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Industrial Development

Introduction

This chapter describes the industrial development initiatives – another important aspect of political economy – in post-apartheid South Africa. It also briefly discusses industrial development levels. The overall aim of this chapter is to contribute to knowledge regarding industrial development initiatives pursued since 1994. The discussion is linked to the performance of the South African economy as a whole, already discussed in Chapter 4. The chapter also investigates the extent to which industrial development strategies and policies pursued since 1994 have been effective in ensuring industrialisation in post-apartheid South Africa. In the main, industrialisation remains weak in South Africa.

The South African economy has, over several decades, been driven by inwardly-focused policies aimed at industrialisation and, particularly, import substitution.¹³⁸ This led to steady economic growth and also importantly diversified the economy to some extent, as the South African economy was largely based on mining and minerals. Industrialisation initiatives have played an important role in the growth of some non-traditional sectors such as tourism, automotive and the wine industries.¹³⁹

Furthermore, most South African companies were highly protected from international competition and foreign market pressures.¹⁴⁰ The inward orientation allowed domestic industries to grow in such a manner that could not have been economically feasible in the absence of the import protection.

To be clear, industrialisation refers to the process of increasing manufacturing output or expanding the manufacturing sector broadly. Industrial development entails both enacting policies for industrialisation and ensuring the growth of the economy and manufacturing opportunities. Industrial policy or strategy involves a set of principles and actions in the pursuit of industrialisation. According to Lall,¹⁴¹ industrial strategy refers to an action plan or method for achieving industrial outcomes such as manufacturing, steel production, beneficiation and other such

heavy or light industry outcome; while Robinson¹⁴² defines industrial policy as any government regulation or law that encourages the ongoing operation of, or investment in, a particular industry.

The chapter starts with describing the main objectives of an industrial policy in post-apartheid South Africa. This is followed by a discussion of the industrial structure, both before and after apartheid. Then there is a discussion of other industrial development initiatives, followed by a discussion of what has been achieved through or regarding industrial development in the post-apartheid era so far. Before conclusion, challenges and threats pertaining to industrial development are discussed.

Brief History of Industrialisation

Industrialisation is documented as having begun in Europe in the early eighteenth century. This occurred when there was a shift of the European countries' productive activities away from agriculture towards manufacturing. Engineers incorporating discoveries of scientific breakthroughs in the field of physics (mechanics) and similar areas worked together with labourers on the machines used for production. This brought about technological breakthrough and inventions in the textiles machinery, and the adoption of the steam energy which brought a significant change to industrialisation.

Industrialisation brought about rapid economic growth and the source of demand increased dramatically. The expansion of production was fuelled with increasing domestic demand associated with rising wages as larger sections of the population were incorporated into labour. Since people now had money to spend, this created a domestic market for all the local craftsmen who, for example, created tea sets for tea imported from China. This paved the way for the textile industries and increased the demand for manufacturing goods.

It should, however, be noted that the industrialisation or industrial development of Europe also happened through the colonisation of other continents, including Africa. Many Africans were shipped as slaves to work in Europe. Also, raw materials extracted in Africa were taken by Europeans in order to advance industrial development in Europe. This is still largely the case even though Africa has become politically independent. Lately, China is developing rapidly also through processing Africa's raw materials and precious metals into finished goods.

Industrial Development

It is clear from the Europe case that industrialisation plays a fundamental role in the economy of the country. According to Kiliçaslan and Taymaz,¹⁴³ industrial structures of industrialised countries consist mostly of medium and high technology production and exports. Thus, it is of importance that structural change occurs

with regards to the industry to bring about economic development in developing countries. Structural change is marked by initial growth and eventual decline of industries. Steenkamp et al¹⁴⁴ indicate that structural change follows three stages: primary goods (mainly agricultural) production is the dominant economic activity, then industrialisation takes centre stage and, ultimately, a developed economy emerges.

Kaldor¹⁴⁵ proposed four ideal stages of industrial development that constituted the driver for rapid economic growth and the sources of demand that sustain industrial development. The first stage, in the early stages of industrial development, involves the expansion of a domestic wage/consumer goods sector fuelled by increasing domestic demand associated with rising wages as larger sections of the population are incorporated into the labour force. The second stage has to do with the continued expansion of the consumer goods sector through increasing export. The third stage, which is the stage of industrial development, is marked by a shift in the industrial structure as heavy industries, in particular capital goods industries, serve the demand for investment in other manufacturing sectors. The fourth stage, referred to as explosive growth, is epitomised by a fast rate of growth of external demand for products of heavy industries in combination with the self-generated growth of external demand caused by the economy's own expansion.

The apartheid government laws did not have an impact only on the society but also on the state. The government and state assisted the Afrikaner and British capital at the helm by imposing policies which were oriented with the strategic objectives of the apartheid regime.¹⁴⁶ Clark¹⁴⁷ argues that the state's involvement in the economy was one of the major tenets of the apartheid state. Furthermore, he explains that the state established corporations primarily to enhance government ownership and control of the key sectors of the economy. However, this approach started to change as the nation drew closer to the 1994 elections, as the last apartheid administration and the incoming government of the ANC began implementing a process of privatisation of State Owned Entities (SOEs), mainly because they wanted to raise capital, cut down on debt and other performance-related matters.¹⁴⁸

Industrial Structure of South Africa

Industrial structure has at least three dimensions, according to Chabane et al.¹⁴⁹ First, economists use concentration ratios as summary measures of the number and relative size of firms in different sectors on the assumption that sectors include similar products. Second, structure takes into account vertical and conglomerate linkages (i.e. the extent to which firms control production at different levels of supply and in related and unrelated activities). Third, industrial structure

can also be understood, at a more fundamental level, to do with the nature and orientation of big businesses in particular and the way they interact. To study an industrial structure or the structure of an economy, sectors are considered.

Primary Sector

The primary sector of the economy extracts or harvests products from the earth. The primary sector includes the production of raw material and basic foods. Activities associated with the primary sector include agriculture (both subsistence and commercial), mining, forestry, farming, grazing, hunting and gathering, fishing, and quarrying. The packaging and processing of the raw materials are also considered to be part of this sector.

Secondary Sector

The secondary sector of the economy manufactures finished goods. All of manufacturing, processing and construction lies within the secondary sector. Activities associated with the secondary sector include metal working and smelting, automobile production, textile production, chemical and engineering industries, aerospace manufacturing, energy utilities, engineering, breweries and bottlers, construction, and shipbuilding.

Tertiary Sector/Services Sector

The tertiary sector of the economy is the service industry. This sector provides services to the general population and to businesses. Activities associated with this sector include retail and wholesale activities, transportation and distribution, entertainment (movies, television, radio, music, theatre, etc.), restaurants, clerical services, media, tourism, insurance, banking, healthcare and law.

Industrial Regulation and Policies

As Bodibe¹⁵⁰ argues, it is important that South Africa designs and implements an industrial strategy that can support sectors that are most likely to create employment for the low skilled. This would require the state to play a more developmental and transformative role rather than merely creating a climate conducive for private accumulation. South Africa positions itself to have an industrial strategy that can 'build a diversified and competitive economy that can sustain higher levels of labour absorption by ensuring sufficient levels of industrial upgrading and moving manufacturing sectors towards higher value activities'.¹⁵¹ In the main, the objectives of an industrial policy are to:

- Develop a diversified and dynamic industrial base;

- Build the tradable non-commodity sectors, which include manufactured and service exports as well as import replacement sectors;
- Foster cooperation and agreement by industry, labour and government on sector; and
- Recognise the necessity for greater prioritisation of sectors and sector specific approaches.

Bodibe further indicates that the motivation for an industrial strategy, from the ANC's point of view, arises from the recognition that:¹⁵²

- Colonialism and apartheid shaped the economy to support mineral export with very concentrated ownership and control. These resulted in high levels of unemployment and underemployment, especially in the former homeland areas;
- The market will not lead to more equitable development or job creation unless the state intervenes to mobilise stakeholders to bring about change. In particular, the state must drive development, disciplining business where necessary;
- The most important interventions must support labour-intensive activities, more equitable ownership (especially collective ownership through the state, worker control and co-ops) and investment in people and communities through education skills development and social programmes like health, welfare and housing.

This strategy requires a greater balance between productivity for export and production to meet the needs of the poor in South Africa and the region.

National Industrial Policy Framework

In January 2007, the South African Cabinet adopted the National Industrial Policy Framework (NIPF), which sets out government's broad approach to industrialisation. The aim of the NIPF is to achieve the following:¹⁵³

- To facilitate diversification beyond our current reliance on traditional commodities and non-tradable services;
- To ensure the long-term intensification of South Africa's industrialisation process and movement towards a knowledge economy;
- To promote a more labour-absorbing industrialisation path, with emphasis on tradable labour-absorbing goods and services, and economic linkages that create employment;
- To promote industrialisation, characterised by the increased participation of historically disadvantaged people and marginalised regions in the industrial economy; and

- To contribute towards industrial development in Africa, with a strong emphasis on building the continent's productive capacity.

The NIPF envisioned that this policy cannot be implemented in a vacuum. The policy introduces four main economic indicators that should be in place for implementation:¹⁵⁴

- A stable and supportive macro-economic and regulatory environment;
- Skills and education for industrialisation;
- Traditional and modern infrastructure; and
- Innovation and technology.

Industrial Policy Action Plan

The Industrial Policy Action Plan (IPAP) aims to play an increasingly sophisticated and determinant role in South Africa's ongoing development, with its particular emphasis on producing a labour-absorbing industrial/manufacturing sector.¹⁵⁵ IPAP is derived from the South African government's objective of defending, supporting and nurturing the manufacturing sector. The state exercises leadership by 'steering but not rowing'. Thus, IPAP 'identifies a complex range of complementary, interlocking policies that require alignment....'¹⁵⁶

The IPAP focuses on the following areas:

- **Economy-wide:** Pursuit of a stronger articulation of macro- and micro-economic policies, greater policy coherence and better implementation. Stronger alignment of industrial policies and programmes with investment and export-promotion programmes, such as the National Exporter Development Programme (NEDP), focused on widening and balancing SA's exporter base. Better policy alignment, both in general and in relation to specific sector strategies, focused particularly (but not exclusively) on those sectors where the domestic economy enjoys global competitive advantages.
- **Procurement:** A sustained effort to secure compliance with existing public procurement policies and strategic supplier development/sourcing measures, with the overall aim of supporting the manufacturing sector to raise domestic production and grow employment. This effort will be combined with further policy framework and institutional improvement measures flowing from the Public Procurement Review and strong persuasive initiatives to secure greater private sector support for local manufacturing – a contribution that large companies in particular are well placed to make, given their significant procurement spend. It also includes providing further support for broad-based black economic empowerment (B-BBEE)

and better alignment between B-BBEE and industrial development objectives – further discussed below in the section on ‘Critical New Initiatives’.

- **Industrial finance:** Stronger alignment and progressive strengthening of industrial financing across all DFIs – and within the Industrial Development Corporation (IDC) in particular – in order to secure an optimal mix of public and private sector funding that can progressively strengthen investment in the productive, especially manufacturing, sectors of the economy.
- **Developmental trade policy:** Ongoing strengthening of developmental trade policies with the following key components: deployment of trade measures such as selective and strategic tariffs and their improved alignment with industrial policy objectives; working closely with the International Trade Administration Commission (ITAC) while recognising their independent role; closer and more detailed cooperation with the Customs Division of the South African Revenue Services (SARS) to combat the ever-present (and steadily growing) problem of illegal and fraudulent imports – one of the key pillars of the illicit economy; steady and incremental strengthening of the capacity and capabilities of the Standards, Quality Assurance, Accreditation and Metrology (SQAM) institutions, which provide an indispensable support framework for a modern and competitive economy.
- **Competition policy:** Strengthened interventions to combat anti-competitive and collusive behaviour in both the private sector and state owned companies – and in so doing, lower the cost of procurement to the national fiscus and of wage goods to working families.
- **Regulation and intellectual property:** An Intellectual Property Rights (IPRs) regime that seeks to create a supportive environment for South Africa’s industrialisation objectives. The regime should provide broad terms of scope for protection and less stringent criteria for novelty. Thus, the recently signed Intellectual Property Amendment Bill enables the regime to strike a balance between encouraging incremental innovations, providing protection for indigenous knowledge and providing enough incentives for innovators to make the necessary research and development investments.
- **Innovation and technology:** New policies and programmes to ramp up competitive capabilities in the production and services sectors of the economy, taking advantage of every opportunity to leverage the quantum advances on offer in the sphere of digital and other globally emergent advanced technologies.

Other Industrial Development Initiatives

For the effective operation of industrial development, the post-apartheid government put in place industrial support institutions. The institutions and stakeholders include other government departments, particularly in the Economic Sector and Employment Cluster, the National Economic Development and Labour Council, and organised business formations, such as Business Unity South Africa (BUSA) and industry associations.

The following regulatory bodies have been put in place to assist in industrial development:

- National Regulator for Compulsory Specifications (NRCS) is responsible for the administration and maintenance of compulsory specifications and the implementation of regulatory and compliance systems for compulsory specifications.
- National Metrology Institute of South Africa (NMISA) is responsible for connecting the national measurement system to the international measurement system. The institute also provides reference analysis in case of measurement disputes and maintains primary methods for chemical analysis, to certify reference materials for South Africa, SADC and Africa.
- South African Bureau of Standards (SABS) is mandated to be the national institution for the development, promotion and maintenance of standardisation and quality related to commodities, and the rendering of related conformity assessment services.
- Industrial Development Corporation (IDC) is to contribute to the creation of balanced, sustainable economic growth in South Africa and the rest of Africa. This is aimed at IDC being ultimately the primary source of commercially sustainable industrial development and innovation for both South Africa and the rest of the continent. This is done by promoting entrepreneurship through the building of competitive industries and enterprises based on sound business principles.
- The South African National Accreditation System (SANAS) is an accreditation institution that deals with accreditation and laboratory practice compliance monitoring in order to accredit and monitor laboratory activities in South Africa.

Lastly, South Africa through the IPAP was determined to grow the competitiveness and labour absorbing capacity of the manufacturing sector, particularly the traditional and non-traditional tradable and value-adding sector in the economy. In this context, considerable emphasis was placed on reducing the current account deficit, by increasing exports and finding local substitutes for imports in these value-adding and labour-intensive sectors. On the other hand, Special Economic

Zones (SEZs) are geographically designated for specifically targeted economic activities supported through special arrangements (that may include laws) and systems that are often different from those that apply in the rest of the country.¹⁵⁷ SEZ may be sector-specific or general. The following categories of SEZs have been identified in the 2014 Special Economic Zones Act:¹⁵⁸

- Industrial Development Zone: This is an industrial estate specifically built to leverage domestic and foreign fixed direct investment in value-added and export-oriented manufacturing industries and services;
- Free Port: This is a duty free area adjacent to a port of entry where imported goods may be unloaded for value-adding activities within the Special Economic Zone for storage, repackaging or processing, subject to customs import procedures;
- Free Trade Zone: This is a duty free area offering storage and distribution facilities for value-adding activities within the Special Economic Zone for subsequent export;
- Sector Development Zone: This is a zone focused on the development of a specific sector or industry through the facilitation of general or specific industrial infrastructure, incentives, technical and business services primarily for the export market.

Studies indicate that Industrial Development Zones (IDZs) are important vehicles used by developing countries to facilitate investment, create jobs and boost exports. In South Africa, the establishment of IDZs is a recent phenomenon intended to attract investment, increase exports and the competitiveness of South African products, and is part of a growing international Export Processing Zone (EPZ) phenomenon.¹⁵⁹ The South African government also shares this perception and IDZs are used as a policy tool for development and export-oriented growth. The South African IDZ programme is aimed at raising the competitiveness of the manufacturing sector through 'leveraging investment in export-oriented manufacturing industries and the export of value-added manufactured products'.¹⁶⁰ A new policy framework SEZ provides a clear guide for the development, operations and management of SEZs, including addressing challenges of the current IDZ Programme. The purpose of the SEZ programme therefore is to:

- Expand the strategic industrialisation focus to cover diverse regional development needs and context;
- Provide a clear, predictable and systemic planning framework for the development of a wider array of SEZs to support industrial policy objectives, the IPAP and the NGP;

- Clarify and strengthen governance arrangements, expand the range and quality of support measure beyond provision of infrastructure; and
- Provide a framework for a predictable financing framework to enable long term planning.

The benefit of operating within the SEZ is that a number of incentives will be available to ensure SEZs growth, revenue generation, creation of jobs, attraction of Foreign Direct Investment (FDI) and international competitiveness.¹⁶¹

Post-apartheid South Africa's Industrial Development

Although significant improvements have been noted with regards to policy interventions made, the interplay of state, wholesale and trade, manufacturing and finance, real estate and business sector interests contributed to the GDP growth of 0.7 per cent in 2014, which is very low when compared to the real GDP growth of 3.3 per cent recorded in 1994. Comparing the GDP by industry for the quarters of 1994 and 2014, there has been significant increase in the GDP figure with the highest contributor being the finance, real estate and business sector.

South Africa is said to be characterised by high unemployment, income inequality and poverty. This is as a result of small domestic markets, due to low incomes of the mass of the population coupled with systematic under-education and training, and an absence of a thriving layer of SMMEs, especially black-owned ones, resulting in the high job loss.¹⁶² Another view is that the structure of the economy has not changed.

In addition, almost half of manufacturing exports come from these very same industries; basic iron and steel 17 per cent of manufacturing exports, vehicles 13 per cent, machinery 11 per cent and chemicals 7 per cent.¹⁶³

Table 5.1: Gross Domestic Product by Industry

Industry	Quarter 1 1994 '000	Quarter 2 1994 '000	Quarter 3 1994 '000	Quarter 4 1994 '000	Quarter 1 2014 '000	Quarter 2 2014 '000	Quarter 3 2014 '000
Agriculture, Forestry and Fishing	3	7	6	4	16	36	22
Construction	4	4	4	4	34	37	34
Electricity, Gas and Water	3	4	4	4	29	38	33
Finance, Real Estate and Business Services	16	17	17	18	174	169	175
General Government Services	18	19	19	20	140	144	147
Manufacturing	22	23	25	26	108	109	116
Mining and Quarrying	8	8	8	8	68	67	76
Personal Services	6	6	6	6	46	49	50
Transport, Storage and Communication	11	10	10	10	78	84	87
Wholesale and Retail Trade, Hotels and Restaurants	15	15	16	19	119	122	124
Total	107	113	116	118	812	855	864

Source: Own Calculations from Statistics South Africa Data

Table 5.2: Employment by Industry

	Jan-Mar 2008	Jan-Mar 2009	Jan-Mar 2010	Jan-Mar 2011	Jan-Mar 2010	Jan-Mar 2013	Jan-Mar 2014
	'000	'000	'000	'000	'000	'000	'000
Both sexes	14 438	14 616	13 797	13 904	14 284	14 558	15 055
Agriculture	838	778	683	627	694	764	709
Mining	353	361	324	335	363	393	424
Manufac- turing	2 111	2 031	1 846	1 906	1 838	1 856	1 804
Utilities	102	112	78	100	95	124	130
Construction	1 181	1 221	1 105	1 093	1 042	1 084	1 199
Trade	3 319	3 207	3 021	3 119	3 208	3 032	3 186
Transport	808	819	838	776	833	872	895
Finance	1 780	1 864	1 780	1 739	1 855	1 916	2 045
Community and social services	2 714	2 824	2 843	2 990	3 094	3 296	3 428
Private households	1 233	1 393	1 271	1 214	1 257	1 219	1 231

Source: Based on Statistics from South Africa Data

Table 5.2 shows the number of employees by industry during the first quarter of 2008– 2014. The table suggests that, overall, the number of those employed across various industries has slightly increased in some and slightly decreased in some industries. The industries that saw an increase include mining which increased from 353,000 to 424,000 employees; utilities from 102,000 to 130,000; construction from 1,181,000 to 1,199,000; transport from 808,000 to 895,000; finance from 1,780,000 to 2,045,000; community and social services from 2,714,000 to 3,428,000. Many jobs were created by the economy in the community and services industry and the finance industry but there is a decline in employment in the manufacturing sector.

Conclusion

This chapter has described the industrial development initiatives in post-apartheid South Africa. The industrial development levels are also briefly discussed and this was linked to the performance of the South African economy as a whole. The chapter also discussed the extent to which industrial development strategies and policies pursued since 1994 have been effective in ensuring industrialisation in post-apartheid South Africa. In the main, industrialisation remains weak in South Africa. One view is that, because the global economic context frequently and rapidly changes, South Africa's industrial policy should be within the context of regional integration and African unity.

Key Terms

Economy: The total output, expenditure, investments and savings as well as net trade (i.e. exports minus imports) in a country. The economy is measured by Gross Domestic Product.

Gross Domestic Product: Total sum of goods and services produced in a country.

Industry (also called Sector): Companies or business on similar or related products.

Industrial Development: Programmes, policies and other initiatives aimed at industrialisation.

Industrialisation: A process by which industries, particularly manufacturing, grow as measured by the number of companies in the sector or the output produced or number of jobs created.

Regional Integration: A process of blending different countries within the same region together economically, socially and culturally, in the pursuit of economic growth and development.

