement Policy Framework Act (PPPFA) and developmental trade policies. The latest IPAP mentions six different incentive schemes aimed at promoting competitiveness of firms and enhancing output of local industries.

The 2016/17-2018/19 IPAP has three key sectoral focus areas. The first sectoral focus area is the most intensive with more than five sectors, including among others clothing and textiles, agro-processing and automobiles. The second sectoral focus area covers gas-based industrialisation, primary minerals beneficiation and green industries. The third sectoral focus area includes ship/boatbuilding and its associated services industry, aerospace and defence, and electro-technical industries.

In the face of massive global competition, high unemployment, low investment rates by industry, a commodity market in the doldrums, and a weak global growth outlook, the South African Government has committed in all major policy documents to focus on growing its industrial capacity. The latest initiative is the Presidential Nine Point Plan. Important lessons, however, emerged around implementing industrial policy in South Africa over the past decade. These include the need to:

- *Strengthen Intergovernmental Co-Ordination and Capability:* Policy coherence and alignment is crucial to ensure industrial policy's successful implementation. Hence aligning economic policies (e.g. trade facilitation, competition policy, small business development, investment promotion and facilitation, higher education, infrastructure development and macroeconomic policy) becomes critical, especially as some of these policies are driven and implemented by different agencies and government departments.
- *Strengthen Developmental Compact with Social Partners:* For an industrialisation agenda to be effective and transformative, all stakeholders (including specifically the private sector and the government) must be in agreement on the objectives of economic development and the roles and requirements of each to achieve them.
- *Prioritise Sectoral Interventions and Objectives:* A difficult process of sectoral targeting and prioritisation will be needed. Large interventions can leave strategic sectors with little support, while diluted interventions across many sectors may lack the transformative power needed to see returns on that support. As a first step, government needs to differentiate more clearly the objectives of different interventions, between those that are meant to help overcome strategic blockages in sectors for growth, and those that are trying to transform them for inclusivity.

1. Introduction

Growth in isolation is not enough to build an economy that meets the needs of all. An economic structure that creates a diverse and inclusive set of opportunities is also needed. Industrial policy is primarily aimed at structural change that develops strategic industries and creates this inclusive economy. Industrial development is essential to self-sustaining development of any economy and there is wide agreement among policymakers on the importance of industrial development as the common factor in which all the advanced economies have been built on. Industrial policy is therefore, according to Gumede, the set of instruments and interventions aimed at industrial development.⁴ He further states that industrialisation refers to the process of increasing manufacturing output or expanding the manufacturing sector broadly. Industrialisation is a process that is enabled by structural change and is seen to follow three stages. In the first stage the production of primary goods is the dominant economic activity. In the second stage industrialisation takes centre stage by ensuring that manufacturing becomes a source of value to an economy. In the third stage the developed economy emerges.⁵ Industrial policy may be divided into demand and supply-side interventions. Demand-side interventions increase the demand for the output of a particular industrial sector, by enhancing market access to other countries. By contrast, supply-side measures enhance the productive capacity and competitiveness of firms. Competition policy, technology policy and small business promotion constitute supply-side interventions.⁶

There is now growing consensus that there is no blue-print for the design and implementation of industrial policy. Rather, industrial policy formation and implementation is seen as a continuous process of learning by doing as a country discovers what works within a contingent global and national environment. Hence, industrial policy is seen as a process of experimentation, learning and correction, rather than a rigid process of planning and implementation. South African industrial developments have gone through different phases with political changes.

The main aim of this report is to provide an overview of existing industrial policy and the state of implementation in South Africa. The report is outlined as follows: Section 2 offers a brief historical context to industrial policy in South Africa. Section 3 provides an overview of industrial developments in the South African economy. Section 4 focuses on industrial policy implementation post 2007, while Section 5 looks at sector-specific programmes with a case study. Concluding remarks are provided.

⁴ Gumede (2015)

⁵ Malan, Steenkamp, Rossouw and Viviers (2014).

⁶ Mayer and Altman (2003)

2. Historical context to industrial policy in South Africa

Historically, South African industrialisation has evolved around the dominant capital-intensive industry and associated interests known as the minerals-energy complex. The minerals revolution of the 19th century laid the foundation for the emergence of the modern South African industrial state. Post-1994, South Africa's industrial developments continued to be dominated by the minerals-energy complex.⁷ According to Roberts⁸, the minerals-energy complex ensured that rapid expansion of productive capacity occurs mostly in those sectors closely related to minerals beneficiation. Consequently, those sectors which have been identified have weak linkages to the minerals-energy complex are inadequately developed⁹.

This section offers a brief historical context to industrial policy in South Africa. It first looks at industrial policy approaches in the apartheid era. This is followed by discussions on industrial policy in the post-1994 era.

2.1 Industrial policy in the apartheid era

Like many other mineral-abundant state, South African industrialisation has evolved around the dominant capital-intensive industry and associated interests known as the minerals-energy complex. The discovery of precious metals in the late 19th century triggered the process of mining and mining-linked industrialisation. In the beginning the emphasis was on solving the "poor whites" tragedy and absorbing white workers who were moving off farms to urban areas. There was also a growing interest by the private sector in replacing imports, particularly in relation to inputs for resource-based industries such as mining¹⁰. Further to this, the apartheid government did not have a central industrial policy, but rather used a number of inwardly focused approaches aimed at industrialisation, such as protectionist trade policies, often referred to as import substitution industrialisation (ISI) strategies. ISI meant relatively high trade tariffs - a complex trade tariff structure with various kinds of duties to develop, protect, and nurture domestic industries.

In 1940 the then ruling party established the Industrial Development Corporation (IDC), a development bank to promote industrial financing. The development bank was established to finance local enterprises after discovering that a lack of long-term investment capital available for starting domestic enterprises was the major hindering factor in the development of the local enterprises. Moreover, the emerging mining houses in the country preferred investments in gold and diamond mines and were cynical of the country's ability to develop secondary industries. The IDC was the first institution established solely to drive the Industrialisation path of the country. Additionally, the institution was established not to compete in any way with the private sector or attempt to take away business from commercial banks.¹¹

⁷ Fine and Rustomjee (2006).The Minerals-Energy Complex includes heavy industry made up of the mining and energy sectors and a number of associated sub-sectors of manufacturing, which have constituted and continue to constitute the core site of accumulation in the South African economy.

⁸ Roberts (2007).

⁹ Mohamed (2007)

¹⁰Mayer and Altman (2003)

¹¹ Mondli and Bardien (2012)

The IDC continued to play a significant role in the country's industrialisation process. With the changes in political regime in the 1950s formally bringing Apartheid, the IDC's scope was expanded and tailored to the government's priorities. The new government prioritised the development of large-scale strategic projects considered too big to be undertaken by the private sector in the chemicals and energy sectors, and probably not very profitable during their early years of operation. Thus, besides providing funding to the private sector for industrial ventures, particularly small and medium enterprises, the IDC also established a number of large-scale projects in chemicals and steel, such as Foskor and Sasol, which were considered of national strategic importance. The institution also played a key role in supporting local firms and developed various intervention programmes to support South Africa's industrial development. These interventions included low-interest loans, subsidies and payment holidays, 2012).¹²

While the Minerals-Energy Complex is certainly important, historically a number of other industries – such as autos and electronics – developed outside of it, driven by apartheid-era isolation and protectionism, which formed the roots of South Africa's autos and white good industries. However, due to the small size of the local economy, by the 1960s the ISI strategy was no longer sustainable and the country started opening the economy and moving towards trade liberalisation. The local aggregate demand could not sustain the industries since most of the population was too poor to afford many of the goods produced. The ISI came to an end in the late 1970s due to oil-price shocks, the decline in commodity prices, and emerging debt problems. The state started prioritising diversification away from the capital-intensive MEC, decentralisation of industrial activities, and support for small- and medium-sized enterprises.¹³ Expanding the manufacturing sector became one of the focus areas. The main aim was to move away from dependency on primary commodities and start exporting manufactured goods, especially in agriculture and mining.

2.2 Industrial policy in post-1994

Post 1994, the democratically elected government inherited an economy with massively skewed policies and had a limited range of industrial policy instruments.

The first policy adopted by the democratic state was the Reconstruction and Development Programme (RDP) in 1994. The RDP did not put any particular emphasis on industrial structure. The focus was on redressing the injustices of the apartheid regime. Building the economy was one of the key programmes of the policy. This was to be achieved through investments and the state had an obligation to entice investors to increase the investment rate. In turn, it was believed that higher investments would eventually result in a more equal distribution of income and wealth.

In 1996, the African National Congress (ANC)-led government adopted the Growth Employment and Redistribution strategy. The economic policies covered under GEAR, among others, included fiscal policy, monetary and exchange rate policy, trade, industrial and small enterprise policies. The policies under GEAR favoured

¹² Ibid.

¹³ Mayer and Altman (2003)

supply-side interventions designed to lower unit costs and expedite progress up the value chain. The main objective was to promote local markets and support them to enhance their productivity capacity and competitiveness in the (highly liberalised free-trade) global market.¹⁴

The state's plans to close the gap between the "first" and "second" economy, and to promote the emergence of the black capitalist through Broad Based Black Economic Empowerment were theorised in the 2006 Accelerated and Shared Growth Initiative for South Africa (AsgiSA)¹⁵. Similar to the GEAR, AsgiSA focused more on supply-side activities such as investment in infrastructure, and skills and education initiatives. However, in the AsgiSA, trade performance was not necessarily identified as one of the major constraints to growth. On realising the failure of these policies to trickle down the desired outcomes, as it was envisaged prior to their adoption, the government had to take a more aggressive approach to development. The expectations included diversification of the economy, reduction in unemployment and as poverty reduction.¹⁶

3. Industrial developments in the South African economy

Job growth has been relatively strong, at around 2,5% a year since 1994. The total number of people in employment climbed from about nine million in 1994 to just over 15 million by 2007. The International Financial Crisis saw the loss of a million jobs, with the manufacturing sector especially hard hit, with employment levels dropping from just over two million in 2008 to 1,7 million by mid-2016¹⁷.

The South Africa economy has undoubtedly undergone structural changes since 1970. The key set of structural shifts are seen in the post-1994 period, and manifest in the noticeable decline of the share of the manufacturing sector and the rise in the GDP of the share of the finance sector. As shown in [Table 1](#), the share of manufacturing in South Africa's GDP declined from 21% in 1995 to 13% in 2015. In the same period the share of finance in the GDP increased from 12% to 18%. The post-1994 structural shifts translate from the impact of unrestrained liberalisation that opened domestic markets, a global shift towards services, and especially to the financialisation of the South African economy, in which financial investments have somewhat decoupled from the real economy.

¹⁴ Mondi and Bardien (2012)

¹⁵ The Presidency (2004).

¹⁶ Letsoala (2013)

¹⁷ TIPS (2016).

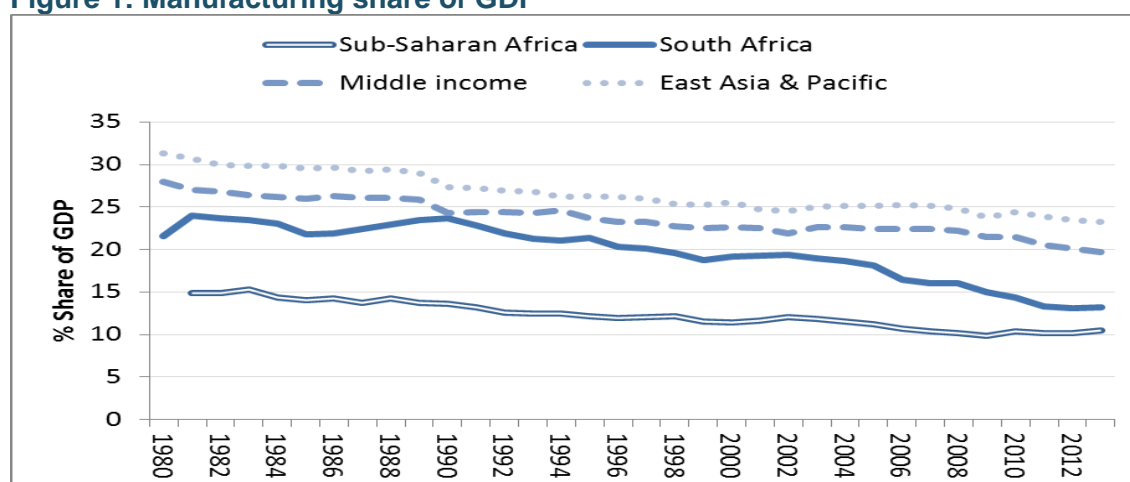
Table 1: Sectoral composition of the South African economy

	1970	1980	1990	1995	2005	2010	2015
Agriculture, fishing and forestry	7%	6%	4%	3%	2%	2%	2%
Mining and quarrying	8%	18%	8%	6%	6%	8%	7%
Manufacturing	21%	20%	21%	18%	16%	12%	13%
Electricity, gas and water	2%	3%	3%	3%	2%	2%	3%
Construction	4%	3%	3%	3%	3%	3%	3%
Trades; catering and accommodation	13%	11%	12%	12%	12%	13%	13%
Transport, storage and communication	9%	8%	7%	8%	9%	8%	9%
Finance, real estate and business services	12%	9%	11%	13%	18%	18%	18%
Community, social and personal services	15%	14%	17%	19%	18%	19%	20%
General government services	9%	9%	13%	14%	13%	14%	15%

Source: South African Reserve Bank

South Africa, similar to the selected regions, as seen in Figure 1, saw its manufacturing contribution to GDP declining over time. As depicted in [Figure 1](#), a noticeably sharp decline is seen between 1995 and 2012, when the manufacturing share of GDP dropped by about eight percentage points from 21% to 13% following a sustained trade liberalisation policy that opened up local markets to international competition. This is a worrisome trend especially because one of the core objectives of industrial policy post-apartheid is restructuring the economy and reversing the prospect of deindustrialisation. Given that the selected regions are showing similar trends, this indicates that external global factors could be affecting the performance of manufacturing industries worldwide. Evidently all the regions were highly affected by the 2008/2009 financial crisis and subsequent economic recession.

Figure 1: Manufacturing share of GDP

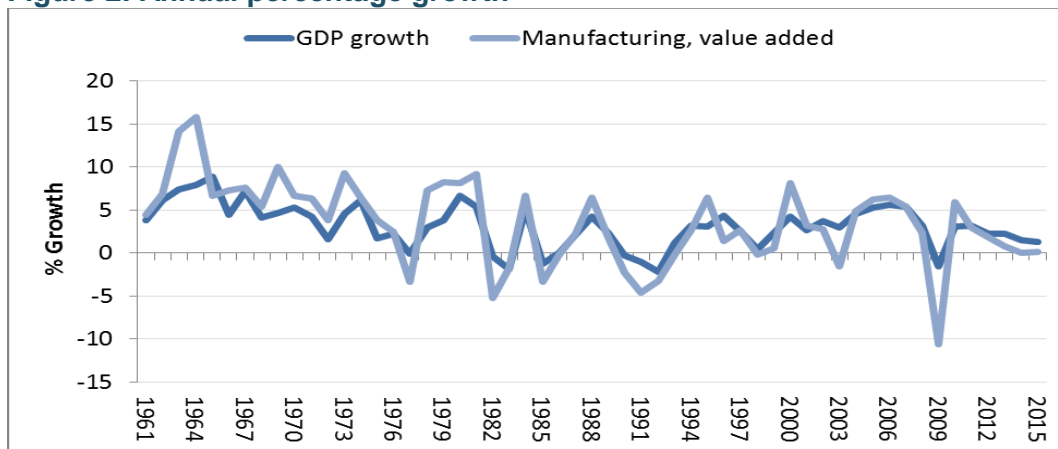


Source: World Bank Data

Over time the annual growth of the manufacturing sector remained closely correlated with that of overall annual GDP growth. [Figure 2](#) shows the average annual real growth rate in manufacturing to be 4,3% pre-1994; 3,6% post-apartheid and before recession; and only 1,9% in the period 2010 to 2015. The South African manufacturing industry was severely impacted by the 2008/2009 global recession

and by definition went into a recession between the periods of 2008Q3 to 2009Q2. The slow global recovery of the United States and European Union and slower growth in China mean that pressure will remain on export-oriented industries.

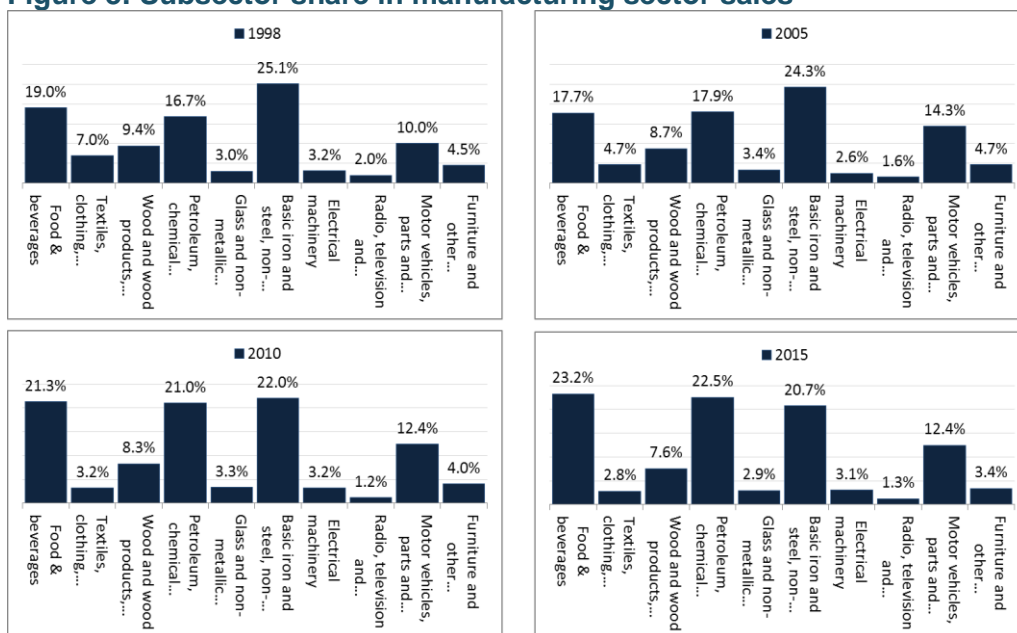
Figure 2: Annual percentage growth



Source: World Bank Data

Post-1994, the South African manufacturing economy has become noticeably more diversified. Notably, the share of basic iron and steel, non-ferrous metal products, metal products and the machinery sector in manufacturing declined slightly from 25% in 1998 to 21% in 2015. On the other hand, petroleum, chemical products, rubber and the plastic products sector increased its share in manufacturing from 17% in 1998 to 23% in 2015. Also, the food and beverages sector increased its share of the manufacturing industry from 19% in 1998 to 23% in 2015. The biggest job losses in manufacturing from 2008 to 2014 emerged in commodity-based manufacturing, such as metals, heavy chemicals and the wood/paper value chain. Only agro-processing saw employment gains in this period.

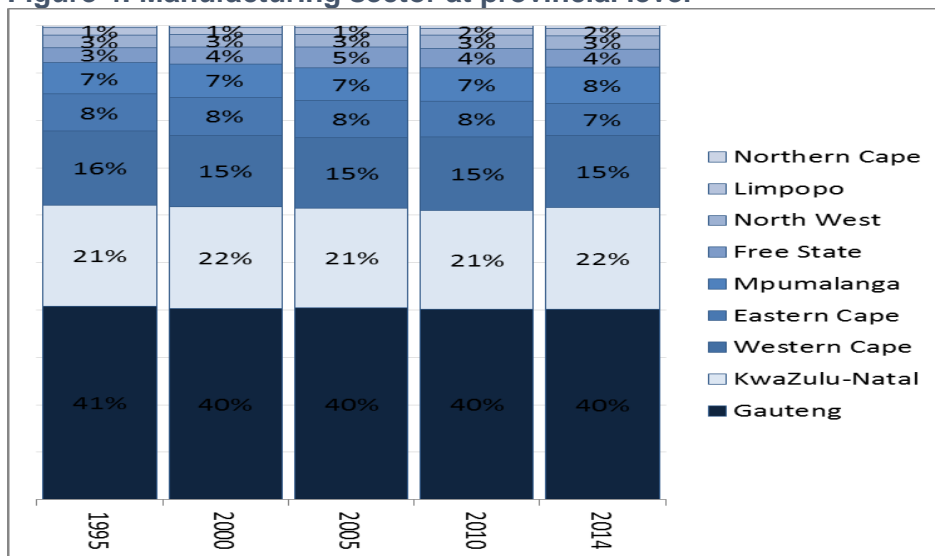
Figure 3: Subsector share in manufacturing sector sales



Source: Statistics South Africa

The share of provinces in manufacturing varies substantially with little industrial economic activities outside the large metropolitan areas of South Africa. As shown in [Figure 4](#), most manufacturing activity takes place in Gauteng, KwaZulu-Natal and the Western Cape. In contrast, the Northern Cape, North West, Limpopo and Free State have maintained low manufacturing. The Eastern Cape and Mpumalanga have demonstrated manufacturing sector potential, highlighting that more strategic investment in the two provinces has potential to grow their manufacturing activities.

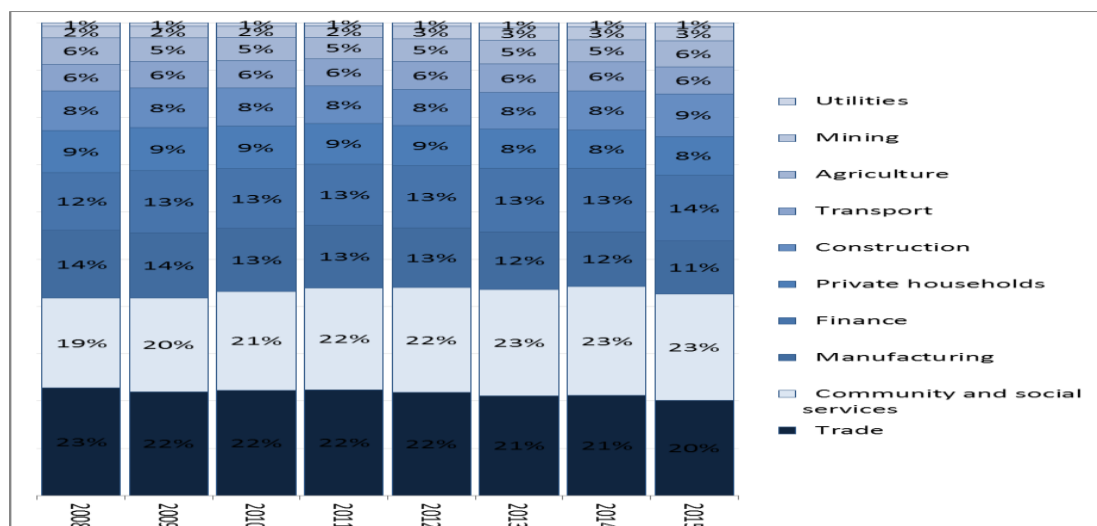
Figure 4: Manufacturing sector at provincial level



Source: Statistics South Africa

Employment data sheds further light on the structure of the South African economy as job opportunities remain in the trades and community and social sectors. Employment in the manufacturing sector was severely affected by the 2008/2009 global recession and has not recovered to pre-recession employment figures. Excess export output by countries like China (for example in the steel sector) and increased input costs due to the Rand's devaluation (and increases in electricity costs) have also contributed to limited manufacturing growth. As shown in [Figure 5](#), the percentage share of manufacturing in total employment has declined from 14% in 2008 to 11% in 2015. In nominal figures the manufacturing sector lost over 131 500 jobs between 2008 and 2015.

Figure 5: Employment by industry



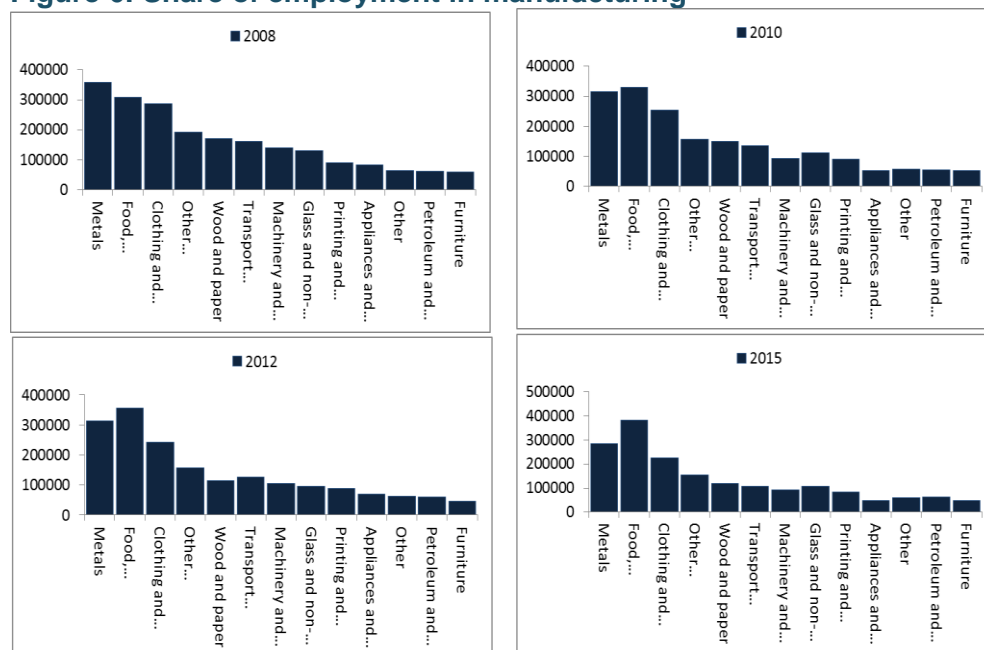
Source: Statistics South Africa

Makgetla and Dicks¹⁸ make the point that the manufacturing sector is undoubtedly critical to long-run growth and development, although it may not be the dominant source of employment. Manufacturing by itself is unlikely to scale up enough to solve the unemployment challenge especially outside large employment growth in the agriculture sector. Rather, industrial policy has tended to include efforts to maximise employment multipliers from manufacturing. There are clear benefits to policies that target equitably spread economic gains in order to permit sustained growth. That in turn requires more equitable or inclusive workplaces, especially in manufacturing, as well as broader ownership of productive assets.

The main employment opportunities in the manufacturing sector have remained somewhat unchanged over the years. The most labour-absorbing sectors are metals; food, beverages and tobacco; and clothing and textiles. Noticeably, the share of employment in the food, beverages and tobacco sectors has overtaken that of the metals sector. There also has been a substantial decline in employment in the clothing and textiles sectors.

¹⁸ Makgetla and Dicks (2014)

Figure 6: Share of employment in manufacturing



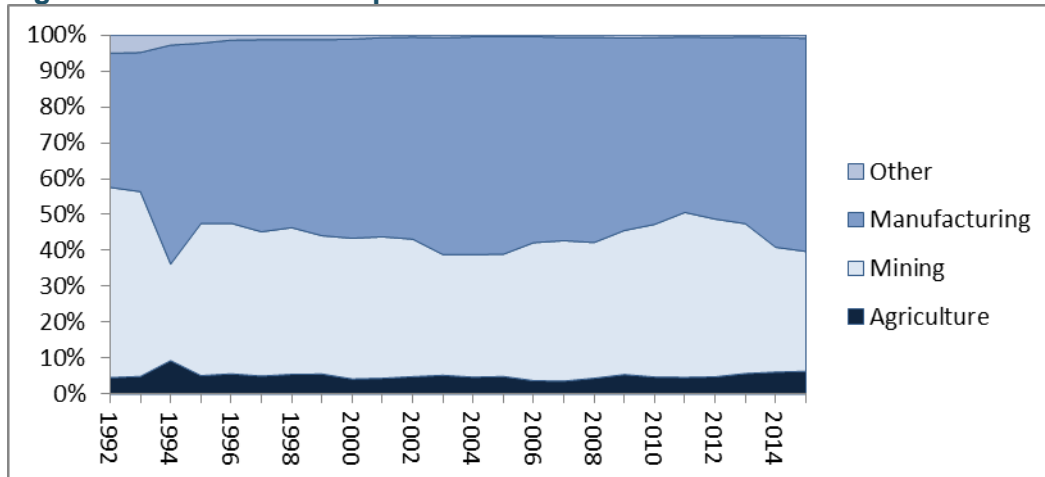
Source: Calculated from Statistics South Africa. Labour Market Dynamics Survey. 2010 and 2014.¹⁹

What becomes evident is that the manufacturing sector has not performed to its full potential. Although the country is still struggling to recover to levels prior to the financial crisis-induced recession, some headway has been achieved in maintaining a strong industrial manufacturing presence (and the related capabilities). South Africa's industrial policy clearly targets large, labour-absorbing sectors; however, the growth potential of these sectors has been limited due to a multitude of factors least of which is global competitiveness in international trade markets.

Previously, South Africa's export basket was mainly dominated by mining-related goods. Over the last two decades South Africa has witnessed the manufacturing sector expanding to dominate the country's export basket with other sectors gradually declining, most notably mining, which suffered most from the end of commodity price boom. As shown in [Figure 7](#), from 1994 the share of manufacturing exports increased to make up almost 60% of the total export basket. In 2015, South Africa's export basket comprised 6% agriculture sector goods, 33% mining sector goods, 59% manufacturing sector goods, and 1% other sector goods. The mining sector has been experiencing a gradual decline in its export share since 2011 and appears not to have recovered from the commodity price slump.

¹⁹ Series on employment by industry. Electronic databases in SPSS format. Downloaded from www.statssa.gov.za Nesstar facility.

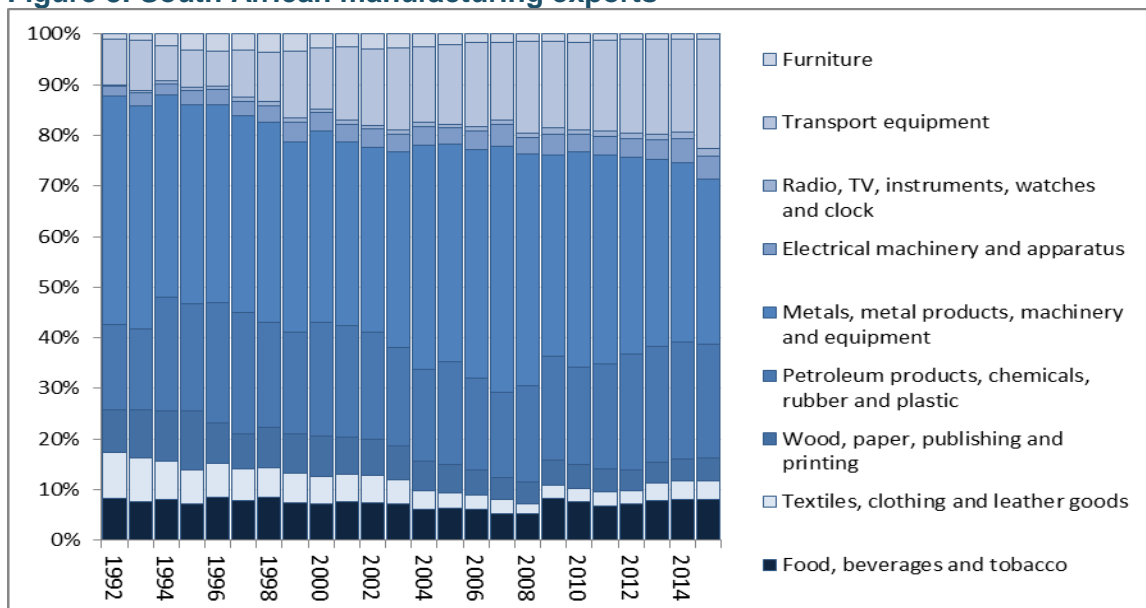
Figure 7: South African exports basket



Source: the dti

The South African export basket of manufactured goods has always largely comprised metals, metal products, machinery and equipment. As seen in [Figure 8](#), from 2008 exports of all the manufacturing exports started to improve, a year after introducing the first industrial policy in South Africa. Exports of food beverages and tobacco also rose rapidly from 2008 to become the fourth largest exported in manufacturing after transport equipment. Notably, most of the products that have been lifted as focus areas in the 2016/17-2018/19 IPAP, such as clothing and textiles, and electrical machinery and apparatus are among the least exported products. Overall the value of imports in manufacturing has been increasing while exports have also been increasing. After the sharp decline in 2012 in both exports and imports, there seems to be a gradual expansion in exports. Imports, however, such as metals and goods of related industries, and transport equipment and machinery still dominate the country's manufacturing sector.

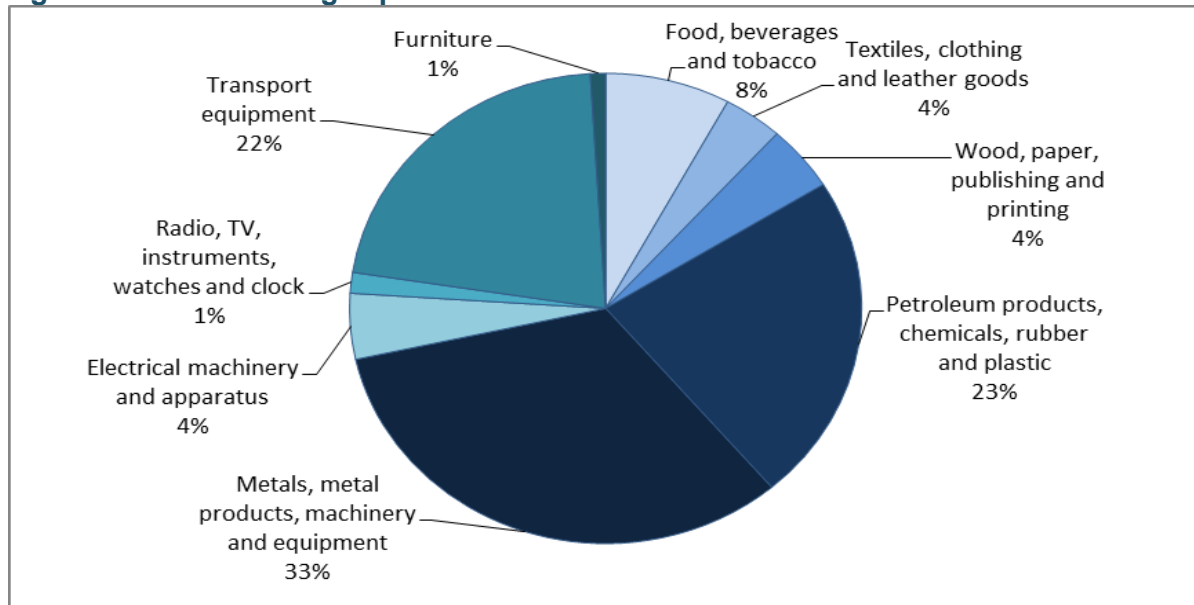
Figure 8: South African manufacturing exports



Source: the dti

Figure 9 shows the composition of the South African manufacturing export basket for 2015. Metals, metal products, machinery and equipment dominated the export basket with 33%. Petroleum products, chemicals, rubber and plastic composed 23% of the total basket. The least exported products are furniture and TVs, radios, instruments, watches and clocks at 1%.

Figure 9: Manufacturing export basket in 2015



Source: the dti

After the first democratic elections in 1994 the state prioritised inclusive economic development. The state looked to international markets as one of the gateways to accelerate economic growth and removed most existing trade barriers. The policies that followed embraced an export-led growth philosophy. The state began to dedicate a considerable amount of its resources to expanding exports and diversification. Thus, South African industrial policy was designed based on the need for the country to export more manufactured commodities to create employment opportunities. Both trade policy and industrial policy share a common objective namely upgrading and diversifying the economic base in order to produce and export increasingly sophisticated, value-added products that generate employment.

Furthermore, the South African Trade Policy and Strategy Framework (TPSF) reiterates the need to achieve full-scale industrialisation and puts more emphasis on the need to upgrade the industrial base to foster the production and export of more value-added manufactures. Thus, the country's trade is tailored to industrial policy and they go hand in hand. Recent studies into the dynamic relations between economic growth and exports in South Africa proved a long-term positive relationship between the two variables. Since the national industrial policy seeks to expand exports, its impact on the economy may only become prominent over time. In the short run, the state must maintain its focus on dedicating resources to the key sectors of the economy based on their potential to grow production and exports and the ability to absorb as much labour as possible.

4. Industrial policy implementation post 2007

The South African National Industrial Policy Framework was launched in 2007 to provide an overarching point of reference for the development of the rolling Industrial Policy Action Plans in particular and to economic and sector policy across government as a whole. The NIPF was developed in the context of the Accelerated and Shared Growth Initiative of South Africa driven by the Presidency. With its strong focus on the manufacturing sector as a key driver of balanced development, the NIPF set a framework and an implementation mechanism – in the form of IPAP – for addressing cross-cutting and sector-specific constraints (and optimising opportunities) to put South Africa on a stronger growth path.

This section focuses on industrial policy implementation post-2007. The section begins by highlighting the objectives of NIPF. This is followed by overviews of the NIPF strategic programmes and the institutional mechanisms governing the implementation of industrial policy in South Africa.

4.1 National Industrial Policy Framework (NIPF)

The NIPF encapsulates the framework and rationale for supporting industrial growth in South Africa, and the IPAP concretises this through strategic interventions (and customised support) to priority industries, especially within manufacturing. Yet, global competitiveness (broadly) remains an issue, and IPAP attempts to support investments in productive capacity, skills and increased local manufacturing capabilities in support of export-led industrialisation. To achieve its goals, the NIPF had the following core objectives:

- Restructuring the economy and reversing the prospect of deindustrialisation;
- Moving to a more value-adding, labour-intensive and environmentally sustainable growth path – especially in globally competitive, non-traditional tradable goods and services;
- Shifting the focus of economic activity towards historically disadvantaged people and regions; and
- Contributing to comprehensive industrial development in Africa (primarily through infrastructure development, increased industrial productive capacity and greater regional integration).

The dti is the leading department that steers South Africa's industrialisation path. To implement the NIPF **the dti** developed and launched a revised three-year rolling Industrial Policy Action Plan (IPAP) with a 10-year outlook annually.

4.2 Strategic Programmes

The NIPF was premised on the need to implement 13 strategic programmes. IPAP, as the implementation programme, translated these programmes into key action plans with measurable performance indicators. The linkages between the two are outlined in Table 2 below.

Table 2: Implementation of NIPF Programmes through IPAP

NIPF (2007)	IPAP (2015/16-2018/19)
<p>SP1: Sector Strategies</p> <p>The sector development process in government included thorough, evidence-based and realistic economic analysis of sectors, taking into account relative size and growth prospects and potential impacts on employment, value-addition, diversification of production and exports, technology development and broad-based empowerment. The process outlined included a robust consultation with business and social stakeholders, the identification of key sectoral constraints and where opportunities lie, an economic cost-benefit analysis, an assessment of institutional considerations, and intra-governmental coordination mechanisms.</p>	<p>IPAP has targeted specific industries for rapid development, especially by working with industry and labour to support investment, technology uptake, upgrading and competitiveness improvements, and importantly – job creation. Sectoral priorities are clustered around two main themes: first, traditional sectors with strong growth multipliers (automotives, metals fabrication, capital and rail equipment, plastics, pharmaceuticals and chemicals); sectors with strong employment multipliers (agro-processing, forestry, timber, paper, pulp and furniture) and stressed sectors (clothing, textiles, leather and footwear), and sectors offering paths to skills upgrading (business processing services and crafts). The second cluster focuses on sectors deemed crucial for long-term resource sustainability (oil and gas, renewable energy, and green transport), sectors that can leverage domestic comparative advantage (mineral resources) and high-tech; ICT; advanced materials and niche manufacturing.</p>
<p>SP2: Industrial Financing</p> <p>Industrial financing²⁰ was recognised as being crucial for implementing industrial policy in South Africa. Financing was to focus on supporting the production of substantively new goods and services, new forms of production, as well as expansive growth of existing non-traditional tradable activities through relieving some fundamental constraints.</p>	<p>Over the past 20 years, the IDC has approved industrial funding of more than R128 billion (R204 billion in 2013 prices) to firms, supporting the creation of 360 000 direct jobs over the period and saving an additional 43 000 jobs. Particularly important was a R6 billion fund that was part of South Africa’s Framework Response to the Global Economic Crisis – with the dti to facilitate the implementation of Industrial Policy in South Africa. Since 2010, the IDC has been a part of the Department of Economic Development (EDD²¹).</p>

²⁰ Programmes administered by the dti, DST and the Industrial Development Corporation (IDC) provide industrial financing in South Africa. The current financing mechanisms required re-evaluation, taking into account evidence about their effectiveness, changed conditions and global best practice in order to improve their effectiveness.

²¹ EDD is responsible for coordinating the New Growth Path (which addresses the structural constraints to absorbing large numbers of people into the economy and the creation of decent work) and overseeing the work of key state entities engaged in economic development. These include the IDC, the Competition Commission and Competition Tribunal, and the International Trade Administration Commission of South Africa (ITAC). The Small Enterprise Finance Agency (SEFA) previously also reported to EDD.

NIPF (2007)	IPAP (2015/16-2018/19)
<p>SP3: Trade Policy</p> <p>Trade policy was integrated into the NIPF with the aim of significantly contributing to achieving the objectives of sustainable economic growth and international competitiveness. Boosting exports (for employment creation and current account deficit reduction) therefore required consideration of the constraints to exports, and responses included targeted FDI promotion, tariff reform²², a more focused export promotion strategy, and a revised trade negotiating strategy.</p>	<p>ITAC (which now forms part of EDD rather than the dti) continued to consolidate and realign itself to support strategic industrial development imperatives, including a revised Trade Policy and Strategy Framework (TPSF) released in 2009. The export promotion work of the department has been bolstered by the development of a National Export Strategy with support enhanced primarily through the Export Marketing & Investment Assistance Scheme (EMIA) being the main support programme overseen by Trade and Investments South Africa (TISA), which is a division within the dti. The National Export Development Programme also provides dedicated export-oriented support for firms. TISA is also the custodian of the NIPF that is leading the development of a National Investment Promotion Strategy. Agreements such as the EU Trade and Development Co-operation Agreement (TDCA) and US African Growth and Opportunity Act (AGOA) have supported expanded export and investment flows between South Africa and key trading partner regions.</p>
<p>SP4: Skills and Education for Industrialisation</p> <p>Emphasised alignment between industrial policy and skills and education development, especially the role of the Skills Education Training Authorities (SETAs) particularly for sector-specific strategies requiring more graduates in tertiary technical skills such as engineering, and larger pools of math's and science school-leavers.</p>	<p>Mandate shifted to new ministry (EDD). Progress has been made in undergraduate engineering and enrolment figures with emphasis shifting towards graduate-mentoring workplace learning. An integrated skills plan for the next 20 years is being developed across all the Strategic Integrated Projects (SIPs) so as to inform training colleges, universities and artisan schools across the country of the skills required to support industrialisation.</p>
<p>SP5: Competition Policy and Regulation</p> <p>High levels of concentration and excessive market power were a major policy concern in many South African industries, and this necessitated creating more robust competition legislation and institutions, which came into force in 1998²³. A need to strengthen competition policy to address some of the unique features of South Africa was noted, particularly,</p>	<p>Since 2009, the Competition Commission now also reports through the EDD. Mergers have taken place across the entire spectrum of South Africa's economy, with the largest number in manufacturing, property and the wholesale and retail sectors, an indication of the extent of corporate restructuring since the late 1990s.</p> <p>In 2007 the Competition Act was amended to enable the Commission to</p>

²² Tariff reform in South Africa since 1994 has been extensive in the scale of tariff reduction and in simplifying the tariff structure. Additional refinements of tariffs have two focus areas. Tariffs on upstream input industries will be reviewed and in the interests of lowering input costs into downstream manufacturing, while tariffs on downstream industries will be treated more carefully, particularly those that are strategic for employment or value-addition.

²³ The 1998 Competition Act recognised the need to promote much higher levels of competition in the economy to facilitate entry of small and medium-sized businesses, historically disadvantaged people and FDI. It also emphasised that certain industries need to achieve minimum economies of scale to be globally competitive.

NIPF (2007)	IPAP (2015/16-2018/19)
<p>continued (and growing) high levels of concentration in the economy in a range of sectors. The responses including setting up a number of regulators, and tackling the specific practice of import parity pricing (IPP), including removing import protection on products priced according to IPP principles.</p>	<p>become more proactive in investigating markets, the abuse of dominant positions, and ensuring market transparency. Further amendments strengthened the Commission's powers to combat anticompetitive behaviour and to provide for criminal sanctions for individuals and entities. While competition policy was designed to tackle concentration in the economy, it has been a relatively blunt instrument. Despite some successes in addressing collusive practices (notably in some food manufacturing sectors, construction, chemicals and fertilisers), it has been unable to achieve the structural shifts in levels of concentration required to change patterns of asset ownership – more specifically reducing barriers to entry for new firms.</p>
<p>SP6: Leveraging Public Expenditure</p> <p>Investments in new infrastructure²⁴ and maintenance provide economic participation opportunities to domestic companies as suppliers by facilitating the build-up of manufacturing capabilities and competitiveness that can be leveraged for exports. Public procurement of designated²⁵ products such as clothing and textiles, rail and bus fleets, infrastructure projects, and renewable energy is supporting increased local content. The PPPFA was amended to enhance the procurement of locally manufactured products.</p>	<p>The Local Procurement Accord was signed in 2011 to promote local procurement to create five million jobs in South Africa by 2020 on the back of an expansive infrastructure build programme valued in the trillions.</p> <p>Competitive Supplier Development Programmes (run by the Department of Public Enterprises) further highlight the role of State Owned Companies such as Eskom and Transnet in developing local supplier development programmes. Heavy emphasis was also placed on developing skills within government, especially around Monitoring and Evaluation to ensure compliance with localisation targets of state procurement.</p>
<p>SP7: Industrial Upgrading</p> <p>Upgraded industrial capabilities such as investments in machinery, upgraded skills and improved logistics capabilities assist firm competitiveness. Key programmes include the Manufacturing Excellence Programme²⁶ and Technical Infrastructure for a sound Standards, Quality Assurance and Metrology (SQAM) system.</p>	<p>The Manufacturing Competitiveness Enhancement Programme (MCEP) is another programme that provides enhanced manufacturing support to encourage upgraded production facilities that sustain employment and maximise value addition. As part of its developmental trade policy, the dti has reoriented its Technical Infrastructure to support developing enabling standards and compulsory specifications, specifically to lock out inferior products and improve the quality of locally manufactured goods.</p>

²⁴ Road, rail, ports, electricity, telecommunications, water and social infrastructure such as housing, schools, hospitals and libraries. At the time this included mega-projects such as the Gautrain and 2010 World Infrastructure like stadiums.

²⁵ The PPPFA allows for the designation of certain products in support of increased local content. Designated products are products for which local production capacity exists and where government procurement of such products is mandated to be from local manufacturers.

²⁶ Supporting firm-level upgrading efforts such as process, product and value-chain upgrading.

NIPF (2007)	IPAP (2015/16-2018/19)
<p>SP8: Innovation and Technology</p> <p>Providing greater support for innovation and technology so as to reach the research and development (R&D) expenditure target of 1% of GDP. Particular emphasis was on process and product development, and the commercialisation of technology. The need for coherence and collaboration with the Department of Science and Technology (DST) was clearly identified.</p>	<p>In collaboration with DST, the dti continues to review incentives and instruments for science, technology and innovation. This includes formalising an R&D-led industrial development approach and R&D projects that scale up industrial growth, ideally through partnerships between government, academia and industry (large, medium, and small enterprises). Key programmes include the Technology Commercialisation Strategy and harmonised innovation support programmes.</p>
<p>SP9: Spatial and Industrial Infrastructure</p> <p>Focused on delivering industrial infrastructure (especially in underdeveloped areas with latent economic potential), primarily through Industrial Development Zones (IDZs) and an extension to other types of infrastructure.</p>	<p>The Infrastructure Development Act No. 23 of 2014 was promulgated and the Presidential Infrastructure Coordinating Commission was established to integrate and coordinate the long-term infrastructure build. Eighteen SIPs²⁷ have been developed and these cover social and economic infrastructure across all nine provinces (with an emphasis on lagging regions with latent potential such as Limpopo, Mpumalanga and the Northern Cape). Following implementation of an IDZ programme, weaknesses were identified that led to a policy review and the dti introducing a new Special Economic Zones (SEZs) policy. IPAP identifies SEZs as key contributors to economic development, especially industrialisation, regional development and employment creation and the SEZ Act No. 16 of 2014 characterised SEZs as including IDZs, Free Ports, Free Trade Zones and Sector Development Zones.</p>
<p>SP10: Finance and Services to SMEs</p> <p>Delivery of financial and non-financial support to small enterprises with the Small Enterprise Development Agency (SEDA), KHULA (enterprise Finance) and the South African Microfinance Apex Fund (SAMAF) key institutional drivers.</p>	<p>Having been initially shifted to EDD in 2009, the small and medium-sized (SME) finance agencies (KHULA and SAMAF) were merged to create SEFA in 2012. These financial (and non-financial) support functions have since been transferred to the Department of Small Business Development (DSBD), which was established in 2014.</p>
<p>SP11: Leveraging Empowerment for Growth and Equity</p> <p>Increased focus of BBBEE on increasing the entry of black people into new (and growing) economic activities</p>	<p>BBBEE was intended to have a wider reach and included a set of codes promulgated by the dti that links government procurement to a set of incentives based on black ownership, management, corporate social investment and training activities.</p>

²⁷ The SIPs comprise: five Geographically-focussed SIPs, three Spatial SIPs, three Energy SIPs, three Social Infrastructure SIPs, two Knowledge SIPs, one Regional Integration SIP and one Water and Sanitation SIP.

NIPF (2007)	IPAP (2015/16-2018/19)
<p>SP12: Regional and African Industrial and Trade Framework</p> <p>South Africa is well positioned to drive industrialisation on the continent given its size and capabilities. However, Africa is limited in its productive capacity and infrastructure, requiring a shift from a trade focus (particularly market access) towards continental industrialisation and integration.</p>	<p>Africa's high growth and increasing consumer demand across the continent presents substantial opportunities for resource exploitation and infrastructure development. On-going programmes are examining regional value chain linkage opportunities across a few key product categories, particularly mining (and beneficiation), agro-processing, pharmaceuticals and chemicals. The Southern African Development Community (SADC) Free Trade Area and continent-wide Tripartite Free Trade Area support export growth to Africa, though Non-Tariff Barriers and Technical Barriers to Trade are still an issue.</p>
<p>SP13: Co-ordination, Capacity and Organisation</p> <p>A key focus was on improving inter-governmental co-ordination around industrial initiatives. There was a further emphasis on capacity building within the dti, the creation of an industrial policy think-tank and increased research and information capabilities (through industrial policy centres of excellence).</p>	<p>The Economic Sectors, Employment & Infrastructure Development Cluster has increased in number with the addition of EDD and DSBD. Ongoing capacity-building initiatives such as the African Programme on Rethinking Development Economies (APORDE) continue to strengthen the developmental thinking behind economic policy in South Africa. Centres such as TIPS and the Centre for Competition, Regulation and economic Development (CCRED) also provide dedicated industrial policy expertise along with universities such as the University of Johannesburg, which now provides a MPhil degree in Industrial Policy.</p>

Source: Adapted from Tsedu, 2015

The Presidential Nine Point Plan announced in the 2015 State of the Nation address targeted boosting economic growth and create much-needed jobs through among others revitalising agriculture and agro-processing, increasing beneficiation and more effective implementation of a higher impact IPAP.

However, the 15 and 20 year reviews²⁸ demonstrated how industrial policy is increasingly impacted by activities that are beyond the influence of the dti alone. The information in the table shows there has been significant progress in implementing most of the core elements of the NIPF through IPAP. Noticeable is the diffusion of some key programmes to other ministries and departments, such as Small Business Development and Economic Development. Not envisioned when the NIPF was first developed, this trend may have some unintended consequences – especially around co-ordination and implementation, with the potential of reducing impact.

²⁸ Hanival and Rustomjee, 2010; Rustomjee, 2013

5. NIPF/IPAP sector-specific programmes

Post 1994, sector-focused policies have seen a progressively growing role in South Africa’s industrial policy, starting from a low base and developing to the current IPAP documents, which centre on a selection of priority sectors. GEAR primarily focused on supply-side interventions, including technological upgrading and special tax incentives, and further notes “twelve industrial priority industry investigations”, indicating future industry-targeting. AsgiSA moved this forward, by specifically mentioning three priority industries: business process outsourcing, tourism, and biofuels - a controversial selection, given the largely service-sector focused set of sectors. Asgisa argued that the sectors were “labour-intensive, rapidly growing sectors worldwide, suited to South African circumstances, and open to opportunities for BBBEE and small business development”; critics argued that excluding industrial sectors meant they lacked large spill-over impacts through industrial multipliers. Additional priority sectors identified in the document - namely agriculture and agro-processing; chemicals; metals fabrication; the creative industries; clothing and textiles, consumer equipment, and forestry, wood and paper – would eventually feed through to the National Industrial Policy Framework.

This section provides a case study of sector-specific IPAP programmes. The section begins by highlighting sectoral focus areas under IPAP across time. This is followed by a case study of the Motor Industry Development Programme (MIDP).

5.1 Sectoral focus under IPAP

Sectoral focus was concentrated under the IPAPs, which were structured around priority sectors. [Table 3](#) displays sectors mentioned across time in the various IPAPs. Nine sectors have been constants since the first IPAP, with these fitting into three different categories. The first are sectors that have been identified as strategic sectors to grow from a low base, with these including high-employment sectors such as business process services and agro-processing, and high-tech sectors like green industries and advanced manufacturing. Second are sectors that are explicitly trying to develop off pre-existing economic advantages, including metals fabrication, plastics and chemicals, and aerospace and defence. Third are pre-existing sectors that require protection, or that are being targeted for expansion, notably the textile industry and the automotive sector.

Table 3: IPAP Sectoral Priorities

	2015/16 - 2017/18	2014/15 - 2016/17	2013/14 – 2015/16	2012/13 – 2014/15	2011/12 – 2013/14	2010/11 – 2012/13
Advanced Manufacturing						
Aerospace and Defence						
Agro-Processing						
Automotives						
Business Process Services						
Clothing, Textiles, Leather and Footwear						
Green industries						
Metal Fabrication, Capital & Rail Transport Equipment						

	2015/16 - 2017/18	2014/15 - 2016/17	2013/14 - 2015/16	2012/13 - 2014/15	2011/12 - 2013/14	2010/11 - 2012/13
Plastics, Pharmaceuticals, Chemicals and Cosmetics						
Boatbuilding and Associated Service Industry						
Forestry, Timber, Paper, Pulp and Furniture						
Mineral Beneficiation (Upstream and Downstream)						
Upstream and Midstream Oil and Gas						
Advanced Materials						
Aquaculture						
Biofuels						
Cultural and Creative Industries						
Nuclear Energy						
Electro-technical industry						
The South African software industry						
Tourism (and links to cultural industries)						
Metering Systems						
Electrical and Telecomms Cable Industry						
IT Equipment						
Public Residential Electrification Programme for low cost housing						
Set-Top Box						
White goods						

Source: Author compilation based on IPAP documents

The clothing textile and automotive sectors have been perhaps the greatest constant in post-apartheid sectoral targeting. Automotives in particular have received perhaps the largest incentive support through the MIDP (and its heir, the Automotive Production and Development Programme – APDP), while the clothing and textiles sector has benefited from large trade protection and frequent financial interventions. The aims of these were different: policy on automotives focused on expansion and realignment of the industry (from local production to export-orientated), while policy on textiles was overwhelmingly about survival in a global environment where imports threatened one of the country’s largest employers.

Beyond these explicit focus areas, sectoral issues have been implicit in a number of more generic interventions. Policies like the clustering strategy, for example, involve the selection of industries to cluster²⁹; and general interventions like the Special Economic Zone policy come equipped with limitations on which industries qualify for the best incentives, and a process of targeting certain industries for key zones.³⁰ Provincial and municipal planning involves targeting sectoral strengths for the region, while science and technology support is necessarily selective, and has made important industry-focused interventions in the likes of the renewable energy sector.

²⁹ the dti, 2015a.

³⁰ the dti, 2015b.

Broadly speaking, however, sectoral industrial policy intervention can be divided into two parts. The first is sustained, large-scale support, of the kind given to the automotive industry. This support is supposed to be transformative, building an industry into something new, bigger and more inclusive³¹. The second is more low-level support, often in the form of strategic planning and small interventions, of the kind delivered in a scatter-shot manner to a wide range of sectors. This support is either an ad hoc intervention brought about by a crisis or an idiosyncratic shock to the sector, or it is targeted at removing barriers, which can help a sector but which is seldom transformative in isolation. The distinction is explored in more depth below, through a case study of the MIDP and sector strategies.

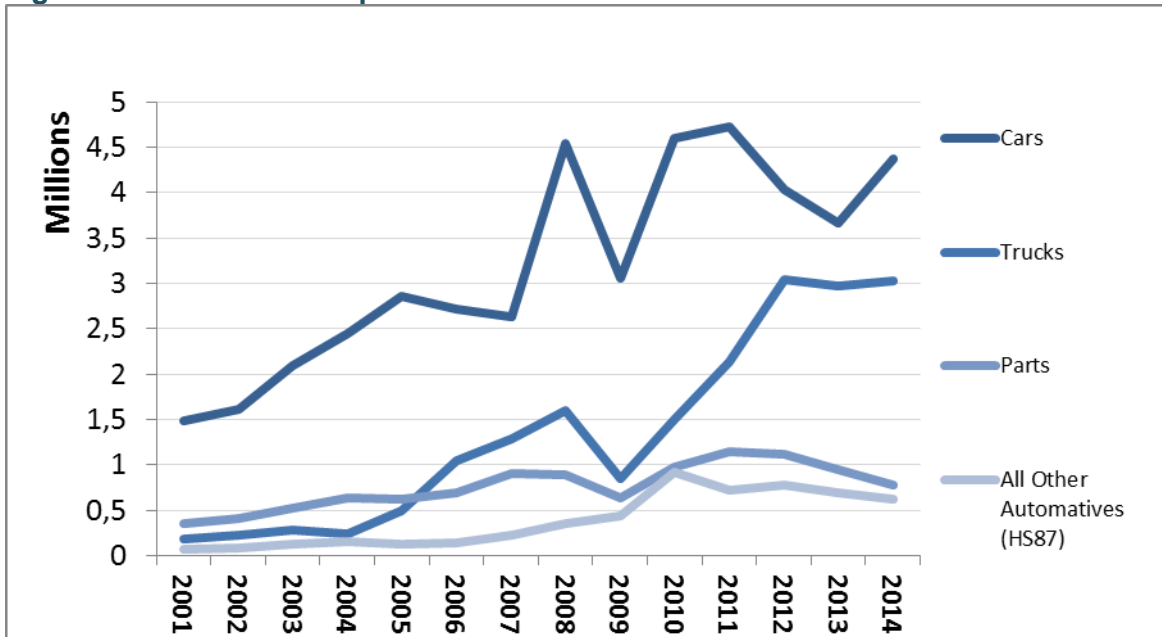
5.2 Case study: Motor Industry Development Programme

The automotive industry has received by far the largest support, first through the MIDP (commencing in 1995), and later through its successor the APDP (from 2014). The MIDP is perhaps the most ambitious industrial policy intervention in post-apartheid South Africa. The programme primarily worked by granting import certificates for every car exported, allowing local producers to circumvent high tariffs (ranging from 25% to 65% for the lifetime of the program) on automobiles (along with a range of supporting interventions). The APDP tweaked this model, particularly to make the programme compliant with World Trade Organization restrictions on export subsidies, which the MIDP was frequently accused of breaching.

The MIDP is widely regarded as the most successful post-apartheid industrial policy intervention. This is even though by some metrics, the industry has not grown substantially. Employment in the assembly and components sector was stagnant or declined marginally between 1995 and 2012, and overall industry growth has been small. But the MIDP was foremost an effort to protect a local industry in decline, by realigning the industry from a focus on domestic production to an export-orientated industry. Through this lens, the initiative was a major success, with automotive exports of finished light automobiles having grown by a factor of 25 and exports of components 12-fold, while the share of exports in the total production of automobiles has grown from 3,7% in 1995 to 55,7% in 2012 (as can be seen in Figure 10).

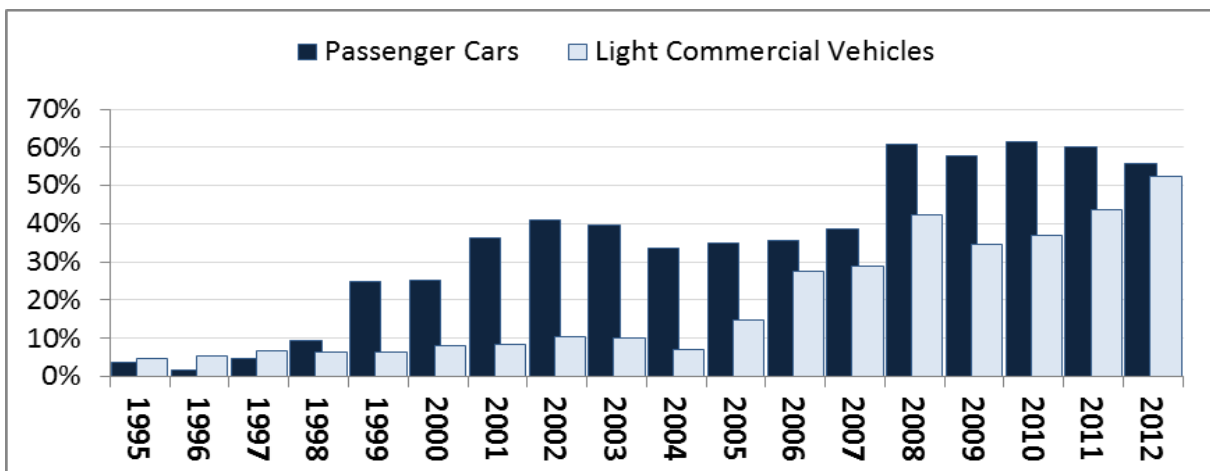
³¹Makgetla and Dicks, 2014

Figure 10: Automotive Exports from South Africa



Source: Author’s calculations based on Trademap data

Figure 11: Exports as a proportion of total production



Source: Barnes and Black, 2013

A range of spillover benefits shore up this success. Automotives have substantial linkages to various industries, including downstream from the platinum industry in the development of catalytic convertors. Tapping into export markets brings with it substantial macroeconomic linkages, including offsetting currency fluctuations by establishing a stable supply of high-value exports. The growth of the automotive industry also facilitated better geographic distribution of growth, including the foundation of the automotive hubs around Coega and East London. Some do dispute this success. Barnes et al - while defending the programme as generally being successful - argue that the sector’s success still fundamentally stems from its basic competitiveness, not simply from support.

Overall, there are three key lessons from the MIDP.

1. First, is scale and success. The MIDP was strategically thought out and well executed - but it was also simply big. The programme offered massive incentives, matched perhaps only by large state-procurement initiatives like the development of power plants. The scale of the MIDP almost certainly played a role in its success, but it creates serious limitations and asks some difficult questions of broader industrial policy. It is simply not possible to run even two of those programmes at once (barring a large realignment of spending priorities across the entire budget), meaning the type of transformative success demanded by multiple industries might not be possible for more than one at a time. There are additional questions as to whether scale is a driver of success or a precondition for success, and if the latter is true, there might be concerns over whether a raft of small-scale interventions across multiple sectors can ever be transformative. The more important lesson is perhaps that there needs to be differentiation between policies that are going to completely overhaul an industry and those that are merely supporting interventions aimed at alleviating certain problems within industries. If the latter is the case, then the basic competitiveness of an industry becomes far more important, rather than the strength of government support.
2. Second, focused, large-scale interventions make supporting policies work better. The MIDP was not the only programme that helped the auto industry. The development of the Eastern Cape automotive hub was assisted by the IDZs at Coega and Port Elizabeth. The focus on exports, particularly to the United States and Europe, was aided by AGOA and the TDCA. A rash of other supporting interventions - in aspects such as research and development, capital investment promotion, and (to a lesser extent) labour relations – all also seem to work particularly well in the case of automotives, even when they were less successful in the broader economy. The MIDP seems to very clearly demonstrate the distinction between a leading-intervention and supporting-interventions. Lead interventions have the capacity to attract investment when it otherwise would not have existed, offering benefits that are so large that they can substantially change the investment calculus of investors. Supporting interventions can also do this, but they are generally never big enough to drive the decision on their own, and can rather make a firm that is already interested in South Africa more likely to act on its interest. To put it another way: massive subsidies can pull in investment, while capital development deductions (like the 12i incentive) cannot.
3. Third, is mobility of investment beyond incentives. There is always lingering uncertainty about the extent to which large incentives lock in the investment they attract, and related questions about when the best time to revoke support is. Most of the firms around the automotive cluster are highly mobile firms operating in global value chains, meaning that a shift in support in South Africa could trigger a relocation. But with scale seemingly being key to the success of the MIDP, and budgets that are too constrained to handle multiple interventions of this scale, there needs to be a consistent churning of lead investment projects. This will always be difficult given the legitimate uncertainty over whether firms will stay without support, and the political dynamics of an industry that has

developed a close relationship with government through cooperation on just such a programme. Some claim South Africa's auto industry "has been and remains internationally uncompetitive"³² without incentives, and that there has been little productivity growth during the incentive period, with components manufacturers, for example, lagging behind European manufacturers in 11 of 13 metrics.³³

Overall, sectoral targeting is an essential component of industrial policy. Tailoring interventions to select sectors seems to offer the greatest scope for maximising impact, and in cases like the MIDP, the result can be transformative. But sectoral targeting also poses a number of challenges. The creation of long lists of possible sectors demands that government either introduce watered-down interventions to all sectors, or concentrates on a handful of priorities, to the neglect of other strategic sectors. The latter raises further questions of how long support can be given to a sector, with consistent interventions needed to reach the full scope of potential sectors. It places substantial political pressure on governments, as portions of the private sector compete for support. This can result in distributions to politically connected interests, or to government acting defensively through strategic support to industries that are struggling, rather than offering proactive support to targeted future champion industries. None of these complexities should, however, detract from the core evidence of the power of focused support to transform an industry, a fact dramatically highlighted by the MIDP.

5.3 Institutional implementation mechanisms

A variety of institutional mechanisms are now used to increase investment, technological capabilities and job creation in industrial activities, including the role of various stakeholders such as government departments, private industry, labour representatives and parliament.

Role of the dti

The dti's 2007 NIPF encapsulates the framework and rationale for supporting industrial growth in South Africa, and IPAP concretises this through strategic interventions (and customised support) to priority industries, especially within the manufacturing sector. The rolling four-year IPAP by the dti is aimed at bringing about structural economic change in South Africa by leveraging state support for industrial development through value-added production focused primarily on manufacturing sectors. IPAP promotes labour-absorbing industrialisation, with a key focus on raising competitiveness and broadening economic participation. As alluded to earlier, it aligns trade policy, investment and export promotion, industrial finance, public procurement and competition policy. IPAP is an attempt to bring manufacturing back to the forefront of South Africa's economy by targeting investments in high labour-absorbing sectors.

There are two key programmes within **the dti** that support manufacturing and industrial development directly. These are the Industrial Development Division (IDD)

³² Kaplan, 2004.

³³ Barnes, Kaplinsky and Morris (2003).

and the Incentive Development and Administration Division (IDAD). IDD houses the Industrial Competitiveness and Customised Sector Programmes, which develop policies and strategies to create jobs, increase value addition and improve firm competitiveness. A significant portion of the funds in this division aims to strengthen technical regulatory and research capabilities, through transfers to departmental agencies such as the IDC, South African Bureau of Standards, South African National Accreditation System, the National Institute of Metrology, the Council for Scientific and Industrial Research and the National Regulator of Consumer Specifications. The IDAD is responsible for helping develop sustainable and competitive firms through providing effective and accessible manufacturing (and services) incentives such as MCEP, Automotive Investment Scheme, Critical Infrastructure Programme, EMIA and infrastructure support to SEZs. Around 63% of the dti's budget is dedicated to the IDAD.

Role of other departments

Implementing NIPF requires coordination across a range of government departments, as well as appropriate organisation and capacity within them. The Economic, Investment and Employment Cluster (EIEC)³⁴ has been identified as being critical to the implementation of the NIPF and IPAP. Noticeable, as mentioned earlier, is the potential reduction of impact of diffusion of some key programmes to other ministries and departments. State Owned Enterprises (SOEs) such as Transnet (which focuses on rail and ports), SANRAL (roads), ESKOM (electricity), DENEL (aerospace and defence) and the IDC also play a pivotal role in supporting industrial development in South Africa.

Role of parliament

Parliament's role and ultimate outcome is to represent the people and ensure government by the people under the country's constitution. This mandate is achieved through passing legislation, overseeing government action, and facilitating public involvement, co-operative government and international participation³⁵. The National Assembly of Parliament is tasked with annual passing and approval of the state budget which includes allocations to the different levels of governments, departments and SOEs. This is primarily achieved following the annual Budget Speech delivered by the Minister of Finance. This annual submission includes two primary bills: the Division of Revenue Bill and the Appropriation Bill, with the Estimates of National Expenditure and the Budget Review spelling out the fiscal framework, and estimates of national revenue, and National Treasury's responses to the Budgetary Review and Recommendation Report (BRRR) from parliamentary committees.

The Parliamentary Portfolio Committee on Trade and Industry assesses the service delivery performance of the dti against its mandate and allocated resources. Section 5 of the Money Bills Amendment Procedure and Related Matters Act (No. 9 of 2009)

³⁴ The EIEC includes the dti, National Treasury, The Economic Development Department, Science and Technology, Energy, Public Enterprises, Transport and The Presidency among others.

³⁵ See http://www.parliament.gov.za/live/content.php?Category_ID=18 for more on parliament's roles and functions.

requires the National Assembly, through its committees, to annually assess the performance of each national department over an 18 month period. A committee must submit a report of this assessment known as a BRRR annually. The overarching purpose of the BRRR is for the committee to make recommendations on the forward use of resources to address the implementation of policy priorities and services, as the relevant department may require additional, reduced or re-configured resources to achieve these priorities and services. The BRRR process enables the committee to exercise its legislative responsibility to ensure that the department and its entities are adequately funded to fulfil their respective mandates and that they are achieving set targets which accompanied budget request submissions.

Role of social partners (business and labour)

Efforts to secure integrated, intra-governmental support for industrialisation, in close co-operation with the private sector, have begun to gain traction. Driving this process is the Presidential Business Working Group, made up of five joint task teams focusing on education and skills, infrastructure, the regulatory environment, the labour relations environment and inclusive growth. The National Economic Development and Labour Council (NEDLAC) is another key platform for co-operation and social dialogue between different constituencies and it comprises of the following chambers: The Public Finance and Monetary Policy Chamber; the Trade and Industry Chamber; the Labour Market Chamber and the Development Chamber. The Trade and Industry Chamber of NEDLAC is meant to reach consensus and make agreements on matters pertaining to the economic and social dimensions of trade, as well as industrial, mining, agricultural and services policies, and comprises six representatives from organised labour, business and government.

Role of local government

Although largely accepted as a critical component of South Africa's economic development plan, industrial policy is mainly driven and coordinated at the national government level. Also both the NIPF and IPAP do not explicitly tie industrialisation to local economic development, even though economic activity (inherently) occurs in geographic localities. This highlights the important role municipalities (and provinces) play in supporting industrial development through, for example, providing affordable and reliable utilities, services to firms and residents (who are also workers), infrastructure development, incentives and supporting investments. There is a clear link between provincial growth and development strategies, municipal Integrated Development Plans, Local Economic Development plans and national policies such as IPAP. A key priority should be to make the institutional arrangements that govern multi-stakeholder and inter-governmental co-operation between provinces, municipalities, national government departments and agencies, business and communities work.

6. Conclusion

There are clear complexities when assessing industrial policy formulation and implementation, because it is an adaptive process, as illustrated by the evolution of industrial policy implementation outlined in this study. Policies must be periodically reviewed to improve their implementation and impact by continuous learning and adjustment. More effort must be made to drive investment in productive capacity that ensures South Africa's manufactured products can compete globally in a world that is on a slow growth-recovery trajectory. Although manufacturing sectors are not the primary drivers of employment growth, we need innovation to ensure that industrial policy targets those sectors that can create the largest and most inclusive set of employment opportunities. With that in mind, some key lessons emerge on ensuring a higher impact industrial policy:

6.1 Strengthen intergovernmental co-ordination and capability

Co-ordination and alignment is crucial to ensure industrial policy's successful implementation, especially when economic growth and development are dependent on multiple factors (and actors, including specifically the dialogue and interface between the private sector and the government). Industrial Policy was not intended to stand alone, hence the alignment of economic policies (e.g. trade facilitation, competition policy, small business development, investment promotion and facilitation, higher education, infrastructure development and macroeconomic policy) becomes critical, especially as some of these policies are driven and implemented by different agencies and government departments – all with different capabilities.

6.2 Strengthen developmental compact with social partners

To some extent, the contestations in economic policy have restricted the collaborative spirit and trust between especially government and business. For an industrialisation agenda to be truly effective and transformative, all stakeholders must be in agreement on the objectives of economic development and the roles and requirements of each to achieve these - a developmental compact. The pervasive "us and them" narrative highlights the work that must still be done to secure the buy-in of participants in supporting the industrial development goals of South Africa.

6.3 Prioritise sectoral interventions and objectives

South African industrial policy takes place in a highly fiscally-contested space. With multiple pressing concerns (education, health, etc.), a tightly constrained budget, and divisions within government about the scale and allocation of spending, industrial policy cannot be used to transform every aspect of the economy all at once. A difficult process of sectoral targeting and prioritisation will be needed. While this is well established through the IPAP, hard questions still need to be faced on how much commitment is needed to see real change. Large interventions can leave strategic sectors with little support, while diluted interventions across sectors may lack the transformative power needed to see returns on that support. This balancing act is difficult even in single sectors: with critics assailing the government for excessive support to the automotive industry through the MIDP, while also criticising inadequate support to, for example, bringing South Africa's electric car programme

to fruition. Over-commitment can be as damaging as a lack of commitment. As a first step, government needs to strengthen the differentiation between the objectives of different interventions, in particular between those that are meant to overcome strategic blockages in sectors, and those that are trying to structurally transform them or make them more inclusive.

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