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**By**

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Research Title:

# Deindustrialisation of the South African Economy

**Supervisor:** Dr Frank Lekaba

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## DECLARATION

I declare that this thesis is my own, unaided work. It is submitted in fulfilment of the requirements of the degree of Doctor of Philosophy in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in other university.

RDagada

Rabelani Dagada

29 January 2025

**TO MY CHILDREN**

## PRESENTATIONS ARISING FROM THIS STUDY

- Dagada, R., & Lekaba, F. (2025). South Africa should import skilled labour to export manufactured products. *Proceedings of the 24th South African Association of Public Administration and Management Annual Conference*, University of Venda, 22 – 26 September 2-25.
- Dagada, R., & Lekaba, F. (2024a). Borderless Africa and blockchain technology: Catalysts for South Africa's reindustrialisation? The *Third International Engaged Scholarship Conference*, 13th – 15th September 2024, Kigali, Rwanda.
- Dagada, R., & Lekaba, F. (2024d). South Africa should import skilled labour to export manufactured products. The *Third 3rd International Engaged Scholarship Conference*, 13th – 15th September 2024, Kigali, Rwanda.
- Dagada, R., & Lekaba, F. (2024c). South Africa's foreign policy should put more emphasis regionalisation than globalisation. The *Third International Engaged Scholarship Conference*, 13th – 15th September 2024, Kigali, Rwanda.

## PUBLICATIONS ARISING FROM THIS STUDY


- Dagada, R., & Lekaba, F. (2025a) *Borderless Africa and blockchain technology: Catalysts for South Africa's reindustrialisation?*( (In: Gregory John Lee & Rabelani Dagada, (Editors): Research in Southern African Digital Business Volume V). Johannesburg: Silk Route Press.
- Dagada, R., & Lekaba, F. (2024b). Has South Africa's macroeconomic policy framework been successful in reindustrialising the economy? *Journal of Public Administration*, 59(2), 188-209. https://doi.org/10.53973/jopa.2024.59.2.a3
- Dagada, R. (2023). *The impact of regulatory overreach to digital transformation: Lessons from South Africa*. (In: Gregory John Lee & Rabelani Dagada, (Editors): Research in Southern African Digital Business Volume II). Johannesburg: Silk Route Press.

## ABSTRACT


South Africa has never been a fully-fledged industrial economy, and the only time in which it had a significant manufacturing sector was during the World War II. This happened because South Africa was geographically far away from the raging and destructive war. Investors therefore moved capital into the country, and many technically skilled professionals moved to South Africa. This led to a significant growth of the manufacturing sector. Most manufactured goods were exported to international markets.

The manufacturing boom in South Africa continued beyond World War II, however, this boom ended drastically in 1960 after the Sharpeville massacre. This occurred on 21 March 1960, when police officers used live ammunition to disperse a crowd of around 5000 peaceful and unarmed protesters who were outside a police station in the township of Sharpeville. Police officers did not warn the crowd before they opened fire, and as a result, 69 people were brutally murdered by the apartheid government while 180 were severely injured. The dead and injured included 29 children, and the massacre was publicised around the world.

The South African apartheid regime received lots of criticism globally, and sympathetic demonstrations towards the victims followed in many countries. The United Nations condemned this brutality against black South Africans after which the Security Council passed a resolution on 1 April 1960 criticising the segregation policies in the country. The Sharpeville massacre marked a major turning point in South Africa's international relations and trade. For example, many countries declared and implemented trade sanctions against the country, capital and many highly skilled professionals left the country, and the manufacturing sector bore the brunt of these developments.

Since 1960, the South African economy has deindustrialised. This means the large-scale collapse of manufacturing firms and massive loss of employment in the sector. This phenomenon has increased since the ushering of the new democratic dispensation in 1994 and can largely be attributed to the poor formulation and implementation of macroeconomic policy. Having said this, it should be mentioned that since 1994, successive democratically elected administrations and presidents have

tried to reindustrialise the economy through the large-scale revival of the manufacturing sector, but to no avail.

The purpose of this study was to investigate factors which affect the deindustrialisation of the South African economy. Searches in various scholarly databases showed limited studies that focused on the use of public policy instruments to reindustrialise the South African economy. Moreover, there is no study that has ever produced a conceptual public policy framework to guide policymakers and other stakeholders on how the economy of this country can be reindustrialised.

This study employed a qualitative research approach to collect data using individual interviews, focus groups, observations, and document analysis. The reason for using a qualitative methodology was that the research participants would provide rich and valuable information. Among other things, this study assured trustworthiness by attaining triangulation. During the fieldwork, 58 individuals were interviewed, while 25 persons participated in the focus group session.

The use of qualitative data analysis methods revealed that migration regulations and rigid labour laws deter reindustrialisation. Moreover, a shortage of skilled labour thwarts reindustrialisation; some tax instruments discourage direct investment and reindustrialisation; and poorly conceived public policy leads to deindustrialisation.

The researcher proposed five possible solutions and interventions to reindustrialise South Africa's economy. These included revision of immigration regulations to promote reindustrialisation; the labour market should be stabilised to increase direct investment; and quality education and training should be provided to create a large pool of skilled labour. Furthermore, major commercial and labour market hubs should be connected; the broad-based black economic empowerment public policy should be implemented prudently. South Africa should also spearhead the use of technology to keep the identity records of nationals across the African states.

Most importantly, the researcher has produced a conceptual framework for employing public policy to industrialise the South African economy. This framework is his intellectual property. It synthesises theory, extensive fieldwork, practice and cognitive perspectives gained over decades of studying and practical work experience in academia, entrepreneurship, and public and private sectors.

The study yielded theoretical, methodological and practical contributions, however, after careful consideration, this researcher has concluded that using only

qualitative research methodology was a major weakness of this study. A mixed research methodology would have been more suitable for this study. Nevertheless, recommendations were made which were aimed at various stakeholders and other scholars. This study has contributed to the knowledge bodies of public policy and development economics.

**Keywords:** deindustrialisation; loss of employment; macro-economic policy framework; manufacturing sector; reindustrialisation.

## ACKNOWLEDGEMENTS

My passion for economics and development economics in particular was ignited after I read Peter Drucker's book, "*The age of discontinuity*", and Alvin Toffler's book, *"The third wave"*. Books by Robert Heilbroner (*The worldly philosophers: The lives, times, and ideas of the great economic thinkers*), Liaquat Ahamed (*Lords of Finance*), and Ben Fine (*The political economy of South Africa: From minerals-energy complex to industrialisation*) also influenced my outlook on political economy.

My favourite local (South African) author is undoubtedly Greg Mills, the director of the Brenthurst Foundation. My scholarship was also enriched by the writings of these professors: Patrick Bond, Fiona Tregrenna, Johan Fourie, Zakes Mda, and Mthuli Ncube, and these authors: R.W. Johnson, Wandile Sihlobo, and Bruce Whitfield. I found the writings of these journalists very exceptionally useful, Peter Bruce and Clair Bisseker.

During the course of this doctoral study, I was supervised by three academics at various points. Prof. Patrick Bond guided me from conceptualisation to the proposal defense stage. Dr. John Khumalo successfully guided me up to the point of obtaining research ethics clearance approval and data collection. Dr. Frank Lekaba led this study when I was analysing the data, writing-up the thesis, and submitting it for marking. I had very good working relationships with each of these academics, but unfortunately, Prof. Bond and Dr. Khumalo left the Wits School of Governance. Nevertheless, when each of them departed from Wits, I was left in safe hands, for which I am deeply thankful. I want to take this opportunity to wish these three mentors all the best in their professional endeavours. Thank you.

My stint as a politician and public representative gave me extensive exposure to development economics and public policy. Besides being a member of the regional, provincial, and national executive committees of the second biggest political party in South Africa, I also served as a Public Representative Councillor in the City of Johannesburg Metropolitan Municipality Council, as well as a Member of the Mayoral Committee for Finance. I was also responsible for political oversight to the Group ICT and the municipality-owned company which provides broadband services (Metropolitan Trading Company). These responsibilities put me at the coalface of

service delivery in the richest and most advanced city in Africa. I am thankful to my political leaders for entrusting me with these important tasks. The lessons learnt in those public office positions have influenced my interpretations, conclusions and recommendations for this study.

While working on this study, my career went through a roller-coaster ride and almost collapsed. I am most thankful to Professors Tshilidzi Marwala, Saurabh Sinha, Gregory Lee, and Pumela Msweli for giving me opportunities that enabled me to bounce back. I am also thankful to the Member of the Mayoral Committee of Finance in the City of Johannesburg, Dada Morero who appointed me as a Member of the Group Advisory Committee on Smart City and Fourth Industrial Revolution. There are many other business associates and clients who played an important role to keep my entrepreneurial ventures going. This boosted my confidence and energised me to complete this study.

As an academic, I learn a lot from my postgraduate students. Most of these students have been leaders in their own right. They hold senior positions in corporate South Africa, multinationals, entrepreneurship and the public office. While writing up this thesis, one of my students was appointed as the Chief Executive Officer of a bank, and the other three were sworn in as members of the 7$^{th}$ parliament in South Africa. President Cyril Ramaphosa appointed one of them as the Deputy Minister of Finance, while the other was elected to chair the Appropriations Committee. The third one became the parliamentary whip of his party.

Sadly, my mother died a few days before I presented the proposal of this study to the defence panel. Consequently, I drove from Limpopo to Johannesburg to attend the above-mentioned defence session while in the middle of arranging her funeral. That is what she would have expected me to do – to keep pushing, despite going through difficult times. Since giving birth to me, she had always been very supportive. My father died when I was nine years old, and the only treasure he left behind for me was my mother. Other family members who are important pillars of support are my brother Tshililo and a few other family members. Thank you.

I am thankful to the reviewers and editors of these books who deemed that the work which emanated from this study was worthy of blind peer review publishing. These books were: *“Intra-Africa Trade Challenges and Opportunities – AfCFTA Context”*, and *“Research in Southern African Digital Business”*. At the time of

submitting this thesis for examinantion, one article based on this study had been accepted for publishing by the *Journal of Public Administration*. Moreover, three papers were presented at the Third Annual International Engaged Scholarship Conference on AfCFTA in September 2024.

Several presentations and publications emanated from this study. These were edited by my colleagues at the UNISA Language Services. They are very efficient, and I appreciate their assistance. I want to take this opportunity to thank Dr. Neil Barnes for efficiently editing this thesis. I am also grateful to my Research Assistant, Dr. Teboho Mofokeng for assisting with the typesetting of this thesis. My employer, the UNISA Graduate School of Business Leadership, generously paid for the services rendered by both Dr. Barnes and Dr. Mofokeng. I am thankful to my employer.

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## ABBREVIATIONS

| | |
|---|---|
| AfCFTA | African Continent Free Trade Area |
| AGOA | African Growth and Opportunity Act |
| AMCU | Mineworkers and Construction Union |
| ANC | African National Congress |
| Angloplat | Anglo American Platinum |
| ASGISA | Accelerated and Shared Growth Initiative for South Africa |
| AU | African Union |
| BCAWU | Building Construction and Allied Workers Union |
| BEE | Black Economic Empowerment |
| B-BBEE | Broad-Based Black Economic Empowerment |
| BOT | Built-Operate-and-Transfer |
| BRICS | Brazil, Russia, India, China and South Africa |
| CBD | Central Business District |
| CCMA | Commission for Conciliation, Mediation and Arbitration |
| CEO | Chief Executive Officer |
| COPE | Congress of the People |
| CPI | Consumer Price Index |
| COSATU | Congress of South African Trade Unions |
| COVID-19 | Coronavirus |
| DA | Democratic Alliance |
| DFIs | Development Financial Institutions |
| DPFO | Developing Poultry Farmers Organisation |
| DRC | Democratic Republic of Congo |

| | |
|---|---|
| EFF | Economic Freedom Fighters |
| EPWP | Expanded Public Works Programme |
| EU | European Union |
| FNB | First National Bank |
| FSCA | Financial Services Conduct Authority |
| 5G | Fifth Generation Technology |
| 4G | Fourth Generation Technology |
| 4IR | Fourth Industrial Revolution |
| FATF | Financial Action Task Force |
| FET | Further Education and Training |
| GDP | Gross Domestic Product |
| GEAR | Growth, Employment, and Redistribution |
| HEI | Higher Education Institution |
| ICASA | Independent Communications Authority of South Africa |
| ICT | Information and Communications Technology |
| IEB | Independent Examinations Board |
| Implats | Impala Platinum |
| IMF | International Monetary Fund |
| IoT | Internet of Things |
| IPAP | Industrial Policy Action Plan |
| IPPs | Independent Power Producers |
| JSE | Johannesburg Stock Exchange |
| LLU | Local Loop Unbundling |
| MCVs | Manufacturing Commercial Vehicles |

| | |
|---|---|
| MEC | Member of the Executive Council |
| MIBCO | Medium of Bargaining Councils |
| NDP | National Development Plan |
| NGP | New Growth Plan |
| NEPAD | New Partnership for Africa’s Development |
| NGP | New Growth Path |
| NHI | National Health Insurance |
| NIPF | National Industrial Policy Framework |
| NTF | Non-Fungible Tokens |
| MT | Metric Tonnes |
| MW | Megawatt |
| NBC | National Bargaining Council for the Clothing Manufacturing Industry |
| NEDLAC | National Economic Development and Labour Council |
| NSFAS | National Students Financial Aid Scheme |
| NGO | Non-Governmental Organisation |
| NPO | Non-Profit Organisation |
| NSC | National Senior Certificate |
| NUM | National Union of Mine Workers |
| OBE | Outcomes Based Education |
| PIC | Public Investment Corporation |
| PoPI | Protection of Personal Information |
| PRASA | Passenger Rail Agency of South Africa |
| PPP | Public-Private-Partnership |
| PSTS | Public Switched Telecommunication Services |

| | |
|---|---|
| PV | Photovoltaics |
| RDP | Reconstruction and Development Programme |
| RICA | Regulation of Interception of Communications and Provision of Communication-Related Information Act |
| UN | United Nations |
| UK | United Kingdom |
| UASA | United Association of South Africa |
| USA | United States of America |
| US$ | United States Dollar |
| USSR | United Socialist Soviet Republic |
| REITs | Real Estate Investment Trusts |
| SAA | Sub-Saharan Africa |
| SAAM | South African Automotive Master Plan |
| SACP | South African Communist Party |
| SACU | Southern African Customs Union |
| SACTWU | South African Clothing and Textile Workers Union |
| SADC | Southern African Development Community |
| SADTU | South African Democratic Teachers Union |
| SAFTU | South African Federation of Trade Unions |
| SAPS | South African Police Services |
| SARS | South African Revenue Services |
| SETA | Sector Education and Training Authority |
| SKA | Square Kilometre Array |
| SMMEs | Small Medium and Micro Enterprises |
| SRD | Social Relief of Distress Grant |

| | |
|---|---|
| Stats SA | Statistics South Africa |
| SAFTU | South African Federation of Trade Unions |
| SAPA | South African Poultry Association |
| SACAA | South African Civil Aviation Authority |
| TVET | Technical And Vocational Education and Training |
| VAT | Value Added Tax |
| VANS | Value-Added Network Providers |
| VIP | Very Important Person |
| WIPO | World Intellectual Property Organisation |
| WWW | World Wide Web |
| WTO | World Trade Organisation |

# CHAPTER 1: NATURE AND SCOPE OF THE STUDY

## 1.1 INTRODUCTION AND BACKGROUND

Deindustrialisation as an economic concept had its origin in the aftermath of World War II when the term was first used to describe how the Allied powers stripped Germany of its industrial assets (Cowie & Heathcott, 2003; Boehling, 1996). Amongst other things, the Potsdam Conference convened to formulate post-war international relations and took a policy decision to destroy all German factories that had a remote possibility of using their products for military operations. At the time, some attendees of the conference wished for the former industrial heartland to be turned into a mere pastoral land bereft of the manufacturing capabilities (Berbee, Braun & Franke, 2024).

However, the Marshall Plan eventually supported not only reindustrialisation of Germany, but also the other two Axis powers, Italy and Japan. It could be argued that the demise of older industrial equipment and modes of labour relations were the pre-requisites for Germany and Japan to become the most rapidly growing industrial powers in the 1950s-80s, until the ‘Newly Industrialised Countries’ (NICs) and China began industrialisation.

Since the Second World War peace treaty discussions, deindustrialisation has largely been used to refer to the shrinking of industrial output as signified by the curtailing and reduction in manufacturing employment, plant and equipment (James & Ebin, 2021; Eucken, 1950). Current manufacturing labour data show that deindustrialisation across the Global North is in full swing, and this time its occurrence is not occasioned by the need to neuter an aggressive military power. Instead, the loss of manufacturing jobs is driven by several variables, including outsourcing (also known as uneven geographical development) and adversarial labour relations which encourage the switch from labour to capital-intensive production (also sometimes referred to as the fourth industrial revolution). Its manifestations give rise to unemployment, lowering of standards of living, social ills, contraction of the economy and the weakening of economic competitiveness (Rodrik, 2016; Berbee et al., 2022).

Deindustrialisation does not have a universal definition. Earlier scholarship by Kutscher and Personick (1986) and Eucken (1951) chiefly described this phenomenon as the ascendance of services over industry in the structure of the economy and the simultaneous softening of investment in the industrial sector. Later, the scholarship of the International Monetary Fund (IMF) sector economists Rowthorn and Ramaswamy (1997) viewed deindustrialisation in terms of a deficit in trade balance occasioned by poor output from manufacturing. Rodrik (2016) and Whalen (2023) argue that deindustrialisation is the decline in the share of manufacturing in the country's Gross Domestic Product (GDP), simultaneously accompanied by structural changes in the labour market and significant losses of employment in the industrial sector.

This economic policy treatise therefore denotes deindustrialisation as a phenomenon where industrial output deteriorates, accompanied by manufacturing sector job losses (Whalen, 2023). Strijbis (2023) observed that deindustrialisation is especially evident amongst developed economies and, to some extent, the upper middle-income economies of Asia. Developed economies have suffered disproportionately from deindustrialisation when compared with other economies because they used industrial policy to ignite second stage economic growth after initially enjoying gains from the agricultural economy (MacKinnon & High, 2023). Some Asian economies, especially those recently referred to as NICs, are simply suffering from the law of diminishing returns. Their industrial policy strategy for economic growth adopted in the mid-1970s is no longer sustainable due to competition in the global markets and is further undermined by the crowding-out effect of services in the economy (Rodrik, 2016).

All these economies that experience deindustrialisation share a basic common denominator, namely the loss of employment in the industrial sector which is a testament to the description of deindustrialisation as a decline in manufacturing jobs. There are, however, differences in the way that economies have been affected by the loss of manufacturing employment (MacKinnon & High, 2023). For example, developed economies have lost more manufacturing jobs than any other region that previously had a strong manufacturing sector. In Europe, a decline in employment in the manufacturing sector and manufacturing as a percentage of GDP continues unabated and represents about 15% of value added and 14% of total employment (MacKinnon and High, 2023).

Moreover, when compared to the manufacturing employment peak of 1970, employment figures have decreased by 36% in the United States of America (USA) in 2017, and this partly explains President Donald Trump's drive to change industrial policy (Reshetar, 2024). Wolf (2013:1) takes a cumulative approach and concedes that "manufacturing's share of GDP has decreased around the world over the last 30 years".

There is thus a positive correlation between economies that grew largely on the back of manufacturing and the subsequent decline in industrialisation in the economies in question. President Trump[1], during his term of office insisted that manufacturers should return to the USA economy. Nevertheless, a debate raged about the 3.7% unemployment rate in the USA and its 'sugar high' component: i.e., the unitability of the economic growth and the fragility of jobs, as well as their part-time and no-perk basis.

Economic policy analysis shows that some developing economies have not wholly escaped the economic phenomenon of loss of jobs in the manufacturing sector; they suffer from what is called premature deindustrialisation (Taguchi & Tsukuda, 2022). Premature deindustrialisation describes a situation where a country's industrial growth is compromised before it reaches full maturity. The inference is that deindustrialisation has been pervasive after its inception in the aftermath of the Second World War. Its reaches have grown to encapsulate the advanced economies, the countries that used to be called the newly industrialising economies, and lastly some of the frontier markets (He, 2023). Other crucial phenomena in this study are the uneven geographical development, and overproduction of manufactured goods. These phenomena are discussed in detail in Chapter 3.

The remainder of this chapter contains the following subsections: purpose of the study, problem statement, context of the study, brief overview of the research methodology, significance of the study, and summary of Chapter 1.

## 1.2 THE PURPOSE OF THE STUDY

Deindustrialisation is affecting South Africa so negatively that there is a need to reverse things (Andreoni & Tregrenna, 2020). The country's economy has been deindustrialising since 1960, and this phenomenon has escalated since the ushering in of the new democratic dispensation in 1994 (Evans, 1999). While the service sector

[1] Donald Trump served as the 45th President of the U.S. from 20 January 2017 to 20 January 2021. He will serve as the 47th President of the same country from the 20 January 2025.

has grown rapidly under the African National Congress (ANC) government, the manufacturing sector has closed firms and retrenched millions of workers (Andreoni & Tregenna, 2020). Thus, South Africa cannot afford to remain deindustrialised if the unemployment problem is to be rectified, and the economy of the country is to be boosted (Crankshaw, 2012).

According to Johnson (2019), South Africa has deindustrialised due to a lack of technical know-how, coupled with the lack of competitiveness within the manufacturing sector. This lack of capabilities has forced the country into exporting its raw materials; these are then processed into finished goods in other countries and are imported back into the country (Armstrong & Lee, 2023a). Such exports of raw materials (mineral and agricultural products) yield low margins for the country in terms of international trade. Consequently, the country has suffered large losses in terms of beneficiation (Dagada, 2021).

The purpose of this study was to investigate factors that influence the deindustrialisation of the South African economy. Most importantly, this study proposes a conceptual public policy framework which would encourage and create a conducive environment for reindustrialisation. To attain the set purpose, the objectives were as follows:

i. To undertake a study of the literature review to determine:
    - industrialisation of the economies;
    - evolution of economic development;
    - theoretical bases of deindustrialisation;
    - deindustrialisation in global markets;
    - causes of deindustrialisation;
    - the trajectory of South Africa's economic policy; and
    - socio-economic consequences of deindustrialisation.

ii. To determine, by means of fieldwork, factors that influence the deindustrialisation and/or reindustrialisation of the South African economy.

iii. To study policy positions and proposal documents collected from government, corporate South Africa, unions, civil society, and higher education institutions and to determine how they perceive and propose public policy measures that can be undertaken to reindustrialise the economy.

iv. Finally, to propose a conceptual public policy framework for reindustrialising the South African economy.

This study provides important insights into the public policy measures that may be employed to re-industrialise the South African economy. Policy makers, experts, and decision-makers in government, corporate South Africa, unions, civil society, and higher education institutions in South Africa may use the conceptual framework formulated by the researcher as a resource and guide. Moreover, the findings and recommendations of this study may be transferable and applicable to other contexts in developing countries.

## 1.3 THE PROBLEM STATEMENT

Deindustrialisation has resulted in high rate of inequality in South Africa (Habib, 2019; Seekings & Nattrass, 2015; Kenney, 2004; Terrreblanche, 2015). The country remains one of the most unequal countries in the world with more than half of its society living in poverty (Negroni & Pallotti, 2024). The economy continues to contract while inflation remains high alongside unemployment which is over a 30% incline (Stats SA, 2023). The failure to address the high level of inequality compounds the country's societal unrest, stagnates economic growth, and limits access to comprehensive healthcare and education. It is a crisis that should not be prevailing within one of the world's most progressive constitutions (Francis & Webster, 2019; Kenney, 2004).

Besides the rapid deindustrialisation, inequality in South Africa emanated from the apartheid system that governed the country before its democratic dispensation in 1994 (Terreblanche, 2015). It established governance structures that were resolute in enforcing concerted and systematic economic inequality. Earnings and income were determined by clear racial discrimination–black people were paid differently to white people regardless of the fact the they possessed the same qualification and performed the same job (Seekings & Nattrass, 2015). Opportunities for promotion were also conditional to race and black pensioners were less compensation than white people.

The then National Party government also had a policy that reserved decent education for the white population while black people were subjected to “Bantu Education” (Khumalo, 2022; Habib, 2019). This philosophy reduced African pupils to inferior education that lacks quantitative and qualitative strengths (Wilson 2011). They were denied key subjects such as mathematics and science intentionally which prevented them from obtaining the skills and competencies necessary to have professional and managerial expertise. In the late 80s, black people constituted 70% of the total population and yet represented only 1% of architecture roles; less than 2% of engineering roles; and 13% of information technology positions (Leibbrandt & Pabon, 2021). Thus, white workers were more secured of skills that enabled them to occupy high profile jobs with high income. This discouraged inclusive mobility within the labour market and distorted income distribution.

Racial classification also dictated possession of land or access. For instance, under the then Group Areas Act, the leasing of premises was prohibited for black people–whether as a merchant, a lawyer or a medical practitioner (Brookes, 2022). This, together with the social environment made in difficult to establish business as a black person in the country. Additional resources such as land, mining rights and access to capital were distributed disproportionally (Nkosi, 2022; Terreblanche, 2014). This resulted in the exclusion of a large sector of the population from wealth and a marginalisation to low income and/or inadequately paid sectors (Habib, 2013). Public investment for black communities was also under resourced by apartheid policies. This was combined with residential restrictions that distanced black people from economic centres. Despite democratisation in 1994, this socio-economic issue still persists three decades later.

South Africa ranks first in the World Bank’s global database of Gini coefficients which ascertains inequality on the basis of consumption per capita (World Bank, 2022). In a working paper by TIPS (2020), deindustrialisation was said to be exacerbating inequality in areas such as household income; property and asset ownership and infrastructure; education; and the historic labour-sending areas.

In 2023 terms, the richest group with incomes in excess of R26000 a month retained 50% of the total household income (Stats SA, 2023). Households with such income are referred to as the middle-class in the Top 10% and are usually defined by decent formal work and substantial assets (TIPS, 2020). This level of wealth far exceeds that of the poorest who generally have an income under R6000, are unemployed or working in low paid sectors, have limited assets and skills, and are on social grant support (Mokhutso, 2025).

Economic assets in South Africa are administered under three types of ownership and control. These include direct owners of business, households and companies with returns of investments, and the power of large corporations, high-level managers and executives (TIPS, 2020). Over half the household assets in the country are owned by the richest 10% of households including over R8.5 trillion in financial assets (Oxfam 2023; Mokhutso, 2025). These households also have high levels of economic power and disproportionately high remunerations from executive and managerial positions.

The Reconstruction and Development Programme (RDP) has focused on housing and household infrastructure for traditionally black communities but the programme has not improved equality significantly (Amoah, Van Schalkwyk & Kajimo-Shakantu, 2022). The investment remains largely entrenched in pre-existing urban planning models that isolate housing of the working class from affluent suburbs and economic opportunities (TIPS, 2020). Some settlements remain without much economic investment, whether commercial, recreational or industrial (Jeeva & Cilliers 2022). Although municipal services have increased in low-income communities, they have been delivered with lower quality. For example, ventilated pit toilets in a number of poor communities are the standard rather than flush toilets while water and electricity supply remain limited (Madikizela et al. 2022).

Limited access to quality education persists in the country and this restricts lower income households from the ability to acquire decent work and incomes (Habib, 2019). Twenty-nine percent of the poorest adults have at least a matric certificate compared to the richest Top 10% with over 83% having a matric certificate or more (Stats SA, 2023). The skills shortage is perpetuated by this unequal education which further enables an unequal pay system. Of the 37 upper-middle-income countries, South Africa's population ranks amongst the lowest in terms of progressive education (Mudiriza et al. 2023).

Poor planning and weak local governance structures limit and fragment economic opportunities. From 2017, 40% of households in poor communities have heavily relied on social grants compared to 12% in the rest of the country (World Bank, 2023). The differences involving funding strategies have further reduced opportunities for people in these regions and land reform has not been implemented to the extent that significantly reverses the legacy of apartheid (TIPS, 2020).

As part of addressing the deindustrialisation of the economy, unemployment, poverty and inequality, the government introduced the following public policies (Dagada, 2021):

- Reconstruction and Development Programme;
- Growth, Employment, and Redistribution Strategy;
- Accelerated and Shared Growth Initiative for South Africa; and
- New Growth Initiative for South Africa.

These public policy interventions did not yield substantial impact in terms of dealing with the deindustrialisation, unemployment, poverty and inequality (Boshoff & Fourie, 2020). Through poorly thought macroeconomic and industrial policies, South Africa has essentially abandoned labour intensive growth (Nattras, 2014; Fourie, 2021). South Africa has the lowest labour force participation rate amongst the the developing economies (Johnson, 2019).

The literature review reveals the significance of public policy in reindustrialising of the manufacturing sector. Although a few authors have published work regarding the deindustrialisation of the South African economy, none of them have specifically focused on a study that produced a Conceptual Public Policy Framework which can be employed as a guide to reindustrialise the manufacturing sector.

It has not yet been established scientifically whether the current public policy interventions are suitable to revive the manufacturing sector. Therefore, a gap exists in the literature regarding the use of an integrated public policy framework to reindustrialise the South African economy. Other than the fact that no study has ever led to the formulation of the Conceptual Public Policy Framework, the literature does not show how an integrated framework can fast-track reindustrialisation in South Africa.

Within this perspective, the research questions have been framed as follows:

**Research Question 1:**

How can South Africa effectively employ public policy to reindustrialise its manufacturing sector?

**Research Sub-Questions:**

1.1 What are the possible lessons pertaining to reindustrialisation that South Africa can learn from other countries?

1.2 What are the issues to consider when crafting and implementing public policies that will enable reindustrialisation?

1.3 What are the factors that have influenced the success or failure of public policy pertaining to reindustrialisation?

Matters dealing with perceptions require qualitative data gathering since there is no need to quantify the data in this study (Truman, 2023).

## 1.4 CONTEXT OF THE STUDY

This section deals with some lessons from Germany's reindustrialisation and waves of economic development.

### 1.4.1 Some Lessons from Germany

Although the apartheid system in South Africa had provided most privileges to white people at the expense of other population groups, poverty in South Africa cuts across all racial groups three decades after the ushering in of the democratic dispensation (Ndletyana, 2020). In other words, the apartheid policy was detrimental to both the oppressor and the oppressed.

Poverty in South Africa was worsened by the deterioration of the manufacturing sector during and after the apartheid era, and it has never been a fully industrialised country (Armstrong & Lee, 2023b). For many years the economy has largely relied on the primary sector – mining, agriculture, forestry, and fishing (Sihlobo, 2020). In other words, South Africa's economy has largely been built on the 'First ($1^{st}$) Wave'. Nevertheless, with the right political will and the creation of knowledge, South Africa can turn around the current dangerous phenomenon of deindustrialisation (Johnson, 2019).

Deindustrialisation occurs when manufacturing declines and firms gradually close, however, Germany was able to resuscitate its economy from destruction and deindustrialisation caused by World War II (Andreoni & Tregenna, 2020; Boehling, 1996). It is on this premise that Germany should be a beacon of hope when it comes to reindustrialisation because it has been a great example to European countries who were drowning in a debt crisis during the last two decades (Fourie, 2021).

The whole Eurozone is yearning for Germany to be their saviour from their faltering economies (Deole & Rieger, 2023). In fact, this country is the largest economy in Europe and the fourth biggest in the whole world. After World War II (1939 to 1945), nobody would have thought that Germany would one day become the economic leader of the European Union and a source of hope for their debt woes (Myszczyn, 2021).

Under the leadership of Adolf Hitler, Germany was seen as an aggressor and the cause of World War II. The Allied forces (led by the United States of America (USA), France, and Britain) heavily attacked Germany during the war and she consequently suffered huge losses in terms of human lives, manufacturing plants, jobs, and economic growth (Boehling, 1996). The heavy bombings caused severe damage to Germany's cities and infrastructure with some of the cities being completely in ruins. The situation was exacerbated when Germany was seen as the cause of both First and Second World Wars and was divided into two parts known as the German Democratic Republic (East Germany) and the Federal Republic of Germany (West Germany) (Eucken, 1950).

This split, which was executed through the erection of the Berlin Wall, existed from 1945 to 1990 and the future of the country looked bleak – 'doom and gloom' (Eucken, 1951). Nonetheless, the reunification of Germany took place after the fall of the Berlin Wall in 1989. Since then, the country's infrastructure, reconstruction, reindustrialisation, and economic development have growing rapidly; this is generally referred to as the German Economic Miracle (Marshall, 1989).

South Africa can also have its own economic miracle despite its economy suffering from the policy of apartheid and international isolation (Paret, 2015). It is sad to observe that, whilst the country witnessed a political miracle in 1994 when a new democratic dispensation was ushered in, South Africa has not experienced major economic development. In fact, South Africa has been deindustrialising speedily, and this has been accompanied by large job losses (Khumalo, 2013; Tregenna, 2016).

### 1.4.2 Waves of Economic Development

This thesis articulates how South Africa's economy has evolved through a series of economic waves. In his famous book, *The Third Wave*, Alvin Toffler (1980) agitates for the post-industrial society to move away from the Second Wave into what he calls a Third Wave Society. Waves are major economic milestones that are sometimes referred to as economic revolutions. The world has so far experienced four major waves.

*First Wave: Mining and Agriculture*

The 1st Wave was preceded by the Stone Age and took place about 10 000 years ago when people turned to agriculture for survival and stayed together in villages for the first time (Pinotti & Margareth, 2013; Fourie, 2021). This period encompassed the first widespread use of technology in human evolution, when pastoral people turned to crop cultivation for survival, and agriculture led to stability (Vitiello & Brinkley, 2014). Villages, language, culture, innovation, and leadership were consequently established (Pinotti & Margareth, 2013). It was during this time that some animals were domesticated, and mining started (smelting of iron and copper ore to produce metal) (Himley, 2014). This was the first major wave in human evolution.

Whilst developed countries have moved beyond sole dependence on the 1st Wave, South Africa is still, to large extent, entrenched in this wave (Sihlobo, 2023). The economy of South Africa still relies on primary forms of production such as agriculture, forestry, and fishing. In fact, agricultural production is declining steadily, and the country is often an importer of food (Motlanthe, 2009; Fourie, 2021). South Africa has been the biggest gold producer for nearly a century, but production has also dropped during the last decade (Mills, 2010; Mills & Herbst, 2012).

*Second Wave: Industrial Revolution*

The 2nd wave of the economic-human evolution happened in the late 18th and early 19th centuries and is commonly referred to as the industrial revolution (Ashworth, 2014; Walley, 2015). The industrial revolution marked a significant turning point in society because of the major changes in the way agriculture, production, and transportation began to be conducted (Russell, 2014; Gaulard, 2015).

Through this process, a manual labour-based economy gradually shifted to a machine-based manufacturing. Trade was expanded with the introduction and improvement of canals, roads, and railways (Wilson, 2014). Steam-powered ships were introduced, the internal combustion engine was invented in the 19th century, and electrical power was harnessed. This period saw a fundamental shift in the developed world, from a reliance on raw agricultural, mining, and forestry products to manufactured goods (Chumakov, 2014).

Unfortunately, South Africa has not completely moved into the 2nd industrial revolution phase but appears to be stuck in a declining 1st wave-based economy (Mbeki, 2009; Dagada, 2024a). In effect though, South Africa jumped the 2nd wave and went straight to the 3rd wave (services sector) where it is doing well (Fourie, 2021; Dagada & Lekaba, 2024d).

*Deindustrialisation of the South African economy*

South Africa has never been an industrialised country because the economy has always largely relied on the primary sector – mining, agriculture, forestry, and fishing (Fourie, 2021; Mbeki, 2009). However, South Africa moved into some elementary manufacturing during the World War II. According to Fine (2018), South Africa was unable to import manufactured products from European countries due to the war and that is why she was forced to develop her own manufacturing firms. This attracted the attention of other countries, and they started to import goods from South Africa (Dagada, 2021). This led to the economic expansion which involved immigrants from Europe. The economic surge continued long after the war, essentially until the early 1960s, when the apartheid policy unintentionally destroyed the manufacturing industry (Fourie, 2021).

Several political developments attracted negative international media attention. For example, the Sharpeville massacre occurred on 21 March 1960, when about 200 black Africans who were protesting against pass laws were wounded and 69 killed when the South African police shot at them (Frankel, 2001). This bloodbath led to covert armed confrontation in South Africa and signified the beginning of enormous worldwide denunciation of the South African apartheid policies. Soon after this incident, both the local and international investors lost confidence in the future of South Africa (Fourie, 2021). This led to a major withdrawal and decrease of investment in the manufacturing industry.

Massive amounts of capital left South Africa, and in the 1970s and 1980s the situation was made worse by South Africa's inability to produce highly developed machinery and equipment. When the new democratic political dispensation was ushered in and the apartheid system was discontinued in 1994, the new ANC government tried to turn round the social, economic, and political consequences of the apartheid policy (Mills, 2010).

Nevertheless, the closing of manufacturing firms (deindustrialisation) has escalated since the 1994 democratic dispensation (Andreoni & Tregenna, 2020; Mbeki, 2009). Although the ANC has good intentions, there has been no efficient political leadership from its government to reindustrialise the economy. To their credit, the services sector has grown bigger since 1994, of which the financial institutions have been major beneficiaries of this growth (Dagada, 2022a). The services sector, by its nature, does not however create massive employment like the manufacturing sector.

Thus, unemployment has been growing steadily, and about 47% of South Africans depend on social grants. Of these recipients, 18-million are permanent beneficiaries, and around 10-million get temporary Social Relief Distress Grant (SRD) (Marais, 2022). Thus, instead of dealing with the triple challenge of poverty, unemployment, and inequality, the South African government perpetually abdicates its responsibility and throws money at the problem (Johnson, 2019; Mbeki, 2009). If there had been political will and ability to address the reindustrialisation of the manufacturing sector, the level of unemployment in South Africa would have been much lower (Marais, 2022).

The dearth of a manufacturing sector in South Africa has also been exacerbated by the affirmative action policy. Instead of growing the economy through manufacturing, the government, through the affirmative action policy, has compelled employers to get rid of white employees and replace them with people from other designated race groups (Whitfield, 2020). This has led to two unintended consequences: firstly, the poor white problem has grown steadily and, secondly, the occupation of jobs by people with no relevant skills has slowed economic growth. It is disturbing to note that, since 2007 South Africa has become a significant importer of food (Fourie, 2021). In other words, even the1$^{st}$ wave-related sectors which have sustained South Africa for centuries are now declining. On the other hand, the export of raw materials has increased substantially (Qobo, 2021).

In the absence of the manufacturing sector to process the raw materials into finished goods, South Africa loses money in terms of beneficiation. This occurs because unprocessed raw materials are far cheaper than processed materials (Dagada, 2021). Thus, raw materials are exported to foreign countries where they are processed and returned to South Africa as finished products for consumption.

Moeletsi Mbeki (2009) stated that, in 2005, base metals and minerals products constituted 71% of South Africa's exports to China. During the same year, machinery and car components, textiles, and footwear comprised 64% of all of China's exports to South Africa. You may be tempted to dismiss Thabo Mbeki on the basis that he is critical of the South African government, but his argument is supported by the utterances of the Deputy President, Kgalema Motlanthe (2009) who reasoned that:

> *"Our economy has become more open and, since 1994, it has steadily become integrated into the global system. Our financial institutions are a force of good example which has somewhat sheltered us from the global economic storms. Yet, the extent of their reach within our society remains far below expectations. Our economy remains largely reliant on mining and agriculture for exports. Except for the services sector, we have not seen a large enough expansion in critical sectors, especially manufacturing".*

In recent years, not much has changed regarding South Africa's exports of raw materials and imports of finished goods (Sihlobo, 2023). The Congress of South African Trade Unions (Cosatu), one of the South African tripartite alliance partners (other partners are the ANC and the South African Communist Party (SACP), has criticised the government for neglecting the manufacturing sector and for largely relying on income from minerals (COSATU, 2010). For instance, petrochemicals, mining, basic iron, and steel accounted for 69% of the South African total exports, and the mining industry is highly capital- and energy-intensive. COSATU further argued that unemployment in South Africa was around 39%. It also asserted that owing to deindustrialisation, South Africa has the lowest labour force participation rate amongst the emerging markets.

## 1.5 BRIEF OVERVIEW OF THE RESEARCH METHODOLOGY

This study went beyond statistics and used a qualitative research approach, with individual interviews, focus group interviews, observations, and document analysis. The rationale for using the qualitative methodology was that respondents would constitute a rich and valuable source of information (Kenny, Doyle & Horgan; 2023).

Participants in this study were academics, technocrats, senior executives, policymakers, lawmakers based in universities, think tanks, advisory services consultancies, prominent publishing houses, unions, and various spheres of government. Purposive and convenience sampling were used to select the participants.

The trustworthiness of this study was assured using triangulation. Four data collection methods (individual interviews, focus group interview, observation, and document analysis) enabled the researcher to meet the requirements of triangulation (Kenny et al., 2023). Details of the research methodology are given in Chapter 4.

## 1.6 SIGNIFICANCE OF THE STUDY

Firstly, the literature review yielded a typology reflecting on the global and local trends regarding deindustrialisation and reindustrialisation of the economies. A search of various research databases revealed that there was no single study that contained such a typology.

Secondly, academics, technocrats, senior executives, policymakers, lawmakers shared their perspectives on the factors that affect deindustrialisation of the South African economy. A search on various research databases revealed that there was no single study that has been done within the context of South Africa which has integrated the positions of these stakeholders, dealing with factors that influence the deindustrialisation of the economy.

Thirdly, the original contribution of this study to development economics, industrialisation, and public policy theories, benefited from descriptions that can add to the understanding of the challenges of reindustrialising the national economy within the South African context. This study has produced a conceptual public policy framework of the reindustrialisation of the South African economy. This framework embodies the researcher's contribution to the study. Detailed theoretical, practical, and methodological contributions of the study are described in Chapter 8.

## 1.7 CHAPTERS OUTLINE

**Chapter 1** contains an introduction, synopsis of, and general direction of the study, the purpose and objectives for conducting this research work, the research questions and sub-questions, a brief overview of the research design, contribution of the study, and thesis outline.

**Chapter 2** presents a conceptual and theoretical framework.

**Chapter 3** provides a literature review on the deindustrialisation of economies.

**Chapter 4** deals with the research design of the study. Details of the research approach and procedures are articulated. These include details about population, sampling, data collection techniques, analysis methods, and trustworthiness of the study.

**Chapter 5** presents the findings and discussions pertaining to the shortage of skilled labour and rigid labour legislation.

**Chapter 6** presents the findings and discussions pertaining to South Africa's poorly formulated public policies.

**Chapter 7** proposes the public policy interventions in South Africa pertaining to poorly formulated public policy. It also presents a conceptual framework. This conceptual framework is the intellectual property of the researcher.

**Chapter 8** weighs the findings of the study and the conceptual framework against the purpose and objectives of the study; secondly, the chapter reflects on how the study contributes theoretically, methodologically, and practically to the knowledge bases of development economics and public policy; and thirdly, it concludes the study and presents recommendations to various stakeholders.

## 1.8 SUMMARY OF CHAPTER 1

Deindustrialisation is affecting the South African economy negatively, resulting in adverse socio-economic impacts. The chapter has also indicated that the South African manufacturing sector has undergone deindustrialisation since the 1960s, and that the closure of firms has escalated since the inception of the new democratic dispensation in 1994. Poorly crafted and / or implemented public policy is a major factor in the deindustrialisation of the South African economy.

The purpose of this study was to research perceived public policy failures in the reindustrialisation of the South African manufacturing sector. Essentially this study has produced a conceptual public policy framework which can promote a conducive environment for reindustrialisation. To achieve the intended purpose of the study, a literature review, fieldwork, and formulation of the above-mentioned public policy framework was undertaken. This chapter has briefly dealt with the background and context of this study.

This thesis provides significant insights into the public policy instruments that may be used to reindustrialise the South African economy. Some of its findings may be transferable to other contexts in emerging markets.

The problem statement, research question and sub-questions which form the base of this research enquiry were articulated in this chapter. This study used qualitative research to evaluate both the research question and its sub-questions. An outline of this study was also presented in Chapter 1, and a brief description of each chapter was sketched.

# CHAPTER 2: CONCEPTUAL AND THEORETICAL FRAMEWORK

## 2.1 INTRODUCTION

Deindustrialisation is primarily measured in economics according to the employment share of manufacturing (Alami & Dixon, 2023). The chapter firstly analyses the economic history of the industrial revolution from its birthplace in the UK since the mid-18th century, and briefly illustrates its innovations. In this chapter, a discussion of Klaus Schwab's four stages of industrial revolution follows, as does Toffler's 3rd wave theory.

Both Toffler (1980) and Schwab (2017) concur that industrial revolution and technological innovation are indispensable, and that they are drivers of growth, and therefore offer value to humanity. Notwithstanding the value in industrial progress, both developed and developing economies do not always sustain the industrial sector. Instead, as economies advance, sometimes the manufacturing sector gives way to the services sector. This phenomenon is called deindustrialisation (Lee & Armstrong, 2022).

Deindustrialisation in developed economies is the outcome of economic growth and is also a result of global division of labour (Fourie, 2021). In the developing markets, deindustrialisation is commencing much earlier, and this is undermining growth. Furthermore, this chapter argues that contraction of the secondary sector in frontier (pre-emerging) markets also follows the sector succession theory (as it is the case with advanced economies). This is accelerated by several other factors, namely the role of technology and the cost thereof, prices of manufactured goods, south-south competition, and domestic public policy failure.

The national economy evolves as various stages succeed each other. The first stage is the primary economy (1st wave), succeeded by the secondary economy (2nd wave), followed by the tertiary economy (3rd wave) and, lately, the 4IR (Dagada, 2024b). These stages simply reflect dominance of one sector over others, and do not portray a mono-sector-economy (Dagada, 2025a; Dagada, 2025b).

As indicated above, economies in general show a four-tier structure. Developing economies have not been spared the brunt of disinvestment and losses of jobs in the manufacturing sector – as has been alluded to in reference to premature deindustrialisation. However, this phenomenon has not affected developing economies in the same way. Some economies like South Korea and South Africa have suffered noticeably. However, Mexico largely escaped this fate and became a major recipient of the USA manufacturing sector's outshoring and outsourcing strategy during the administrations of Presidents Bill Clinton, George W. Bush, and Barack Obama (Islas, Arribas & Gutiérrez, 2018).

## 2.2 INDUSTRIALISATION OF THE ECONOMIES

This section deals with the industrial revolution, the role of the UK and its innovations, Schwab's four stages of industrial revolution, and Toffler's third wave.

### 2.2.1 Industrial Revolution

The Industrial revolution began in the $18^{th}$ century and took place against a backdrop of an agrarian economy, where villagers and rural dwellers specialised in tending their livestock and caring for their lands (Ashton,1968). The characterisation of the prevailing environment at the time fits neatly with Rostow's (1960) depiction of the first stage of economic development. This represents a traditional society, where economic actors engage in primitive activities such as hunting and gathering, and the means of economic production are devoid of advanced technology.

The Industrial revolution changed this agrarian economic order, and aggressively transformed economic production methods and processes from docile human power to the agency of the machine. It revolutionised the manufacturing sector forever, leading to mass production and mass consumption (Fourie, 2021). The transition took place over time in the West, mainly Europe and North America, but it is widely held that it originated in the UK, with the rest of the world following in its footsteps.

### 2.2.2 The Role of UK and its Innovations

The UK is considered the birthplace of the industrial revolution, with three factors playing a role in this (Fourie, 2021). First, the UK enjoyed political stability and became a colonial power with the colonies in question ensuring a guaranteed availability of raw materials and operations inputs for manufacturing production (Raj, 2000). Moreover, they served as a market for processed goods. In the 18th and the 19th centuries, the UK controlled satellites in Africa (Rhodesia, South Africa, and Tanganyika amongst others), and thirteen states (colonies) in the USA, Canada, and Australia. It owned numerous others in the Caribbean Sea and the Pacific Ocean which provided the UK with a comparative advantage in mining and other natural resources, and were lucrative trade partners with the UK.

Second, the UK was rich in mineral deposits and iron, with abundant coal deposits. Coal was the major input in power production and was also an indispensable ingredient for industrial production. Clark (1957) observed that the UK's coal reserves were vast; for example, the northeast coal field had 8550 million tonnes of coal. In 1755 the extraction rate was 2-million tonnes per year, and this implied that the UK had 4000 years of coal reserves. In the end, this demand for coal encouraged the industrial revolution, and household consumption escalated its production. All these demand side factors made coal a mainstay of the UK's economy.

Lastly, progressive political reforms towards a representative government and relative political stability in the UK supported the industrial revolution (Weingast, 1993). During the industrial revolution, between the 18th and the 19th century, there was a significant waning in the contestation of political power. The monarchy was firmly established as a seat of ceremonial authority, while real political power was exercised in parliament and by the executive. The electoral franchise was steadily distributed to industrial towns such as Birmingham and Manchester which were granted parliamentary representatives for the first time. These concessions muted possible popular political agitations and the likelihood of outbreak of sudden civil wars that could have rendered the UK unstable and ungovernable (Pearson, 1992).

The unfolding political changes did not diminish, and this ensured that by 1832, the power that was almost exclusively enjoyed by an oligarchy of wealthy landowners and the nobility was now shared with commoners (Weingast, 1993). By 1884, a significant population of males had a political say in the governance of the country. This period of relative peace encouraged merchants and entrepreneurs to invest in the economy without the fear of capital destruction and investment erosion due to political risk. This suggests that a democratic form of government played a decisive role as an ideal environment for economic progress of the society (Raj, 2000).

During the early stages of the economic revolution, the textile subsector became the most dominant economic activity, was the leading employer, and was the biggest in terms of value (Pearson, 1992). Before the advent of machine-based production systems, the practice was for textile products to be produced in homes. Customers would send input factors to a textile manufacturer and later fetch the finished product.

Often customers would have to contend with the extended time it took for the order to be fulfilled. The quality of the finished goods often varied, and quantities were often inadequate. These concerns were the bane of small-scale survivalist craftsmen toiling in manual, home-based operations and explains why economies remained relatively small, weak, and negatively affected by slow growth (Frey, 2019).

The Industrial revolution changed this economic tardiness. In 1764 James Hargreaves invented a spinning engine for the textile industry, and this creation was improved by Samuel Compton. Later Edmund Cartright added improvements with a mechanised system of weaving (Griffiths, Hunt & O'Brien, 1992). These technological improvements revolutionised the textile industry, and saw capital investment rise, leading to the creation of textile factories and improvement in the quality and professionalisation of the industry. Importantly, these changes created vast employment opportunities and led to economic expansion, underscoring the fact that industrial innovations and improvements are paramount to economic wellbeing (Fourie, 2019).

Development in the iron industry was also a main feature of the industrial revolution. One of the major changes in this sector was Abraham Darby's discovery in the 18th century of a better way of producing cast iron (Cox, 1990). His innovation was premised on coke fuel instead of a charcoal fired furnace. In the mid-18th century, Henry Bessemer developed a method for producing steel in vast quantities (Wolf, 2001). Iron and steel are essential industrial inputs for tools, motor vehicles, machines, civil engineering developments, housing projects, ships, and infrastructure. Thus, iron and steel revolutionised the economy of the west, and improvements in operations management – including process design – ultimately produced early billionaire industrialists such as Andrew Carnegie and Andrew Mellon (Carnegie, 1986; Ashton, 1968).

Economic philosophy historian Heilbroner (1999) describes transportation before the industrial revolution: merchants covered vast distances on horseback; commercial goods were transported on animal drawn buggies and carts; but all these methods were not efficient nor quick. The industrial revolution addressed these constraints. For example, in 1712 Thomas Newcomen applied improvements to existing engine technology, and the result was the creation of the first steam engine (Greener, 2015). Its early use was mostly confined to pumping mine water. Half a century later, James

Watt improved on the existing technology, and the resultant steam engine was used to power ships, locomotives, and machineries in industrial plants (Scherer, 1965). By the mid-18th century, the UK had sufficient technology for mass transit via railroads, and steamships were hauling freight on the sea.

Criticism of the industrial revolution nevertheless shows that this economic revolution was accompanied by human misery (Fourie, 2019). Labour rights were almost non-existent; child labour was rampant, and workers in the factory floors toiled for very long hours. The working environment lacked in health standards, and the resulting mortality rate was high. De Vries (1994) describes it thus:

*'The intensification of work and suppression of leisure was associated with the (self) exploitation of family members - wives and children, the neglect of what we now call human capital formation (literacy rates stagnated in the eighteenth century), and greater recourse to binge drinking and binge leisure'.*

The inference is that the industrial revolution led to vast innovations that transformed the economic structure in the West. Whereas the preceding agriculture economy provided sustenance and was the main economic activity, the industrial revolution remodelled and improved the West. The criticism of the revolution is centred mainly on the human misery that it brought (Frey, 2019; Dagada, 2022). Notwithstanding, several economists have accentuated the virtues of the industrial revolution (Ashton, 1968; Cox, 1990; Greener, 2015). Schwab (2017) even suggests that the industrial revolution has not ended, but it is continuing to unfold in succession of stages.

### 2.2.3 Schwab's Four Stages of Industrial Revolution

Schwab (2017) applies a post-modern analysis to the industrial revolution; his approach is liberal; and his labelling is not constrained by history. Instead, he posits four different stages of the industrial revolution. The first three stages encompass the foregoing brief history of the industrial revolution, with the common feature of these stages presenting the industrial revolution as one of man's greatest triumphs. It gave freedom from being confined to the agricultural economy and provided a platform for future technological and economic advances.

According to Schwab's dating system, the first industrial revolution began in 1760 and culminated in 1840. Its major characteristics were engineering advances such as the creation of railroads and the invention of the steam engine. These revolutionised production systems ended dependence in human-sourced energy, and improved mechanical production (Schwab, 2017; Ashton, 1968).

The second stage of the industrial revolution spanned a period between the late 19th century and the early 20th century. The major features of this period were the invention of electricity and the assembly line. The supply of reliable energy is indispensable to economic growth, and the assembly line has vastly improved operations management in manufacturing plants (Schwab, 2017; Fourie, 2021).

The third stage of the industrial revolution is what he calls the computer or the digital revolution. The main reason for labelling it thus is its information communication technology creations such as semiconductors, mainframe computing (1960s), personal computing (1970s and 1980s) and the internet of the 1990s (Schwab, 2017; Fourie, 2021).

Schwab (2017) then introduces what he calls the 4IR, which builds and extends on the third revolution, and begins at the turn of the 21st century. Its major features are mobile internet connections, the use of small but powerful sensors, and availability of increasingly cheaper applications, artificial intelligence and machine learning. He concedes that digital technologies that are anchored in hardware while using software and networks are not necessarily new; but what differentiates them from the third phase of the industrial revolution is that they are sophisticated and integrated. Consistent with this worldview, Massachusetts Institute of Technology personages Brynjolfson and McFee (2014) perceive the current age as the ‘second machine age’ out of recognition for the role of the technology revolution.

The foundation of the 4IR is the primacy of autonomous technology and the relegation of dependency on human agency. Therefore, as much as the previous ages were characterised by man interacting with machines, the contemporary age is mostly about what technology can do without extreme dependence on the human muscle (Frey, 2019). This is further accentuated by simultaneous developments in the life sciences subsector (gene sequencing for example) and breakthroughs in nanotechnology, and quantum technology. In this realm, the fourth stage of the revolution is new inventions as well as improvements of earlier technologies - with all these converging and interacting across physical, digital, and biological domains (Diamandis & Kotler, 2020).

The fourth revolution is expanding faster and touching human lives more quickly than the previous three revolutions (Lee & Armstrong, 2002). This is illustrated by the fact that the second revolution gave humankind electricity; yet this source of energy remains unavailable to 1.3 billion persons of the world population. Moreover, the third revolution is known principally for the internet; yet 4-billion people still lack access to the internet. This may be compared with the main symbol of the first revolution, namely the spindle which took more than 120-years to breach the European borders (Schwab, 2017).

Nevertheless, in contrast to previous revolutions (from first to the third), the fourth revolution is expanding very quickly and is not mutually exclusive of disciplines. Instead, it encourages harmonisation of disciplines, discoveries, innovations, and scientific realms. For example, discoveries in mathematical sciences are easily integrated with social creations and application; and innovations in civil engineering fields are easily linked with biological innovations (Diamandis & Kotler, 2020).

Further, the fourth revolution is synonymous with innovations in artificial intelligence; self-driving cars are increasingly becoming a reality, and this class of innovation includes virtual assistants, drones, and translation software (Dagada, 2022b). This tells us that the fourth industrial revolution is a world of infinite possibilities, that it is leaning on automation of applications, and is increasingly devoid of human participation (Frey & Osborne, 2017). Indeed, this is a giant leap for humankind, from depending on horses for transportation in the first revolution to driverless cars in the 4IR.

Schwab (2016) identifies three megatrends that define the 4IR, namely the physical, the digital, and the biological trends. The physical trends are subdivided into four manifestations, namely autonomous vehicles, 3-D printing, advanced robotics, and new materials. The sub-category of autonomous vehicles includes driverless trucks, drones, aircraft and boats. Granted, some of the creations in this category are still in infancy – such as driverless cars, but the drone technology is well advanced, and current geo-political warfare is increasingly being waged using this technology. Research and development in these technologies continues unabated, and future innovations may result in unimaginable applications and capabilities (Othman, 2022).

Three-D printing technology is also called additive manufacturing and allows manufacturing to be aided by a 3-D model. Currently, 3-D is mostly used in aerospace, the automotive sector and the medical industry, however, since 3-D technology is still in infancy some problems exist. Over time, existing constraints should be addressed which will allow for wider use and application (Schwab, 2017). In fact, the new 4-D technology will allow for self-altering products (Khalid, Arif & Ahmed, 2022).

The third physical sub-trend is advanced robotics which is the ability to use technology to do what human beings do. In recent years, robots tended to be used in tightly controlled environments such as automotive manufacturing. As the 4IR evolves, advanced robots are being used for precision services such as in healthcare (laparoscopy service) with the aim of ensuring that nature patterns are imitated. In advanced robotics, the fourth industrialisation is allowing for an effective collaboration between human beings and technology (Schwab, 2017; Sakai & Nagai, 2022).

The other major physical sub-trend in the 4IR is new materials. These are unique and are distinctively lighter, much stronger, recyclable, and adaptive. In addition, some of these are self-healing, have memory, and have the capacity to revert to an original state. An example in this trend is graphene which is 200 times stronger than steel, a million times thinner than a human hair, and can transmit electricity and heat. New materials are therefore packed with capabilities that old material technology just does not possess (Schwab, 2017; Chaikittisilp, Yamauchi & Ariga, 2022).

Digital trends refer to the pervasive trends of the 4IR, namely the internet of things (IoT). This denotes the graduation from physical to digital networking. This is enabled by advancements in technology, leading to smaller, cheaper and smarter sensors being installed in homes and industrial parks, cities – for the virtualisation of life and industry. The IoT is supported by the proliferation of mobile technology (smartphones). The role and use of IoT is widespread, and includes monitoring, improvement of product/service supply value chains, and product research and development (Schwab, 2017; Hazra, Rana, Adhikari & Amgoth, 2023).

Invariably, these developments are changing the way organisations produce goods and render services, the way individuals engage with institutions and service providers, and how government engages society, and enables the sustenance of the sharing economy. Indeed, were it not for the IoT, transport services such as Uber, online music and entertainment consumption - live streaming - would have remained a pipedream (Schwab, 2017; Zheng, Wu & Liao, 2023).

The last trend includes the biological realm, observable on account of the vast number of technological advances within the ambit of natural sciences and health services. For the major part, the revolutions in question are the result of investments in research and development – and these are taking place mostly in academia. It is worth noting that brain science research has become one of the leading scientific fields in recent years, receiving significant financial resources for research (Schwab, 2017; Castillo-Romero, Santacruz & Gonzalez-Valdez, 2023).

Trend analysis reveals that the technological revolution within the biological field has grown by strides, and there are several innovations worth highlighting. For example, genetic studies have shown incredible results, where medical scientists are quickly able to carry out DNA sequencing in a few hours and for less than US$1000. This is a major improvement. In the past, it took scientists a decade and US$2.7 billion to conclude the Human Genome Project (Schwab, 2017). Quantum computing is very useful in this regard (Dagada, 2022b).

Genome innovations are emerging concurrently with other developments. For example, DNA can now be manipulated to create a desired biological outcome which will revolutionise the way a disease like cancer will be treated (Diamond & Kotler, 2020). Furthermore, IBM's Watson computer has become a virtual medical doctor which is able to diagnose medical ailments and recommend required treatment (Chow, Sanders & Li, 2023). Wearable technology is easily able to monitor physical exercises, calculate blood pressures and assess mental health in numerous environments – at home, at the gym, or at work. Thus, in a nutshell, the 4IR is drastically altering the prevailing scientific environment, and this is an expansion of the economic and innovations revolution that began in the 18$^{th}$ century. Going forward, research and development in science will simply add to new discoveries and improve current technological capabilities.

It is worth mentioning that before Schwab (2016), Alvin Toffler wrote a futuristic book called the Third Wave in 1980 which was intended to predict economic events; and the said predictions have been realised in the last thirty years. Therefore, this study will briefly review the Third Wave theory.

### 2.2.4 Toffler's Third Wave

In 1980, Toffler made a profound commentary on economic evolution. He observed that amidst life's upheavals, society is advancing forward, eliminating ineffective components and introducing new innovations. Consistent with the preceding literature, he noted that the first phase of economic activity was agriculture which was practiced for thousands of years by all humanity. However, society is marching forward, and few societies are still devoted wholly to this primary sector (Jiang, 2023).

Over time, the wave of agriculture economy was effectively succeeded by another wave, and this change took place around 1750. The 2nd wave was the industrial revolution which took 300 years to grow to maturity (Ashton, 1968). Notwithstanding, the industrial revolution has improved the life experience of humanity, having bestowed its innovations: 'a tractor on the farm, a typewriter in the office, and a refrigerator in the kitchen' (Schwab, 2017). Moreover, the 2nd wave improved the business and operations environment, introduced standardisation, specialisation, redefined finance and politics (Hsieh & Rossi-Jansberg, 2023).

Before the emergence of the IoT, Toffler, in 1980, observed that the 3rd wave will be the technetronic, post-industrial age (Kurnicki, 2023). Amongst other things, he foretold the contemporary wave of the information age, the world of the internet and other new and hitherto unknown technologies. At a time of dependence on fossil technology, Toffler forecast the use of renewable energy and the end of traditional operations planning and assembly lines on factory floors. In a way, the 3rd wave is a celebration of the continuity of aggressive innovations, the unfolding of industrial revolution, and the future of infinite possibilities. Regrettably, despite the value proposition of the industrial revolution to humanity, deindustrialisation is continuing apace in both the advanced and emerging economies (Liu & An, 2023).

## 2.3 THE EVOLUTION OF ECONOMIC DEVELOPMENT: FROM AGRICULTURE TO THE 4TH INDUSTRIAL REVOLUTION

Indeed, the discussion of the meaning of deindustrialisation will be amiss if it does not note that a national economy is characterised by structural changes over time. For instance, what is often a loss of employment in one dominant sector serves as an indicator of the succession of stages of economic development (Gladwell & Shirky, 2016; Liu & An, 2023). In an economic treatise aimed at explaining deindustrialisation, Cowie and Heathcott (2003) argued that the relegation of manufacturing in the developed economies in favour of services is a natural evolution of national economic progression. They concluded that "what we call deindustrialisation may best be understood with hindsight as one episode in a long series of transformations within capitalism" (Cowie & Heathcott, 2003:10; Kurnicki, 2023).

The evolution of capitalism in phases and stages has long been acknowledged in the political economy of development literature. For instance, the 18th century UK economist, Sir William Petty, argued that major economic revolutions always succeed each other (Clark, 1957). Rostow, the Massachusetts Institute of Technology's economic historian argued that analysis of historical trends of economic growth universally shows that economic evolution takes place according to phases – where each phase succeeds the other (Rostow, 1960). He identified five stages of economic development, namely the traditional society, transitional society, take off, the drive to maturity, and high mass consumption – arguing that these "stages-of-growth are . . . a way of looking at the sequence of modern [economic] history" (Rostow, 1960:1).

Heilbroner (1999) points to this evolution, in particular the economic sector continuum and linear trend line showing agriculture as a foundational economic sector, succeeded by mining, that gives way to manufacturing, which in turn is succeeded by services – a sector that is now increasingly being supplanted by the 4IR. Having said this, it is important to consider the fact that there are many authors who have observed and argued that economic waves can also complement each other and exist concurrently (Lee & Armstrong, 2002; Kurnicki, 2023; Sivakumar & Roy, 2017; Liu & An, 2023; Colin & Palier, 2016; Hazra et al., 2023; Al-Rodhan, 2016; Hsieh & Rossi-Jansberg, 2023). This is happening to countries such as Germany, China, India, Brazil, Japan, Israel, and Malaysia.

Others such as Diamandis and Kotler (2020), Johnson (2019), and Dagada (2022a) argue very strongly that the replacement of old economic waves (revolutions) by new ones in a linear format is not a natural phenomenon. Rather, it is a result of poor economic choices by the affected countries. In a well-run economy – the primary, secondary, and tertiary sectors should run concurrently. This means that a country's economy could simultaneously have the agriculture, mining, manufacturing, services, and 4IR sectors coexisting and thriving. Germany is a good example of this phenomenon.

However, the notion that the country should shut down its agricultural sector and deindustrialise as its economy advances is fundamentally wrong (Tregenna, 2016; Nosrati, Ash, Marmot, McKee & King, 2018; Scheiring & King, 2023). The following first world and upper-middle income economies still pay attention to agriculture and manufacturing – China, Germany, India, Japan, USA, South Korea, France, Italy, Canada, UK, Mexico, Thailand, Indonesia, Brazil, Netherlands, Russia, Spain, Turkey, Poland, Belgium, Switzerland, Sweden, and South Arabia. Some of these countries still practice mining and other extractive economic activities (Coyle & Nguyen, 2022).

Primary forms of production such as agriculture and mining will never be out of fashion because people must eat, and resources should be extracted to assist with production of goods and services. The same applies to manufacturing as the secondary sector. Clothes, households' products, motor vehicles, building and construction materials, and other products should continue to be produced to sustain humanity. Agriculture, mining, manufacturing, and recycling enable people to live better. Thus, there would be no services, ICT, and 4IR without agriculture, mining, and manufacturing (Armstrong & Lee, 2023a; Coyle & Nguyen, 2022).

The fieldwork of this study and the conceptual framework which the researcher crafted explores how South Africa can have the four waves running co-currently. It was mentioned in Chapter 1 that South Africa has jumped the 2$^{nd}$ wave (industrial revolution) and went straight to the 3$^{rd}$ wave (services sector). It was also indicated in Chapter 1 that South Africa is doing very well in the 3$^{rd}$ wave and is performing fairly well in the 4$^{th}$ wave.

### 2.3.1 The Primary Economic Sector: Agriculture and Mining

For most nations and regions, the most dominant form of economic activity in the early stage of development is agriculture. At this stage, the sector is labour-intensive, with little capital equipment, and production is initially for subsistence consumption mostly, although surplus is traded (Mills, Herbst, Obasanjo, & Davis, 2017). Mohr and Fourie (2011) show that agriculture was the first economic activity dominating the South African economy. Fouquet and Broadberry's (2015) analysis of the leading economies clearly shows that their early histories were characterised by agriculture as the foundational economic sector.

Over time, many economies display a shift from agriculture as their primary economic sector to advanced mining (as opposed to artisanal mining). This does not mean that agricultural production suddenly ceases altogether, instead it simply means that mineral resources emerge to assume a significant share of the national Gross Domestic Product (GDP) for countries with a comparative advantage, whilst agriculture recedes (Barattieri, Cacciatore & Ghironi, 2018). Alston and Pardey (2014) maintain that agriculture stopped being the major contributor to the global economy; over time it contracted and was replaced by mining, other extractive economic activities, and subsequently manufacturing.

In the case of South Africa, as is the case in the UK, USA, and Australia, the agriculture economy was succeeded by mining as the major contributor to the GDP. Be that as it may, it should be borne in mind that both agriculture and mining are part of the 1$^{st}$ wave and thus mining and other extractive economic activities complemented agriculture. In other words, mining and agriculture co-existed, even though in some economies (including South Africa), mining replaced agriculture as a bigger contributor to the GDP (Fourie, 2021).

### 2.3.2 The Secondary Economic Sector: Manufacturing

Subsequently, the primary economic sector is complimented by the secondary economic sector, and this stage is characterised by the conversion of raw products into finished goods using mechanised processes (Heilbroner, 1999; Grundke, Stein & Appel, 2023; Bhana, 2017). The enduring symbol of the manufacturing economy is factory production, and where the primary sector is heavily dependent on human labour, manufacturing uses automation and mechanisation to drive production (Sakai & Nagai, 2022).

Moreover, where the primary sector was initially subsistence-focused and production was for limited consumption, from the onset, the objective of manufacturing was meant for mass consumption (Workman, 2023). At the core, manufacturing leverages off engineering, and this is a tribute to production innovation, simplification and improvement inherent in the production process. Of course, the agricultural sector has now become highly automated and mechanised (Sihlobo, 2020). Agriculture is also now very commercial, using mass production, and feeds into manufacturing through agro-processing and textiles (Soltanali, Khojastehpour & Keybari, 2023).

Literature suggests that manufacturing is the herald of the industrial revolution, and that it has been marked by various stages. The first industrial revolution began in 1760 and gained momentum in 1840 (Hartwell, 2017).

The second stage of the industrial revolution spanned a period between the late 19th century and ended well into early 20th century (Hartwell, 2017). The major features of this period were the invention of electricity and the assembly line. The supply of reliable energy is indispensable to economic growth, and the assembly line has vastly improved operations management in manufacturing plants (Fourie, 2021).

The third stage of the industrial revolution has been the computer age or the era of the digital revolution (Schwab, 2017). The main reason for labelling it thus is on account of ICT creations such as the internet (1950s), semiconductors (1959), mainframe computing (1960s), personal computing (1970s and 1980s), and the world wide web (WWW) (1989) (Armstrong & Lee, 2023a).

Critics of the secondary sector note that manufacturing was known for social and environmental ills, exposure of labourers to risks, and degradation. Head (2018) recounts descriptions of dreadful diseases, inhumane working conditions, and scant protection afforded to factory workers. Notwithstanding, the upside is that manufacturing was at the core of economic policies of developed economies and expansion of newly industrialising countries and was furthermore a major contributor to employment creation (Ghemawat, 2017; Li, 2023). Further, legislation and regulations have been passed to safeguard labourers' wellbeing, working conditions, and environment (Mills et al., 2017).

### 2.3.3 The Tertiary Economic Sector: Services

In the traditional three-tier economy landscape, the tertiary (services) sector emerged to complement manufacturing as the pre-eminent contributor to some national economies (Munoz, Mascagni, Prichard & Santoro, 2022; Smith, 2018). The secondary economy is anchored in the conversion of primary goods to produce a finished product. However, the services sector is concerned with provision of mostly intangible products and services to clients (Wits, Tuzovic, & Ehret, 2015; Yanamandra & Alzoubi, 2022).

The International Monitory Fund (IMF) has shown that the services economy is the dominant backbone of advanced economies. Regarding the latter, the IMF top 10 services index only features three developing economies, namely China, India, and Brazil, with the rest of the composite dominated by developed nations. However, Fourie (2021) strongly argues that South Africa has a very highly sophisticated services sector; for example, the country's digital banking is arguably the best worldwide (Dagada, 2021; Khera, Ng, Ogawa & Sahay, 2022; Dagada, 2013).

The rise in the value of the services sector since the early 1980s was accelerated by growth of the knowledge economy, and this was caused by the fact that research and knowledge institutions were at the centre of the services revolution (Gladwell & Shirky, 2016). Economic actors in the form of firms and business conglomerates are increasingly manipulating knowledge and specialised intellectual expertise in new research to drive innovation, disrupt service conventions, and grow output (Armstrong & Lee, 2023b; Colin & Palier, 2016).

Of note is the fact that the tertiary sector 'married' innovations in manufacturing and new research to entrench the services sector. Thus, waste disposal and mobile phone services are in the same class as the services sector, notwithstanding their varying processes (Herrero & Rial, 2022). It is this link between research and the increase in innovations and their role in firm decision-making that has now launched the current stage in the evolution of economic development, namely the 4IR (Al-Rodhan, 2016; Lubinga, Maramura & Masiya, 2023).

### 2.3.4 The Fourth Industrial Revolution

The services sector is now being succeeded and complemented by the 4IR, which is synonymous with the innovative convergence of old and new technologies, involving physical, digital, and biological realms (Diamandis & Kotler, 2020; Al-Rodhan, 2016). It builds on the third revolution (services sector) and begins at the turn of the 21st century. Its major features are mobile internet connections and the use of small but powerful sensors. The 4IR makes available increasingly cheaper applications, artificial intelligence, machine learning, blockchain, IoT, quantum computing, big data, advanced robotics, autonomous vehicles, virtual reality, augmented reality, metaverse, and flying cars (Dagada, 2021; Dagada, 2024b).

Digital technologies that are anchored in hardware and use software and networks are not necessarily new. What differentiates them from the third phase of the industrial revolution however, is the fact that the current one is characterised by advanced technologies (Cukier & Mayer-Schoenberger, 2016; Diamandis & Kotler, 2020).

Consistent with this worldview, the Massachusetts Institute of Technology luminaries, Brynjolfson and McFee (2014) identify the current age as the 'second machine age' out of recognition of the role of the technology revolution. Thus, the foundation of the 4IR is the primacy of autonomous technology and relegation of the dependency on human sustenance (Lubinga et al., 2023).

The 4IR is expanding faster, touching human lives quicker than the previous three revolutions, and encourages harmonisation of disciplines, discoveries, innovations, and scientific realms. Such convergence refers to the blurring of lines between technologies and delivery channels. The various technologies and services include computing, gaming, wireless and wireline communications conduits, consumer electronics, digital media, print media, broadcasting, publishing, gaming, socialising, and photography (Diamandis & Kotler, 2020). This list is not exhaustive.

By 2015, there were more than 9-billion devices digitally connected worldwide, and it is expected that this number will rapidly grow to between 25-billion and 50-billion by 2025 (Chen, Xiao & Pang, 2022). Digitisation is becoming ubiquitous, and internet connectivity is starting to find its presence in everyday things like household appliances, food packaging, furniture, and vehicles. This should be attributed to 4IR technologies. Commerce at large, and digital commerce have become beneficiaries of the ushering in of the 4IR. Its technologies have transformed business processes and enabled innovative business models.

The 4$^{th}$ wave of economic revolution is a world of infinite possibilities which depend on the automation of applications increasingly devoid of human participation (Diamandis & Kotler, 2020). It has already been stated in the preceding paragraphs that some economies deindustrialise, both in developing and developed countries. The South African economy is one of these.

## 2.4 THE THEORETICAL BASES OF DEINDUSTRIALISATION

Three theoretical schools of thought explain the evolution of deindustrialisation, namely the Austrian economics school, Ricardo's comparative advantage, and Toffler's 3rd wave.

Oh (2001) maintains that deindustrialisation should be understood within the Austrian school of economics' theoretical framework of competition. According to the Austrian view of economics, businesses are forever engaged in a commercial contest against the backdrop of uncertainty in the economic environment (Alter, 2019). However, such competition takes place in a setting of perfect competition, where market forces operate freely. Moreover, business transactions take place with complete information, market players are many, and goods are supplied to buyers according to supply and demand. Renko, Shrader, and Simon (2012:1235) further emphasise that in the *"neoclassical view (the Austrian economics school), demand and supply are constantly maintained in equilibrium by the 'invisible hand of market forces"* – a reference to Adam Smith's economic thought.

Therefore, in such an environment the major economic player becomes price, in that it signals to shareholders and entrepreneurs where to deploy resources. In addition, it compels business managers to devise business strategies to improve efficiencies. Lastly, price determines the quantity of resources required to improve operational throughput (Boettke & Candela, 2017; Zhou, Leng, Liu, Cui & Yu, 2022).

Oh (2001), and Head (2018) further note that as (national) income levels increase, consistent with economic growth in the economy, the pattern of consumer demand changes, and this compels entrepreneurs to explore strategies to remain competitive and profitable. The rise in levels of income has an impact on domestic economic patterns – as per Engel's Law. This maintains that the proportion of income spent on food items declines as income per capita grows (Rowthorn & Ramaswamy, 1997; Fine, 2018). What has emerged is that as the economy grows and income levels surge some consumers spend more on services than on manufactured products and perishable consumer goods.

The manifestation of Engel's Law impacts firms' decisions regarding capital expenditure, with trends in firms showing a higher quantum of expenditure on services production than on industrial investments (Rowthorn & Ramaswamy, 1997). For the

Austrian school of economics, market forces – in particular, price as well as demand and supply – compel the entrepreneur to explore strategies to contain production cost whilst simultaneously increasing the potential for profit maximisation (Barattieri *et al*., 2018). The drive for efficiency and high profit margins compels firm managers to source industrial capital goods from foreign commercial centres. Simultaneously, the same business competition variable accelerates relocation of manufacturing capacity mainly to South America and Asia (Oh, 2001; Koigi, 2017).

Blaum, Lelarge, and Peters (2015) argue that industrial companies from the North actually benefit from this strategy, especially by *"gaining access to low-cost, quality inputs… Input trade reduces firms' unit costs and lowers domestic prices, [and] therefore increase[s] consumers' purchasing power".* Simply stated, the strategic decision by companies to outsource their factory and manufacturing capacity to developing nations tends to increase profit margins and contributes to the lowering of consumer price inflation. Whereas this may be beneficial to multinational firms, President Trump reasoned that offshoring and outsourcing of manufacturing functions to developing countries has been detrimental to the USA economy and has fast-tracked deindustrialisation of its manufacturing sector (Sharples, 2022). It was also the president's view that this has led to the escalation of unemployment in the USA. It was on this premise that he attempted to reverse offshoring and outsourcing industrial policies when he lost the 2020 presidential elections. He was also reversing generous foreign exchange, and this has led to "trade wars" between China and the USA (Ghemawat, 2017; Ghosh, 2022).

Nevertheless, offshoring and relocation of factories to developing economies is beneficial and is the result of an interplay between the decline in industrial expenditure, a shift in consumer demand behaviour in developed markets, and the entrepreneurial need for profit (Zhou et al., 2022; Workman, 2018; Ghemawat, 2017). Seen through the prism of the Austrian competition economics theory, deindustrialisation is in some instances a consequence of cost containment as investors respond to prevailing economic patterns.

The role of recipient entities and countries in the deindustrialisation process may also be explained by the theory of comparative advantage (Sivakumar & Roy, 2017; Shen, Long, Lee & Zhang, 2022). Comparative advantage is a theoretical conception of 19th century philosopher David Ricardo who espoused its processes in his principles of political economy and taxation (Popkova, 2023). The major tenet of comparative advantage is that gains from international trade accrue mostly when each trading party exploits its natural endowments and focuses on trading activities with low opportunity cost.

Vogel (2011), and Ghemawat (2017) noted that several Asian countries anchored their industrial policies on this economic strategy and invested significantly to accrue comparative advantage to attract commissions from industrial companies in developed countries. For these countries, their peculiar competitive advantages are wide ranging, and include highly educated workforces (India), extremely cheap labour (China and Bangladesh), and specialist expertise (Taiwan, Israel, and South Korea). For example, the Chinese company Foxconn assembles Apple Inc's iPhone; the Indian company Infosys provides information systems to the USA aerospace manufacturing giant Lockheed Martin; and Canadian aircraft manufacturer Bombardier receives jet parts from its factories in China.

Kniivilä (2007), and Fine (2018) observed that the exploitation of the comparative advantage has been beneficial to these countries, many of whom were previously backwaters of global capitalism – by realising economic returns to unskilled labour, increasing employment, stimulating, and expanding the national economy.

It is worth reminding the reader that before the 4IR became a common phraseology, Alvin Toffler (1980) wrote the futuristic book called the Third Wave. The purpose of the treatise was to chart economic forecasting. Much has been said about Toffler's theory in the preceding sections.

## 2.5 CONCLUDING REMARKS FOR CHAPTER 2

This chapter has presented various conceptual and theoretical overviews. For example, the economic advances of the West are attributable mainly to the 18th century industrial revolution. These economic and business innovations had their genesis in the UK but spread throughout the world. Secondly, the industrial revolution has not ended but continues to evolve. Schwab's (2017) conception of the 4IR suggests that new innovations will continue to be discovered through research and development. Already, some 4IR innovations are already benefitting humanity. Schwab's hypotheses mirror Toffler's economic futures thesis of 1980.

The chapter has engaged the theories explaining the deindustrialisation thesis. Three theories are pointed out, namely the Austrian economic school of thought pertaining to the framework of entrepreneurial competition, the classic Ricardo's theory of comparative advantage and, lastly, Toffler's 3rd wave. In a nutshell, these theories suggest that deindustrialisation is an outcome of constant change in business. It is mostly occasioned by the entrepreneurial search to minimise cost, a process which is influenced by consumer behaviour, and ultimately ensures business sustainability and high profit margins for shareholders.

# CHAPTER 3: DEINDUSTRIALISATION OF ECONOMIES

## 3.1 INTRODUCTION

This chapter discusses deindustrialisation as an economic and business phenomenon in global markets. It will show that, notwithstanding the multiplicity of definitions of deindustrialisation, the most common description is anchored in the rise in unemployment in the manufacturing sector as its share shrinks in the overall national economy. The decrease in the number of factory plants and the corresponding reduction in the labour force is widespread in advanced economies, but some newly industrialising economies and developing nations have had similar experiences, commonly referred to as premature deindustrialisation.

Discussion of the evolution of the economy follows, in which it is presented as a process where various phases of economic stages succeed each other. The first stage is the primary economy ($1^{st}$ wave), succeeded by the secondary economy ($2^{nd}$ wave), followed by the tertiary economy ($3^{rd}$ wave) and, lately, the 4IR. These stages simply reflect dominance of one sector over others, and do not purport to portray a mono-sector-economy.

Although the economy in general shows a four-tier structure, developing economies have not been spared the brunt of disinvestment and losses of jobs in the manufacturing sector – as has been alluded to in reference to premature deindustrialisation. However, this phenomenon has not affected all developing economies alike. Whereas some countries like South Korea and South Africa suffered noticeably, Mexico has largely escaped this fate and became a major recipient of the USA manufacturing sector's offshoring and outsourcing strategy during the administrations of Presidents Bill Clinton, George W. Bush, and Barack Obama (Islas, Arribas & Gutiérrez, 2018).

This chapter further discusses factors contributing to deindustrialisation. For example, the offshoring of industrial resources to developing economies is the leading cause of deindustrialisation in advanced economies. Moreover, firms are applying arbitrage in search of favourable labour markets, and this is leading to factories relocating to mostly developing countries with attractive and cost-efficient labour public policy regimes.

The inference is that deindustrialisation is a net result of several factors. These are presented initially from a global perspective and later focus on African and South African realities. Below is the discussion of the global deindustrialisation of economies concept.

### 3.2 DEINDUSTRIALISATION IN GLOBAL MARKETS

The economic definition of industrialisation is commonly based on assessment of the labour market in particular it is about the share of manufacturing in total employment (Haraguchi, Martorano & Sanfilipo, 2019). Following from this perspective, a decline in the share of total employment in the manufacturing sector suggests deindustrialisation.

Some authors have argued that deindustrialisation often indicates a shift to another economic structure, namely services (Rowthorn & Ramaswamy, 1997; Fine, 2018). As this change in the structure of the economy unfolds, transfer from a concentration of employment in manufacturing to services employment patterns follows. According to this analysis, deindustrialisation is a natural phenomenon of economic growth. Consistent with this school of thought Clark (1957:492) observed:

*'A wide, simple and far-reaching generalisation… (is that) as time goes on and communities become more economically advanced, the numbers engaged in agriculture tend to decline relative to the numbers in manufacturing, which in turn decline relative to the numbers engaged in services'.*

It was mentioned in the preceding sections that this worldview is originally attributable to the 17$^{th}$ century British economist and philosopher Sir William Petty who proposed that major economic changes always succeed each other (Petty & Graunt, 1899; Murphy, 2009). The emergence of services as an outcome of the decline of manufacturing is also consistent with Schumpeter's concept of creative destruction. This rests on the assumption that entrepreneurs and investors are choosing to abandon manufacturing in favour of services as a driver of growth (Hospers, 2005). The drive towards services is the manifestation of diversification; Rostow (1960) calls this stage the 'drive to maturity' in relation to national economic development.

The economic trend in deindustrialisation is a consequence of the 'drive to maturity', a graduation to the next stage of development. It is crucial to identify when this change takes place. Rodrik (2016) for instance identifies the tipping point in the transition from an economy dominated by manufacturing to one dominated by the services sector. This deindustrialisation began to occur when per capita income pierced the US$6000 (1990 level) threshold.

Most of the advanced economies have been experiencing deindustrialisation since the latter half of the $20^{th}$ century. Lately, developing economies, particularly in Africa, have also experienced a decline in the manufacturing sector and this is driven mostly by domestic public policy failure and the predatory trade policies of fellow frontier economies (Mills, 2010; Lee & Armstrong, 2022). Below follows the discussion of deindustrialisation in advanced economies.

### 3.2.1 Deindustrialisation in Developed Economies

Rowthorn and Ramaswamy (1997) observed that most developed economies have gone through deindustrialisation. Furthermore, they maintain that the weakening of industrial output in advanced economies is a common feature. According to this perspective, deindustrialisation reflects economic advancement, an indicator of rising living standards and success of the prevailing macroeconomic strategy.

Analysis of employment statistics in manufacturing reveals that deindustrialisation began in earnest in the US in the 1960s, with the share of manufacturing jobs at 28% in 1965 (Lee & Armstrong, 2022). The softening of industrialisation increased noticeably so that by 1994, the share of manufacturing jobs was only 16%. By 2016, the share of manufacturing jobs in the USA economy was a mere 10%, which Trump vowed to reverse (Rodrik, 2016).

Another example was Japan's economy which was destroyed by World War II but was quickly rebuilt so that it became the second largest economy before the present-day emergence of China (Fourie, 2021). Nonetheless, like most developed economies, Japan has not been able to evade the decline in the manufacturing sector output which began in the 1970s. In 1973, the share of manufacturing jobs was 27,4%; however, by 1994 manufacturing contracted to 23% (Lee & Armstrong, 2022).

In a similar vein, deindustrialisation started to manifest in the 1970s in countries that are members of the European Union (EU) as the stimulus package of the Marshall Plan bore dividends (Fourie, 2021). The EU-15 manufacturing share of jobs was 30% in 1970, but by 1994 the jobs figure was 20%. Now, the EU membership has not been static, but has since increased, and conducting an exacting time series analysis is not easily possible, and as a result this study uses the UK as a proxy. In 1970, the UK share of manufacturing jobs was 33%, and by 2016, the share of manufacturing was 10% (Rodrik, 2016)[2].

Evidently, deindustrialisation in the economies of the North has been a long-standing reality. Rowthorn and Ramaswamy (1997) conducted a regression analysis regarding deindustrialisation between 1960 and 1994 in developed economies, namely the USA, EU, and Japan. This exclusivist approach to studying deindustrialisation was in part motivated by a belief that "deindustrialisation so far has been pronounced in the industrial economies" (Rowthorn & Ramaswamy, 1997:5). The research in question observed that any contraction in manufacturing employment is directly proportional to the contraction in the contribution of manufacturing to the GDP. There is however an inverse relationship between the two structures of the economy. As the share of manufacturing declines, in contrast the share of services in the GDP rises. This suggests services is the natural successor of manufacturing as the structure of the economy changes.

There should be an account of why industrialisation slows down as the economy evolves and advances. Results from studies in developed economies suggest that a shift in expenditure patterns takes place from manufacturing to services (Lee & Armstrong, 2022). This view is augmented by reference to Engel's law and curves. According to this law, the proportion of income spent on food items declines as income per capita grows (Zimmerman, 1932). Thus, economic advancement leads some people to spend more on services than on manufacturing. Investment in services at the expense of manufacturing is a natural consequence as investors respond to prevailing economic patterns.

Economic developments do not remain constant over time; but the expansion of the services sector accelerates due to mainly two factors (Castano, Mendez & Galindo, 2016). First, entrepreneurs do not cease to invest in services owing to anchoring, favourable economic conditions, and good returns. Second, as the economy advances and becomes sophisticated, consumer demand for services increases. This market enthusiasm for services naturally dictates investment

[2] UK withdrew from the EU on 1 February 2020.

decisions: capital is invested in the growing service economy, and additional jobs are created in the same sector. Invariably, this stellar sector performance has a crowding effect, but the dislodgment process does not solely influence the manufacturing sector, but it includes the agriculture sector as well.

Against this background there is a debate about the role of external factors in the deindustrialisation of the advanced economies. One school of thought exists which suggests that international trade has weakened the manufacturing capacity of developed economies (Harrison & McMillan, 2011). Another school of thought proposes that deindustrialisation is a natural economic phenomenon, and that a convergence of various economic factors plays a role in the contraction of manufacturing (Lee & Armstrong, 2022).

In 1997 the IMF produced a treatise on the state of manufacturing in developed economies which concluded that these have shed jobs in the sector as their economy advances. A noteworthy finding was that trade relations between developed and developing economies should not be blamed for deindustrialisation of the North. This is because in the preceding four decades, developed economies had been affected by several economic challenges. These included rising energy inflation, and stagnation of the economy. According to the IMF, the cited economic problems in the West have accelerated the decline in the share of manufacturing employment and stagnation in real wages. The challenges have also increased inequality in the USA, and an increase in general unemployment in Europe (Frey, 2019).

This IMF report also observed that deindustrialisation has not contributed significantly to a decline in employment in the USA (Rowthorn & Ramaswamy, 1997). Two reasons explain this: first, manufactured imports from developing countries constitute an insignificant proportion of the USA GDP – 2% in 1994. Second, there is little evidence of a decline in prices of goods whose production is extensively dependent on unskilled labour. In contrast, the increase in inequality of earnings between skilled and unskilled labour in the USA is attributable to the infusion of technology – in particular the role of computers in the operations sphere of the economy (Frey, 2019; Greenspan, 2007).

At that time, other economists argued forcefully in critiquing the rationalisation of deindustrialisation in the West. For example, Wood (1994; 1995) and Freeman (1995) differ with their benign perception of imports from developing countries. They contend that production and workplace operations in developing countries are labour intensive, and that manufactured imports into developed economies displace low skilled workers in the domestic market (of the developed economy). Worth noting in this criticism is that Wood and Freeman observe the disruptive role of imports in the labour market, even when the import penetration ratio is low and trade between counterparties is balanced.

This debate has not diminished but continues to rage, and its latest manifestation relates to the role of deindustrialisation in the labour market. The general observation is that deindustrialisation leads to loss of employment and compounds problems of inequality (Frey, 2019; Fourie, 2021). According to the debate, deindustrialisation in the West is causing a rise in unemployment on account of trade between developed nations and developing economies.

The researcher has carefully studied the relationship between deindustrialisation and the labour market. Data sourced from the socio-economic accounts of the World Input-Output Database, and the information facts file from both the advanced economies and the developing markets show that workers with a low skill base bore the major brunt of deindustrialisation between 1996 and 2009. The employment rate of workers with intermediate skills remained constant between 1996 and 2008, but the situation changed beginning in 2009. That semi-skilled employees started losing jobs in 2008-2009 may be because the said period was affected by the global economic contraction, resulting in massive job losses. Throughout the period under assessment, the employment rate of high-skilled workers improved, even defying the economic pressure of the 2008/2009 depression.

In the context of the debate, there is a need to explain the large decline in low-skilled employment in the advanced economies, and this is explained by the Stolper-Samuelson and Heckscher-Ohlin Models (Learner, 1995; Learner, 1996). According to the models in question, trade relations and commercial transactions of unskilled-intensive manufactured goods between a developed country and a developing economy with abundant low skill leads to the fall in price of the manufactured good in the skill-abundant North. Such a trade relationship leads to the fall in wages of unskilled employees in developed economies. The result is a change in specialisation in terms of which the North will concentrate on skill-intensive manufacturing and services – hence the emergence of deindustrialisation in the North.

Moreover, developing countries enjoying comparative advantage in labour costs concentrate on production of low-skilled labour-intensive goods (Houseman, 2007). This explains the current phenomenon, where corporations in the North outsource to manufacturing capacity resident in the South such as China, Bangladesh, Philippines, and Mexico.

In the current environment, deindustrialisation of developed economies has largely been taken as a fact by the political class until Presidents Trump and Joe Biden endeavoured to reverse this phenomenon (Ernst, 2021; Budning, Cote & Wilner, 2023). The main narrative is that domestic industrial policy is weak in the face of large-scale imports and dumping from developing economies, and that this is increasing unemployment. Trump rode the wave of protectionism in the manufacturing sector and made some visible progress to reindustrialise the USA. His successor, President Biden, built and extended on Trump's reindustrialisation public policy (Ibid). In France, Marine Le Pen rode the same wave, but lost the presidential elections. Politicians such as Trump, Biden, Boris Johnson, Le Pen, and many others put a lot of emphasis on reindustrialisation of their countries' economies during their electoral campaigns (Fourie, 2021). This led to the New York Times putting up this punchy headline: 'Why are politicians so obsessed with manufacturing?' (4 October 2016).

The electorate is also aware that manufacturing has the potential to create massive numbers of jobs. During the 2016 presidential elections, Hilary Clinton did not focus on how she would revive the manufacturing sector and thus she lost against Trump (Frey, 2019). In fact, developed economies have not let their manufacturing sectors die, they just outsourced them to countries that pay lower wages. The USA has been reversing this strategy since 2017. In 2022, the UK and German went back to coal mining and nuclear energy to boost their industrial output (Wilkes, Torsoli & Look, 2022; Patt & Steffen, 2022).

The phenomenon that scholars should rather pay attention to is the potential impact of increasing use of 3-D printing, automation, digitisation, and mechanisation to the primary forms of production and manufacturing. This should include implications for the employment of human labour.

### 3.2.2 Deindustrialisation in the Developing Economies

Much literature shows that deindustrialisation is an economic outcome associated with mostly advanced economies. Nonetheless, alternative literature paints a different picture and suggests that even developing economies are now experiencing deindustrialisation (Mills, 2010; Mills & Herbst, 2014; Fourie, 2021). Rodrik (2016) observes that a contraction in manufacturing in most emerging markets actually follows an inverted u-shaped path, suggesting a hard landing. In addition, the said contraction in the manufacturing economy of pre-emerging markets takes place much earlier than was the case with the advanced economies (Mills, Herbst, Obasanjo & Davis, 2017). Startlingly, "in most of these countries, manufacturing has begun to shrink (or is on course for shrinking) at levels of income that are a fraction of those at which the advanced economies started to deindustrialise" (Rodrik, 2016:2). This suggests that deindustrialisation is commencing even when per capita income has yet to reach the transition tipping point of US$6000 per annum (Taguchi & Tsukada, 2022).

Early deindustrialisation has several consequences that are destructive to a developing economy (Rodrik, 2016). For instance, premature deindustrialisation weakens the structure of the economy that in the past benefitted advanced economies in their growth path. The shrinking of the manufacturing sector leads to increases in unemployment as unskilled labour is unlikely to be easily employed in the highly skilled service sector. Premature deindustrialisation also robs the economy of multiple drivers of growth, as the new emerging sector of the economy (services) is unlikely to immediately revolutionise productivity, ensure national economic competitiveness and produce adequate output early in the development phase (Lee & Armstrong, 2022).

Several factors explain deindustrialisation in developing economies (Caldentey & Vernengo, 2021). For instance, the demand for manufacturing products ebbs away due to preferences shown for services. In this regard, the evolution of the developing economy is imitating the track followed by developed economies. They start out as agrarian economies, take off because of rapid innovations and investment in manufacturing, and lastly mature into services, a development that either displaces or compliments both manufacturing and agriculture.

Some authors vehemently disagree with this observation (Armstrong & Lee, 2023a; Lee & Armstrong, 2022; Fourie, 2021). They argue there is no substantial services sector in most African, South American, and Caribbean countries. Most pre-emerging economies are dependent on agriculture and extractive production of minerals and aggregates, metals, gas, and petroleum products. The researcher fully supports these authors, and he has produced peer-reviewed work regarding this (Dagada, 2021; Dagada, 2022b).

The second hypothesis concerning deindustrialisation in developing economies relates to the primacy of technology and the cost thereof. Aggressive productivity levels in manufacturing require technology more than in any other sector of the economy (Caldentey & Vernengo, 2021). This observation was emphasised by Robert Solow's (1956) treatise that shows that economy demands investment in technology for success. It is no coincidence that Solow authored this treatise in the mid-20th century, the time of the shift in manufacturing to services in advanced economies. Aggressive growth of the manufacturing sector requires a rapid innovation in technology and its deployment in the productive sector of the economy. Asian Tigers embraced this economic planning (often with the aid of USA technology transfer), made gains, and later progressed to the services sector at the right time (Fourie, 2021). In contrast, African pre-emerging markets simply do not have technological resources, and their manufacturing base is therefore poor, and collapses prematurely.

Another cause of deindustrialisation in developing economies is the decline in prices of manufactured goods. In markets where prices of manufactured decrease, this has  a causal effect on deindustrialisation (Zhou et al., 2022).

The researcher further analyses the role of price through a comparison of the evolution of manufacturing in two economies, namely Mexico and South Korea. South Korea's price decline of 250% was the most aggressive and was accompanied by deindustrialisation (Rodrik (2016). South Korea thus experienced deindustrialisation in the mid-1980s as the price of its manufactured products continued to plunge. Noteworthy is the fact that South Korean deindustrialisation saw a rapid march towards ICT and the 4th wave. It spawned aggressive investment in the services industries and innovation in the technology. This explains the fact that one of the eminent symbols of the current phase of industrialisation, namely Samsung, is a South Korean champion (Turner, Kim & Kwon, 2022).

In contrast to the price deflation of South Korean manufactured goods, the price of Mexico's industrial products between 1960 and 1990 remained largely constant (Lee & Armstrong, 2022). Partly because of this unchanging price level, Mexico has maintained its manufacturing economy, and in recent years has been the recipient of USA manufacturing business as USA firms outsource the production of manufactured products (Crossa, 2022). The conclusion is that developing countries whose manufacturing products remain price competitive in the global markets sustain their industrial sector. In contrast, developing countries whose manufacturing products do not enjoy price competitiveness in the global markets shift investment capacity to the services sector. In this regard, investment in services becomes a risk management strategy and demand side economic stimuli.

Zivanai (2016) who investigated premature deindustrialisation in Africa since 1980 found the major causes of this phenomenon to be a lack of access to funding by local manufacturing firms, and explicit and implicit sanctions by the Western powers. There existed a lack of foreign direct investment, strict production standards requirements, poor public infrastructure, obsolete machinery, excessive production costs, poorly formulated and implemented public policy, globalisation, small domestic markets, poor agriculture performance, and market distortions. In her study, Zivani (2016) found that the manufacturing subsectors that were affected included clothing and textile, timber, engineering and metals, chemicals, fertilisers, pharmaceutical, leather, food and beverages. These findings are supported by other scholars (Tshuma, 2019; Tregenna, 2016, Caldentey & Vernengo, 2021; Botta, Yajima & Porcile, 2023).

In his highly regarded book titled 'The curse of Berlin: Africa after the cold war', professor Adekeye Adebajo attributes Africa's poor manufacturing sector and premature deindustrialisation to the Berlin conference which took place in 1884-1885 (Adebajo, 2014). The outcome of the conference was that a group of European countries agreed to partition Africa between themselves. This would enable these countries to govern African states as their colonies and plunder their natural resources so that they could support manufacturing sectors and socio-economic developments in their own economies. Although all African states have obtained independence from their erstwhile colonial masters, the historic and structural effects of the curse of the Berlin conference is still vividly felt in each African country.

Assertions that the effects of this remain devastating to Africa's socio-economic development have been confirmed by other authors (Fourie, 2021; Dogan, 2021; Eyffinger, 2019; Michalopoulos & Papaioannou, 2016). Nevertheless, this does not mean that Africans should complain perpetually but should rather implement necessary public policy and other measures to reindustrialise their economies. That is exactly what other regions that were colonised or subjugated by European countries did. The European trade along the Indian Ocean also morphed into colonisation (Fourie, 2021). Countries such as Goa (modern India), Macau (China), Nagasaki (Japan), and Malacca (Malaysia) became victims of this which is why the Chinese built the Great Wall of China. All these countries have reindustrialised their economies and dramatically improved the living standards of their people (Fourie, 2021). Africa should emulate these countries.

### 3.2.3 Deindustrialisation is not Necessarily a Natural Consequence of Economc Advancement

Several eminent scholars are not in agreement with the assertions, observations, and insinuations that suggest that deindustrialisation is a natural evolution of the country's economic growth (Tregenna, 2016; Tregenna & Andreoni, 2018; Mills et al., 2017; Diamandis & Kotler, 2020; Armstrong & Lee, 2023a, Armstrong & Lee, 2023b; Lee & Armstrong, 2022; Frey, 2019; Hausmann, Santos, Macchiarelli & Giacon, 2021; Hausmann, Hwang, & Rodrik, 2007; Hausmann, Andreoni & Tregenna, 2020; Barrios, Brenot, Taniparti, Protzer, and Henn, 2023). These scholars attribute deindustrialisation to poorly thought through public policies. Many pre-emerging economies have undergone deindustrialisation prematurely even though they did not even have a substantial services sector. It is wrong therefore to suggest that primary production sectors such as agriculture, mining, and other extractive economic activities are replaced by manufacturing; manufacturing is replaced by services; and the services sector is replaced by 4IR. Ideally, a thriving economy should have these sectors running concurrently.

Most industries in developing and developed countries still rely on primary forms of production such as agriculture, mining, oil, gas, petroleum products, fishing, forestry, etc. It is actually disingenuous to create an impression that manufacturing could at some point be outdated. Building and construction materials, clothes, household products and furniture, motor vehicles, and other physical materials should be produced. There will also be no manufacturing sector without inputs from the primary forms of production. There will also be no 4IR without the manufacturing sector. Computers, mobile phones, 3-D printers, network towers, fibre optics, cloud infrastructure, wireless network infrastructure, satellite infrastructure, software development infrastructure, and other 4IR devices are produced by manufacturers. In other words, all the economic waves (revolutions) complement each other instead of replacing each other. They build and extend on each other.

For instance, the agricultural sector remains very important because it feeds into manufacturing. That is why Greg Mills (2010) insists that there would be no industrial revolutions without agricultural revolutions. All most all countries that have embarked on substantial manufacturing went through massive agricultural growth. This assertion is supported by economic history and extensive research (Fourie, 2021; Sihlobo, 2020). It stands to reason that we can only feed the 8-billion people around the world with thriving agricultural sectors in both developing and developed economies

The service sector and 4IR will never employ more people than the primary forms of production and the manufacturing sector. Agriculture, the extractive sectors, and manufacturing are highly labour intensive and thus they can provide jobs for unskilled and semi-skilled workers. The services sector and 4IR mostly employ skilled labour.

The published literature cited in this study made their observations many years ago when they suggested that agriculture and manufacturing fade away as a natural economic progression. While their writings are true reflections of their research findings and observations, much has changed many years after their publications. These include Petty and Graunt (1899), Zimmerman (1932), Clark (1957), and Rostow (1960). Engel's law and curves were products of observations made in the 19$^{th}$ century, while Rodrik (2016) relied on the historic observation of the manufacturing sector in the middle of the 20$^{th}$ century. Dynamics have drastically changed regarding industrialisation since these authors published their work (Wood, 1994 & 1995; Freeman, 1995; Rowthorn and Ramaswamy, 1997; Hospers, 2005; Murphy, 2009). Developed, emerging, pre-emerging, and developing economies are doing everything possible to industrialise or reindustrialise their economies.

### 3.2.4 South-South Deindustrialisation: Sub-Saharan Africa-China Trade Relations

The evolution of South-South relations provides another vantage point in analysing deindustrialisation of developing economies. Ajakaiye (2006) observes that the evolution and structure of the sub-Saharan Africa-China relationship follows a familiar pattern. African countries rely on comparative advantage in their commercial trade transactions with China, and this is evidenced by the fact that they export mostly minerals to China in their unfinished form (Gold, 2022; Gold & Rasia, 2022). Popular minerals and metals exported to China include platinum-group metals, gold, diamonds, uranium, manganese, chromium, nickel, bauxite (aluminium raw material), cobalt, petroleum and gas. The major mineral and metal producers are the Democratic Republic of Congo (DRC), Ghana, Namibia, Nigeria, South Africa, Botswana and Zimbabwe. This is complemented by several smaller-scale producers namely Tanzania, Mozambique, Namibia and Sierra Leone (Fourie, 2021).

In exchange, China exports finished, manufactured goods such as vehicles, car components, textiles and clothing, footwear, and consumer electronics to Sub-Saharan Africa. The major reason China is exporting finished manufactured products is attributable to the fact that it has industrial capacity, a beneficiary of the economic evolution of advanced economies towards services (Dagada, 2021).

China's tertiary economy continued to grow from its share of 8% of global manufacturing exports in 2004 (Lett & Banister, 2009). In addition, China's manufacturing economy benefits considerably from the low cost of labour. The Chinese manufacturing labour market is composed of semi-skilled, cheap human resources (Zhang, 2023). China's average hourly remuneration is very small – 'a small fraction of that found in many of China's trade partners' (Lett & Banister, 2009). In 2004 'the average hourly manufacturing compensation estimate for China was US 0.67, about 3% of the average hourly compensation costs of production workers in the USA for the same year' (Lett & Banister, 2009:40).

This data suggests that China's competitive edge in global manufacturing is attributable to these exceedingly low labour costs. One of the major benefits of low-cost labour is that many global corporations like Apple and Nike outsource industrial products to China (Zhang, 2023). Therefore, the sub-Saharan Africa-China trade is premised on division of labour, where African countries specialise in merely exporting raw minerals and other commodities, and China specialises in beneficiation and manufacturing, subsequently exporting the finished products to the rest of the world, including the African frontier markets (Soko, 2021).

Although China's foreign policy professes solidarity with the global South, its economic expansionism is undermining economic structures of developing nations (Qobo, 2021). In fact, China is a significant actor in a new phenomenon, where a fellow developing country erodes the manufacturing capacity of a fraternal, developing nation states. This is a manifestation of realism in the international political economy, and is enabled by the prevailing international trade relations protocols in the World Trade Organization (WTO), in particular market access and non-discrimination.

Sekakela (2016) observes that China's exports of manufacturing products to African countries have resulted in several consequences. Firstly, Chinese exports are undermining domestic production. In this regard, cheap, foreign imports crowd out domestic products, thereby disincentivising investment in local manufacturing. Secondly, Chinese imports displace exports of manufactured goods of developing countries in third markets. In this regard, Chinese exports into African countries lead to the collapse of established patterns in regional markets. Lastly, the weakening of both domestic and regional African manufacturing capacity leads to an increase in unemployment, especially for the low skilled labour cohort. This puts pressure on the fiscus as more people depend on social security (Grinberg, 2022).

Botswana and South Africa are prime examples of economies whose manufacturing sector has been eroded by China, a fellow developing economy. Thirty years ago, Botswana-China bilateral trade relations were non-existent, but by 2012 Chinese exports to Botswana were worth US$234m, whilst Botswana's exports to China was valued at US$47m (Sekakela, 2016; Calabrese & Tang, 2023). This trade imbalance emphasises the fact that Africa's specialisation in exports of mostly raw materials is not greatly advantageous. The Botswana basket of exports to China is 92% raw material, mostly rough diamonds, a few pieces of art, and vegetables. Rough diamonds are mostly needed by the emerging Chinese diamond cutting and beneficiation industry. In exchange, Botswana's imports of Chinese products are mainly medium-skilled manufactured products in the form of man-made fibres, handbags, and footwear (Soko, 2021). The latter items increased by 40% and 25% respectively.

The large volume of Chinese manufactured exports into Botswana has reduced the productive capacity of the domestic manufacturing sector (Oya & Schaefer, 2023). This is because consumer preferences have shifted to the consumption of cheap imports against local products. Chinese manufacturing has not only had an impact within its borders. For decades, South Africa was the number one trading partner with Botswana for non-mining products, but the presence of cheap Chinese imports has seen a decline in Botswana's volume of exports of manufactured products to South Africa. Between 2001 and 2006, the decline averaged 10%. However, between 2007 and 2012, Botswana's share of manufactured products into South Africa declined by 12%. This suggests that as time evolves, the rate of Chinese displacement of the local industrial capacity increases (Sekakela, 2016; Calabrese & Tang, 2023).

However, the ever-increasing presence of cheap imports has now displaced South African manufacturers in Botswana as well. In fact, analysis of the volume of South African exports of manufacturing products into Botswana has constantly declined between 2001 and 2012 (Sekakela, 2016; Calabrese & Tang, 2023). Simultaneously, China's imports in South Africa have increased. This suggests that Chinese deindustrialisation of a fellow developing economy does not just affect one country, but it has a third market impact.

Rodrik (1999) and Fourie (2021) have noted that one of the strategies used by the countries collectively known as the Asian Tigers was to boost their industrial revolution miracle by promoting agriculture and paying the workers lower wages. Fourie (2021:182) wrote: 'Workers ultimately 'paid' for the miracle by temporarily forgoing higher living standards, just workers in England did during the industrial revolution. The only reason this was possible, the argument goes, is that there was consensus among political and economic leaders to sacrifice the short-term well-being for their citizens for long term development". China could therefore not be blamed for producing cheaper goods by embarking in lower production costs. Industrial development requires national consensus that all stakeholders are prepared to sacrifice for the greater good of the society. This is possibly what the South African president, Cyril Ramaphosa, has tried to achieve but to no avail – he referred to his envisaged version of national consensus as 'social impact' (Calland & Sithole, 2022).

### 3.2.5 The Role of Domestic Public Policy Dynamics in the Deindustrialisation of the South African Economy

The evolution of the South African economy shows that its manufacturing sector was partly undermined by domestic policy. Like most markets, the first phase of the South African economy was largely agrarian. However, the history of Mapungubwe indicates that this community engaged in gold mining and traded with the East via the Mozambique trade route (Mda, 2013). This primary sector remained the mainstay of the economy even after the arrival of the Dutch East Indian Company community in the mid-17$^{th}$ century (Dagada, 2021).

However, with the discovery of diamonds in Kimberly and gold on the Witwatersrand in the 19$^{th}$ century, the economy of South Africa was revolutionised (Fourie, 2021). In 1910 when the Union of South Africa was formed, mineral exploitation (27.3%) was the main economic contributor to the GDP followed by agriculture (21.5%), and manufacturing contributed a mere 4.2%. By 1960, however, manufacturing was contributing 21%, ahead of mining (12.7%) and agriculture (12.4%). It is worth noting that the secondary sector (26.6%) growth in 1960 was behind the tertiary sector (48.3%) (Fine, 2018).

It was around this time that South Africa's economy began to be affected by domestic policy, and this was brought about by political risk. It was mentioned in Chapter 1 that police shot dead 69 Pan African Congress anti-pass protesters in Sharpeville in 1960 (Frankel, 2001). This led to the announcement of the state emergency and the banning of pro-democracy organisations, namely the Pan African Congress and the ANC. Of significance is that these events led to the imposition of both political and economic sanctions. Regarding the former, South Africa was expelled from the Commonwealth, later the United Nations (UN), and was isolated by most nation states. This isolationism was only lifted when democratisation started in the early 1990s (Dubow, 2017; Patel, 1980).

Regarding economic boycotts, these began in 1959 when South African exiles supported by English sympathisers in the left-wing labour and political structures began agitating for economic sanctions, notably by discouraging shopkeepers from including products in their inventory (Klotz, 1995). The economic boycotts started slowly, but with the Sharpeville massacre, the economic boycott increased. South African exports were boycotted, and these included agriculture and industrial products.

The cumulative effect of sanctions is that it undermined the country's productive capacity (Ross, 2021).

## 3.3 CAUSES OF DEINDUSTRIALISATION

Literature reveals that the several factors explaining the ascendance of deindustrialisation include offshoring-outsourcing, globalisation, closure of borders, labour policies, weakening of technical education, and economic policy paralysis (Armstrong & Lee, 2023; Lee & Armstrong, 2022; Ghemawat, 2017; Nourbakhsh, 2016, Gladwell & Shirky, 2016).

### 3.3.1 Offshoring-Outsourcing

One of the enablers of deindustrialisation is the offshoring and outsourcing of industrial capacity to foreign markets (Andreoni & Tregenna, 2020; Ghemawat, 2017). The terms 'offshoring' and 'outsourcing' tend to be used interchangeably. The former denotes business strategy, where manufacturing resources of industrial companies in developed economies are transferred to the industrial base of emerging and least developed countries. The offshoring company often retains a majority (mostly 100%) equity in the transferred operations (Nakashima, Kodama & Sengoku, 2023; Farrel, 2004). In this context, outsourcing is a business strategy option, where a firm chooses not to manufacture certain operating inputs but sources them from offshore suppliers (Sivakumar & Roy, 2017). The common denominator of offshoring and outsourcing is that industrial tasks are alienated from a firm and a market. The cumulative effect of this is benefit of employment opportunities and industrial functions to an outside country (Ghemawat, 2017; Nakashima et al., 2023).

Apple provides a good example of both offshoring and outsourcing (Smith, 2024; Ghemawat, 2017; Plattner & Zeier, 2016). Although Apple is a USA company, physical components which constitute its iPhones are made in Asia – the screen from Japan, flash-memory from South Korea, but all components are assembled in China. The USA's team contributes the intellectual property – design and software development of the iPhone (Ghemawat, 2017; Smith, 2024). Apple employs highly qualified engineers to integrate the input from various counties and produces the final phones (Petrie, Kollmann, Thomson, Codoreanu & Webster, 2023). Whereas countries in South America and Asia had been using beneficiaries of American manufacturing firms' offshoring and outsourcing, South Africa did not benefit from this due to its perceived rigid labour laws, policy flip-flopping, poor investment in research and investment, and critical shortage of artisans (Ruiters & Bond, 2023; Andreoni, Kaziboni & Roberts, 2021).

Pierce and Sen (2014) observed that offshoring has resulted in the dismantling of factories across the USA, Canada, and Europe. Veugelers (2013) noted that most factories located in Eurozone creditor economies in the North collapsed as production moved to debtor regions in the South. In the USA and Canada, domestic manufacturing firms in the ICT, aviation, automotive, and civil engineering industries are outsourcing from Asian suppliers, particularly from China. Offshoring and outsourcing are thus distinctively characterised by the shutting down of industrial bases in the home countries in favour of foreign production (Petrie et al., 2023; Ghemawat, 2017; Plattner & Zeier, 2016).

Off-shoring and outsourcing are accelerated and motivated by several factors some of which are public policy agility, cheap labour, and industrial strategy efficiencies of competitors (Ghemawat, 2017; Petrie et al., 2023). Instead of bringing skilled foreigners (and their families) to their shores, developed countries would rather have their manufacturing firms operating in countries and regions where such firms are based (Sadiku, Ajayi-Majebi & Adebo, 2023). Most market recipients of offshoring in the South have a marginal labour cost, abundant concessional corporate tax rates, and non-existent constrictive labour laws all of which result in negligible costs of doing business. Hamilton and Shin (2015) and Sadiku et al. (2023) observed that the existence of this conducive market environment results from a calculated industrial policy designed to improve domestic employment rates, accelerate technology transfer and grow the local economy. The major practitioners of this policy are Bangladesh, the Philippines, India, Cambodia, Vietnam, Indonesia, and China (Fourie, 2021).

Lett and Banister (2009) conducted a comparative analysis on the ease of doing business between China and the USA. The conclusion of the study was that China enjoys an advantage in terms of labour cost coupled with scale, and this explains the offshoring of USA manufacturing jobs and work to China. China's average hourly remuneration is very small – *"a small fraction of that found in many of China's trade partners"* (Lett & Banister, 2009). In addition, China has very few labour disruptions, in contrast with the USA whose labour market has the presence of unions prone to organising industrial strikes (Mukherjee, Kumar, Pandey & Lahiri, 2023).

The other factor that has encouraged the proliferation of offshoring and outsourcing is the framework of post-Second World War international commerce (Ghemawat, 2017; Mukherjee et al., 2023). During the interwar years (1918-1939), international mercantilism and trade were subdued, and adversely affected by closed business systems, protectionism, and corporate nationalism. However, beginning with the creation of Bretton Woods institutions and the success of economic multilateralism, corporate strategies and industry policies underwent restructuring (Barattieri *et al*., 2018). Wiggins and Morello (2003) and Ghemawat (2017) noted that the profound change in business policy of the South saw industry and government policy suddenly open. The objective of this was to attract industrial investment from enterprises in developed economies – what they call 'nearshore and offshore sourcing'. This suggests that the offshoring of factories, jobs, and industrial capacities of advanced economies to the south resulted from profound changes in policy regarding the conduct of international commerce, and proactive sovereign and enterprise business policy in newly industrialising economies.

The discussion of onshoring and offshoring attests to the fact that in global commerce, *"deindustrialisation is primarily a natural outcome associated with the development of modern societies, and resulting from demand, supply and relative price effects"* (Boulhol & Fontagné, 2006). Due to President Trump's "America first" policy, and President Biden's manufacturing public policy the USA's offshoring and outsourcing policies appear destined to be replaced by an onshoring industrial regime (Qobo, 2021; Ghemawat, 2017; Budning et al., 2023).

### 3.3.2 Globalisation

Economic globalisation refers to the integration and convergence of international markets through the elimination of barriers to trade and the promotion of inclusive, worldwide commerce (Smith, 2018; Kortunov, 2023). The evolution of world mercantilism is based on the primacy of the market economy and a belief that the expansion of markets contributes to high incomes and improvements in living standards. Moreover, the advancement of the WTO trade system is the major component and foundation of globalisation (Deardorff & Stern, 2002; Fourie, 2021).

Since its ratification in 1995, the WTO endorses the reduction and elimination of trade tariffs and prohibits subsidy measures that distort trade and the use of non-tariff protectionism (Potipiti & Suwanprasert, 2022).

The letter of the Uruguay Round of Trade Agreements firmly based the international trade system on transparency, market access, and non-discrimination. Nonetheless, globalisation in practice has promoted deindustrialisation, particularly of developing nations, abetted by trade distorting measures of advanced economies (Ghemawat, 2017; Potipiti & Suwanprasert, 2022). Protectionist trade policies of developed economies have deindustrialised frontier markets through non-tariff barriers, pointedly through sanitary and phytosanitary measures amongst others. As a form of explanation, the EU's Common Agricultural Trade and various USA farm bills, including the current strategies are being used to sustain protectionism and distort global trade markets (Heyl, Ekardt, Sund & Roos, 2022; Ikerd, 2022). Thus, emerging and pre-emerging countries' policies to industrialise and gain market access in developed markets have been frustrated by imposition of non-tariff barriers based on sanitary and phytosanitary grounds.

Refusal of market access denies exporters from the South opportunities to invest in and improve their industrial value chain. It reduces avenues and impetus for exploiting comparative advantages (Heyl et al., 2022; Ikerd, 2022; Jouanjean, Maur & Shepherd, 2016). In addition to the use of non-tariff barriers, developed countries use disguised subsidies to support their industries resulting in the deindustrialisation of mostly developing economies, including South Africa (Fourie, 2021; Annan & Dryden, 2016). The European, American, and other governments in developed countries have subsidised their farmers which has distorted fair trade and affected manufacturing in developing economies negatively, nevertheless, the WTO has failed to resolve this matter.

The use of trade-distorting subsidies is expressly outlawed in the current trade system. With the introduction of the WTO in 1995, member countries agreed on a reduction of export subsidies by 36% in value and 21% in volume during the implementation period (Ghemawat, 2017). Further, they agreed on three classifications of subsidies. These were: 'prohibited' class (subsidies that promote domestic goods over imported goods); 'actionable' (subsidies that causes injury); and 'non-actionable' (subsidies used to support research and academic activities)

(Tokarick, 1996; Pieterse, Farole, Odendaal, Steenkamp, 2017). Notably, the trade framework did not specify which subsidies and support structures are countervailable, and this omission has emerged as a force for undermining the transparency ethos of the current WTO trade system (Ghemawat, 2017; Fourie, 2021).

Against this background, developed economies are persisting with prohibited subsidies in their production and export value chains (Heyl et al., 2022; Ikerd, 2022; Ghemawat, 2017). For example, during the pre-WTO commencement period (pre-1995), most countries used support measures. They included direct payments to producers and manufacturers, distributed countercyclical disbursements, provided export credit guarantees, lured investment through excessive tax exemptions, and offered marketing assistance and loan deficiency assistance (Ridley & Devados, 2012; Annan & Dryden, 2016). These measures were used to turn otherwise uncompetitive sectors into profit, create jobs at a local level, promote industrialisation, and stimulate the economy. They were, however, trade distorting in that they generally reduced prices, undercut competition, and used financial means to secure comparative advantage (Ghemawat, 2017).

In the post-1995 era of the WTO implementation policy regime, developed countries continued with their prohibited subsidies (Smith, 2018; Heyl et al., 2022; Ikerd, 2022). Although the WTO has clamped down on some of the most obvious support measures such as production and manufacturing subsidies, particularly in the logistics and transport sector, offending member countries continue to employ disguised support initiatives. For example, the agriculture sector uses crop insurance to support producers. Glauber (2016:6) notes that crop insurance is the leading method of routing financial aid to producers due to 'the potential exemption of such programs from reduction commitments under the Uruguay Round of Trade Agreement on Agriculture of the World Trade Organization'.

Analysis of the USA farm bill in this regard is instructive and demonstrates how benign support policy guidelines are being exploited. Glauber (2016) maintains that, although some countries have similar insurance / subsidy programmes, the USA has the biggest in the world, valued at US$9-billion per year in premiums. Insurance expenditure for farmers is subsidised by the government and covers revenue products (price and yield declines), area-based products, and margin products (margin profit insurance) (Ghemawat, 2017). The government reimburses insurance companies as a measure of promoting these supported products. The latest available data shows that 300 million acres of agricultural lands are insured, and the total liability is worth US$102-billion. Two thirds of liabilities are revenue products. The net effect is that the support system ensures that USA farmers are largely profitable, and the agriculture sector is globally competitive, especially for agriculture products from markets that do not receive subsidies (Fourie, 2021; Glauber, 2016).

Using the indicators of the WTO agriculture trade system, it becomes apparent that globalisation is not transparent, non-discriminatory, nor does it promote market access (to markets of developed economies) as pronounced (Kadian, 2023; Workman, 2018). Refusal to open markets reduces demand and prevents innovation in manufacturing. Globalisation is therefore somewhat shielding developed countries from trade competition (Kadian, 2023). Moreover, globalisation is destabilising manufacturing sectors of developing economies – (detailed below), especially as observed from the travails of the South African industrial market (Annan & Dryden, 2016).

Before 1994 South Africa invested in industrialisation of the local economy albeit with constraints and certainly not at the level of developed economies (Fine, 2018). South African economic history points to the role of the development finance institution the Industrial Development Corporation, the power utility Eskom, and strategic acumen of Hendrik van der Bergh in industrial policy (McDonald, 2009; Seekings & Nattrass, 2015). However, in earlier times, industrialisation was mostly confined to white, urban areas, in line with the colour bar legislation (Ismail, Mabuza, Pillay, Xolo, 2014). With time, industrial policy was reformed to promote industrial investment and economic development also 'amongst Bantu persons in the Bantu areas' through the adoption of the Bantu Investment Corporation Act of 1959.

As a result of this legislation a number of precincts in black peri-urban areas were identified for industrial development (Fourie, 2021; Mills & Herbst, 2014). For example, in the former homeland of Venda, Shayandima became an industrial zone; in Lebowa, the Seshego, and Lebowagomo locations housed industrial complexes that manufactured furniture, shoes, and traditional beer. In Brits, Babelegi was developed as an industrial zone. Industrialisation in these locations benefited from government loans on concessional rates from the government-owned Bantu Investment Corporation Limited, later renamed the Corporation for Economic development

(Adendorff, 1971; Roberts, 2004). Furthermore, investors benefited from preferential tax, corporate tax rates, and less onerous labour costs (Crush, 1995).

When South Africa's trade policy embraced globalisation in 1995 with accession to the WTO, these industrial zones contracted. Kerby (2016) observed that these industrial firms collapsed due to evaporation of industrial support from the South African government and simultaneously by an increase of imported goods from mainly developed nations and China. Imports from China, EU, and the USA enjoyed credit support and import restraints on non-tariff barriers (Fourie, 2021; Mills & Herbst, 2014).

Owing to globalisation, the once vibrant Shayandima industrial zone is derelict, resulting in employee retrenchments. Mokgawa (2010) noted that Seshego had fourteen factories, employing 1355 human resources but, owing to globalisation, their operations ceased, and all workers were retrenched. Mills and Herbst (2012) recounted a deindustrialisation case that unfolded in a South African town of Alice, Eastern Cape. Dimbaza was established during the days of apartheid under an industrial development plan called the 'border industry scheme'. This scheme was characterised by significant levels of government subsidies that at one point were 'peaking at more than 50% of wages per worker' (Mills & Herbst, 2014:55).

With the entrenchment of trade multilateralism and ratification of the WTO and the attendant trade globalisation, changes in domestic trade policy led to the subsidies being discontinued for all the factories in the area, and the 'border industry scheme' being restructured. As a result, 'the industrial park wilted and quickly died', and the last factory closed shop in 2011, retrenching the remaining 314 labour force (Mills & Herbst, 2014:55).

Thus, industrial policy in South Africa was greatly undermined by government strategy which evinced an enthusiastic adoption of multilateral trade policy and aggressive globalisation (Tregenna, 2008). Mills and Herbst (2014) contend that the contribution of manufacturing to the South African GDP reduced by more than 6% in the 2000s as a result of the reforms in international trade structure of the early 1990s. During the same period, manufacturing contributed 30% to Malaysian GDP, 20% to Indonesian overall economy, 30% to the Philippines GDP, whilst in South Africa it shrank by 15% (Dagada, 2021).

The shrinking of South Africa's manufacturing sector because of globalisation has ramifications throughout the country. These include the loss of the 120 factories in

Dimbaza (Mills & Herbst, 2014), the collapse of the 14 factories in Seshego (Mokgawa, 2010), and countless other factories in Shayandima and Babelegi industrial parks, amongst others. Benefits of globalisation may be true, but Ghemawat (2017) argues that 'the myth of a borderless world' came crashing down when British citizens voted in June 2016 for pulling out (Brexit) of the most advanced economic block – the EU – and due to the hostile attitude of President Trump towards world trade and globalisation. Another interesting observation is that the two leading proponents of open markets, the UK, and USA have become the greatest adversaries of globalisation, while China has become its staunchest defender (Qobo, 2021; Weaver, Moyle, & McLennan, 2023). The attitude of both the UK and USA is an indication that the world has acknowledged some weaknesses of globalisation and the effects of neglecting localisation.

### 3.3.3 Visa Regimes and Closure of Borders

There is a correlation between restrictions in movements of human beings and tradable goods and acceleration of deindustrialisation – particularly in Africa (Fourie et al., 2020). This is because trade is retarded by keeping markets small and geographic borders sealed and inaccessible. Human movements are also curtailed using the visa regime, where arrivals of foreign nationals are granted entry subject to payment of an entrance tax (Barattieri, et al. 2018; Fourie, 2021). In some instances, visa requirements are so onerous that they prevent entry without an option of a waiver.

The reasons why these visa taxes and restrictions are imposed are numerous. Some countries impose a visa regimen as a reciprocal measure and argue that they are merely following suit – especially since developed countries are doing it (Moze & Spiegel, 2022; Squire, 2016; Mahajan, 2009). Mills and Herbst (2014) note that some countries impose a visa regime to promote security, and enforce work permits as a protective measure to safeguard jobs for the local population. Others use the visa regime as a security layer, preventing access for persons with criminal records, while simultaneously using it as a capital-raising and revenue-generation policy (Kalemba, 2022; Umana-Dajud, 2019; Fourie, Rossello-Nadal & Santana-Gallego, 2020).

All African countries have a visa regime – and seen through the perspective of deindustrialisation, these visa regimes are bringing about severe restrictions in their economies (Mills, 2010; Fourie, 2021). These take many forms, but the most debilitating are visa requirements and tariffs, both of which contribute to the limited intra-African trade – abetted by small markets (Kalemba, 2022; Umana-Dajud, 2019). Regarding the latter, most African countries, with exception of the DRC (95,89-million people), Nigeria (213.4-million), Ethiopia (120.3-million), and Egypt (109.3-million) have small populations. For example, Lesotho (2.281-million people), Eswatini (1.192-million), and Botswana (2.588-million) have limited populations, and are therefore small markets. However, if these countries were to remove access impediments, the African market would be bigger and more lucrative, being populated by about 1.4-billion people (Fourie, 2021; Fourie et al., 2020; Haini, Loon, Yong & Husseini, 2023).

Size matters in the market economy, and small populations have a negative impact on demand because industrial productivity in such countries is discouraged by limited demand (Mahajan, 2009; Fourie et al., 2020). In contrast, countries with visa-free borders and free movement of people and goods promote industrial productivity due to the availability of larger markets, and low prices for goods due to the absence of import duties and taxes (Umana-Dajud, 2019; Haini et al., 2023). Therefore, a visa requirement promotes deindustrialisation in Africa in that it restricts the market for tradable goods, and generally limits demand (Mills & Herbst, 2014; Fourie et al., 2020).

Notwithstanding the popularity of visas in developing nations in Africa, some nations sustain a visa-free regime (Fourie et al., 2020; Mills & Herbst, 2014). The main reason for this is that the national economy benefits from the ease of in-bound international travel. International tourists from high income economies bring with them hard currencies which aid the current account. Moreover, impediment-free international travel promotes inward foreign direct investments, and further promotes conditions for the diffusion of expertise and skills (Green, 2015; Diamandis, & Kotler, 2020).

Mills and Herbst (2014) recount that the sovereign state of Georgia, with a total population of just 4.5-million people, adopted a visa-free travel regime which brought immediate economic benefits in the tourism sector. In 2004 (before the introduction of a visa ejection policy) Georgia received 300 000 tourists, while after the visa policy changes, more than 3-million tourists visited Georgia per year, with total tourist-linked cash receipts of up to US$1 billion. Compared with South Africa that receives around 10-million tourists a year, on a per capita basis, Georgia's tourists total three times as many (Ghvanidze, Bitsch, Elze, Hanf & Kang, 2022).

### 3.3.4 Problems with South Africa's Economic Development Public Policies

Since 1994, South Africa has introduced four major economic development policies, namely the Reconstruction and Development Programme; the Growth, Employment, and Redistribution Strategy; the Accelerated and Shared Growth Initiative for South Africa; the New Growth Path; National Development Plan; and lastly the Industrial Policy Action Plan. The provisions anchored in the said development policy regimes are briefly described below.

#### 3.3.4.1 Reconstruction and Development Programme (RDP)

The RDP was a socio-economic public policy framework negotiated by the ANC and its partners the SACP, COSATU, National Civil Organisation and other civil society organisations). This began in January 1994 in preparation for the new democratically elected government (Cameron, 1996). After the assumption of power in 1994, the RDP became government public policy with extremely wide objectives in relation to political cohesion, cultural matters, housing, human capital development, energy, and transport, amongst others. In essence, the RDP was not an exclusively economic policy but had a wider purview. According to its document: 'It seeks to mobilise all our people and our country's resources toward the final eradication of apartheid and the building of a democratic, non-racial and non-sexist future' (RDP policy document, 1994:3). In the end, policy objectives became a mix of meeting basic socio-economic needs; promoting human capital development; and entrenching democracy.

The RDP oversaw many developments in dealing with the country's socio-economic problems such as – housing, clean water, electrification, land reform, healthcare, and public works (Johnson, 2019; Blumenfeld, 1997; Corder, 1997). Many of the houses that the government continues to build for the poor are still called RDP houses. The government also builds subsidised rental housing for low-and-medium-income groups. These houses are also colloquially referred to as RDP houses.

However, a major weakness of the RDP was that it was a large, convoluted wish list without any financial plan. It did not clearly articulate which ministries would be responsible for various objectives and how overlaps would be managed (Johnson, 2019). After only two years, the whole plan was discontinued and was immediately replaced by the Growth, Employment, and Redistribution policy. This policy was the direct opposite of the RDP. While the RDP agitated for a Keynesian public spending bonanza, the new policy advocated for high public sector investment, prudent management of the fiscus, and privatisation of some state-owned entities

#### 3.3.4.2 Growth, Employment and Redistribution Strategy (GEAR)

In 2000 the RDP was replaced by the GEAR policy, located in the ministry of finance. Unlike the RDP, GEAR was mostly about economic development, and its objectives were a competitive and fast-growing economy, increasing employment rates, and social security in the form of quality health care and investment in education (Gelb, 2007). The strategy called for the attainment of 6% economic growth per annum and creation of 400 000 jobs annually. Furthermore, GEAR called for private sector capital formation, increase in public sector investment, and an infrastructural development strategy using labour intensive techniques.

GEAR saw the economy growing to an annualised rate of 5% and large tax reductions during the second term of President Thabo Mbeki's administration (2004 to 2008); nevertheless, few aspects of the other policy instruments were implemented (Breakfast & Phango, 2019). During the period of Mbeki's administration and GEAR's implementation, the economies of provinces such as Gauteng and the Western Cape grew at an annualised rate of about 7% while the economy of the City of Johannesburg grew by 9% (Dagada, 2021).

From 2000 to 2008, unemployment averaged 25.57%. It reached an all-time high of 31.20% during the first quarter of 2003 and a record low of 21.50% during the first quarter of 2008 (Buthelezi, 2023). In 1994, the ANC government had inherited an unemployment rate of 29.89% from the apartheid government. The initial good economic performance should largely be attributed to global factors, but also to GEAR and the management of the economy by three conservative public officials who were informally referred to as "Three Ms" – Mbeki (President); Manuel, Trevor (Minister of Finance), and Mboweni, Tito (Governor of the Reserve Bank) (Gevisser, 2022). Johnson (2019) describes GEAR as the first ANC proper economic policy. Although this policy did not meet all its objectives, it succeeded in keeping the country away from an IMF bail-out.

When Mbeki resigned as the President of the Republic in 2008, the South African debt to GDP ratio was at its lowest – 27.80%. However, once President Jacob Zuma took over, GEAR was shelved and the ratio rapidly increased (Calland & Sithole, 2022). Even when one considers the fact that the global recession began in 2008, the South African financial institutions were not affected. Thus, the drastic escalation of debt to GDP ratio should not be attributed solely to the financial crisis, but to poor governance of the country (Fourie, 2021; Johnson, 2019).

While the ANC and its tripartite alliance partners, the SACP and COSATU, fully supported the RDP due to its socialist orientation, they vehemently opposed GEAR because of its free market biasness (Gevisser, 2022). The unpopularity of this well-crafted economic policy discouraged all Mbeki's presidential successors from embarking on a similar strategy.

#### 3.3.4.3 Accelerated and Shared Growth Initiative for South Africa (ASGISA)

The ASGISA was introduced to the South African body *politik* in 2004, effectively as an economic policy to compliment GEAR (Gelb, 2007). The objective of the policy was to significantly reduce unemployment by 50% by 2014 and promote economic growth. The policy was strongly influenced by the preceding economic reality, in particular the growth rate averaging between 3% and 5% in the decade after democracy.

However, several constraints were apparent which included high currency volatility, a poor national logistics system, and limited competition in the market structure of the economy (Ngandu, 2021). In view of these constraints, the ASGISA policy sought to grow the economy by increasing public sector investment and increasing infrastructure expenditure. Of note, ASGISA conceded that government did not have a substantial industrial policy and that 'a broader national industrial policy framework is in the final stages of preparation'.

As in the case of GEAR, SACP and COSATU did not support ASGISA (Gevisser, 2022). They described these two public policies as neoliberal, pro-capitalist, and a betrayal of the poor and the working class.

#### 3.3.4.4 New Growth Path (NGP)

The ANC's faction of leftist radicals, COSATU, and SACP successfully rallied behind the choice of Jacob Zuma as the ANC president. When he became the head of state in May 2009, President Zuma did much to appease the left. As part of this, he appointed a former unionist, Ebrahim Patel to the newly created ministry of economic development (Shai, 2019). Patel launched the NGP, in December 2010 with its major objective being to create five million jobs by 2020 and reduce unemployment to 15%; unfortunately, unemployment went up to 27.2% by 2018 (Seekings & Nattrass, 2015). The number of unemployed increased by 103 000 to 6.08-million, while the number of those employed decreased by 90 000 to 16.29-million during the second quarter of 2018 (Buthelezi, 2023).

All the aforementioned numbers do not include people who had given up looking for employment; if we include these and use the expanded definition of unemployment, the number of unemployed would be 37.2% in 2018. The NGP had envisaged that jobs would be created through six priorities: infrastructure development, agriculture, mining, manufacturing, green economy, and tourism. From the above-stated numbers, it is very clear that the NGP failed dismally to achieve what was intended (Ngandu, 2021).

#### 3.3.4.5 National Development Plan (NDP)

This is the latest major South African national economy development policy. The NDP was concluded on 11 November 2011, and launched in August 2012, and seeks to influence the national economic development trajectory until 2030. The main objective of the policy is to increase economic growth to at least 5% per annum, reduce unemployment, and eradicate poverty and inequality (Ngandu, 2021). Government aims to suffuse the NDP to all spheres and tiers of government and ensure that fiscal planning mirrors NDP priorities. As a result, the NDP finds expression in five-year plans, namely the Medium-Term Strategic Framework.

Several commitments characterise the NDP. First, an increase in infrastructure expenditure is proposed to stimulate the economy and create conditions conducive for growth. Second, promotion of education investment and access as well as high employment rates, especially for the youth. The NDP has a manifest international agenda through advocating regional integration and international trade to bolster the current account. Lastly, the NDP is anchored in an anti-trust market structure competition aimed at preventing monopolies and defusing the potential for unchecked inflation and artificial barriers to the market.

The problem with the NDP was that it was a large uncosted wish list which was not accompanied by any financial plan. While this policy was preceded by a thorough diagnostic analysis and well written – President Zuma and his administration never took it seriously. This how Johnson (2019:181) captures the sentiment: *'When the NDP was debated in parliament, the COPE leader, Mosiuoa Lekota, asked who exactly would be responsible for the plan's implementation. There was hearty laughter on all sides, the ANC included, for everyone knew from the first that the NDP was not to be taken seriously. It wasn't'.* That is the major weakness of the ANC government, even in instances where they produce a well-crafted public policy, they usually get it terribly wrong when it comes to its implementation.

Although under both Zuma and Ramaphosa's administrations there have been ministries responsible for planning, monitoring and evaluation, we have never really seen tangible work from these ministries (Armstrong & Lee, 2023a). A key objective of the NDP was to strengthen state-owned entities like Eskom and Transnet but unfortunately, exactly the opposite happened. Fourie (2021:219) explains: *'It also became increasingly clear that the action plans drawn by government – notably the ambitious and admirable NDP, which was aimed to eliminate poverty and reduce inequality by 2030 - were paid little more than lip service'.* Another major tenet of the NDP was to create millions of jobs by revitalising agriculture and promoting massive reindustrialisation. The government failed to execute this because agricultural sectors continued to shed jobs, while the economy was deindustrialising.

#### 3.3.4.6 Industrial Policy Action Plan (IPAP)

Post the1994 new democratic dispensation in South Africa, there has been some work towards sector-focused policies which were biased towards improving manufacturing output (Andreoni & Tregenna, 2020). GEAR paid more attention to the supply-side interventions but noted 'twelve industrial priority industry investigations' illustrating future industry targeting (Masondo, 2018). ASGISA took this forward by particularly mentioning three priority industries: business process outsourcing, tourism, and biofuels (Chitaka, Von Blottnitz & Cohen, 2018). It should be noted that these sub-sectors were largely in the services sector instead of manufacturing. To address this sector-focused manufacturing, the Department of Trade and Industry, introduced the National Industrial Policy Framework (NIPF) in 2007. After several iterations, the NIPF became an Industrial Policy Action Plan (IPAP) (Drew, 2019;

Kaplan, 2019). The IPAP largely focused on government's subsidising of the local automotive industry.

Historically, South Africa has been a leader in the African continent with regard to its automotive industry manufacturing subsector (Wuttke, 2023; Markowitz & Black, 2019; Kaplan, 2019). By 2022 the country was producing more than half a million vehicles of various types on an annual basis. Although South Africa produces its own domestic brands when it comes to trucks and military vehicles, the rest of its automotive products are licensed by foreign brands (Monaco & Wuttke, 2023). These include six major manufacturers: Volkswagen, Toyota, Nissan, BMW, Mercedes-Benz, and Ford. General Motors has decided to stop building and servicing vehicles in South Africa (Tolmay, 2017; Wuttke & Whitfield, 2022).

The local automotive industry is comprised of two major segments – manufacturing of passenger vehicles (light commercial vehicles), manufacturing commercial vehicles (MCVs), and components), and trade (automotive retail and aftermarket wholesale) (Wuttke & Whitfield, 2022). There are nine MCVs, heavy commercial vehicles, and bus assemblers in South Africa and 500 automotive component suppliers. According to the CEIC data, 555 889 vehicles were produced in South Africa in 2022 – 66.9% of which were exported while the remaining 33% were sold in the domestic market.

The biggest stimulus to this thriving industry has been programmes sponsored by government policy. These policy instruments include: the Motor Industry Development Plan (1995-2012), Automotive Production and Development Programme (2013-2020), and the South African Automotive Master Plan (SAAM) (2021-2035). SAAM was aligned to the National Industrial Policy Framework, and IPAP (Tolmay, 2017).

The automotive industry manufacturing subsector has had a positive impact on the local GDP. By the end of 2021, its direct input to the GDP was R207-billion (4.3%), and its contribution to the value-addition of the country's manufacturing sector was 18.7% (Armstrong & Lee, 2023a). The automotive industry impacts the overall economy both upstream and downstream. For instance, it contributes significantly to South African manufacturing sales, including exports to 154 international markets (Monaco & Wuttke, 2023). This is important when one considers the fact that South Africa has been deindustrialising and negatively affecting the composition of its labour force (Masondo, 2018; Kaplan, 2019).

With regard to job creation, the automotive industry directly employed 110 000 workers and indirectly 1,5-million workers across the value chain by the end of 2021 (Armstrong & Lee, 2023a). Prior to the outbreak of COVID-19, this sector employed 468 502 people. This constituted 2.9% of all formal and 4.7% of the total employment in the country. For every employment opportunity made in the automotive industry manufacturing subsector, 8.4 jobs are created in the overall economy. Be that as it may, this has led to unintended consequences – the subsector has contributed negatively to South Africa's trade balance deficit (Davies & Coetzee, 2018). This should be attributed to the fact that most components that are used to assemble motor vehicles locally are imported from original equipment manufacturers based overseas (Wuttke & Whitfield, 2022).

#### 3.3.4.7 Economic policy weaknesses regarding industrialisation

All these policies lacked a clear industrialisation strategy. Only the RDP yielded massive social security to the underprivileged (social grants, free access to public health, and social housing). GEAR saw the economy growing to the annualised rate of 5% and large tax reductions during the second term of President Mbeki's administration (2004 to 2008). Apart from these, few aspects of the other policy instruments were implemented (Seekings & Nattrass, 2015). During the period of Mbeki's administration and GEAR's implementation, the economies of provinces such as Gauteng and Western Cape were growing at an annualised rate of about 7% while the economy of Johannesburg was growing by 9% (Dagada, 2021).

Even the RDP and GEAR were not fully implemented, and South Africa has flip-flopped from one economic public policy to another, leading to a lot of policy uncertainty (Johnson, 2021). Extensive efforts and consultations were done to produce the NDP. However, President Zuma's administration did not appear to be interested in implementing its recommendations that would grow the economy in general and specifically re-industrialise the manufacturing sector (Ngandu, 2021).

During the discourse and implementation of the RDP in 1994, there was a complete absence of any reference to a much-needed national economic policy directive (Fine, 2018). In major part, this was because the RDP was not strictly an economic policy, but was mostly a socio-economic and political framework to guide the ruling alliance. When GEAR was first announced, the manufacturing sector-related policy was not even ready for publication, and subsequent public policy pronouncements on this matter lacked rigour and ambition (Tregenna, 2008). This was true especially when compared with re-industrialisation public policies of the Asian Tigers (Fourie, 2021). Analysis of the reindustrialisation literature amongst the Asian Tigers shows that industrial policy was well thought out and executed. The result was the emergence of *chaebols* (large business conglomerates) and national industrial champions such as Samsung, LG, Panasonic, Hyundai, and Huawei, just to mention a few (Chu, 2016).

Moreover, South African economic policy lacks central coordination and a clear executive location for administrative and implementation purposes (Ndletyana, 2020). Granted, minister without portfolio Jay Naidoo was often bandied about as being responsible for the RDP, but this was not actually the case. This paralysed public policy implementation as well as monitoring and evaluation. Subsequently, GEAR was located in the office of the president, but bickering within the ruling alliance and attempts to delegitimise it by mostly the left-wing groups and trade unions weakened the policy (Johnson, 2019). In contrast, Japan's industrial and economic development has been consistently located within the ministry of international trade and investment. This has ensured policy consistency, hence the industrial excellence that has fortified and grown the Japanese economy since World War II (Johnson, 1982).

Moreover, fragmented ministerial policy management was linked to unclear policy location. During Zuma's presidency, South Africa had four executive loci where economic public policy was expressed – often in conflict with each other. These were the Presidency, the National Treasury, and the Departments of Trade and Industry and Economic Development (Seekings & Nattrass, 2015). This arrangement led to policy confusion, paralysis and divergence. Although the structuring of the current NDP streamlines policy, executive structuring still encourages policy inconsistencies, hence poor implementation abounds (Ndletyana, 2020).

According to Luiz (2016:52): *'countries which have successfully transitioned out of middle-income status are those which had more diversified, sophisticated export baskets which allowed them to leap to higher levels'.* Regrettably for South Africa, its export basket has particularly diminished for manufacturing products. Poor public policy formulation and implementation has left South Africa with an eroded capacity for manufacturing. The countries' economy has depended mainly on the services and primary sector (agriculture and minerals) exports for growth, but exports of manufacturing products has been weakening (Luiz, 2016; Dagada, 2021). The inability of South African economic policy leadership to arrest the decline in industrial performance has entrenched deindustrialisation in the country, hence diminishing performance in the manufacturing export sector. All these aforesaid weaknesses have resulted in dire socio-economic consequences detailed below (Andreoni & Tregenna, 2020).

Another deindustrialising factor arising from poor economic planning in South Africa is poor infrastructure (Mazele & Amoah, 2022). Workman (2023) delineated South African exports according to markets, noting that, of the total US$123.4-billion value in South African exports in 2022, 33.6% was destined to various Asian markets, including China; 25.7% to fellow African countries; 29.5% to the Eurozone and 10.1% to North America. The dispersion of these trading partners is exposing the infrastructure weaknesses that have not been successfully addressed by the post-democracy economic policies (Mazele & Amoah, 2022). Infrastructure impediments are numerous, and include the fact that access to the freight rail network is constrained. Ports' charges are exorbitant when compared with international standards, and ports are congested due to poor infrastructure development and maintenance (Pieterse et al., 2017). Lastly, regional trade flows of goods are constrained by poor regional rail intermodal facilities.

Lastly, the South African economic policy framework has not been able to unlock inward foreign direct investment (Chih, Kishan & Ojede, 2022). Many reasons are cited in this chapter, prominent of which are labour bargaining policy, recession of skilled workers, and poor productivity levels. Regarding the latter, the 2022 World Economic Forum's Competitiveness Index ranked South Africa 60$^{th}$ out of 137 global economies, and this attests to labour sector productivity weaknesses. The conclusion is that several public policy weaknesses and structural factors have contributed to the entrenchment of deindustrialisation both in global markets and in the domestic market. The socio-economic consequences of the evaporation of the manufacturing sector have been devastating.

The IPAP has been very ambitious, cumbersome, and difficult to implement (Kaplan, 2019; Chitaka et al., 2018). For example, the latest version of the IPAP focuses on 13 sectoral areas with several interventions under each. Additionally, there are eight transversal focus areas. The IPAP was also criticised in the paper released on 27 August 2019 by the Minister of Finance, Tito Mboweni, titled: Economic Transformation, Inclusive Growth, And Competitiveness: Towards an Economic Strategy for South Africa. This paper was critical of the IPAP, particularly its several sectorial areas, numerous interventions, and many transversal focus areas that make it burdensome and difficult to implement meaningfully. Mboweni wrote: *'This is likely to limit the impact of the respective interventions because there are limited resources … and additional sectors strain these resources further'*. With its executive sponsor, the Minister of Trade and Industry, Rob Davies out of government, the National Treasury's criticism spelled a death knell to the IPAP. However, there is a commitment from the National Treasury specifically and Ramaphosa's administration broadly to retain IPAP's flagship – the South African automotive industry in spite of all its imperfections (Drew, 2019; Andreoni & Tregenna, 2020).

### 3.3.5 Uneven Geographical Development

This concept deals with the enormous concentrations of productive resources in certain continents, regions, countries, cities, and new developmental nodes in contrast to relatively empty and / or underdeveloped physical spaces (Yeung, 2019). Some of these geographical areas were previously occupied by farms, mines, and factories. However, due to transformation of the economy, some sectors and geographical spaces may remain neglected and consequently underdeveloped. Das (2017) has observed that tight concentration of commercial activities in one place has contributed to deindustrialisation. This adds up to a phenomenon referred to as uneven geographical development (Bond & Desai, 2006).

Harvey (2017) argues that this phenomenon reflects a major weakness of capitalism. Of course, it would be wrong to confine uneven geographical development to the capitalist system only (Das, 2017). Even socialist economies like that of China, the erstwhile Union of Soviet Socialist Republics (USSR) and East Germany experienced uneven development – for example, agriculture and manufacturing were underdeveloped in some of their regions.

With regard to manufacturing, heavy industries tend to be geographically based in territories where production powers are highly concentrated, and this leads to uneven development between highly urbanised and rural areas (Gong & Hassink, 2020). This proves that geography plays a prominent role in both deindustrialisation and reindustrialisation. Bond and Desai (2006) noted that production has caused geographical transformation across the face of the earth. Vast concentrations of productive resources have joined forces in metropolitan areas and certain commercial capital cities at the expense of some industrial hubs (Alami & Dixon, 2023). The movement of transport systems, communications infrastructure, residential areas, shopping centres, and parks to any continents, countries, metropolis and economic zones has led to deindustrialisation of some economies. This shows that physical geographical development has progressed unevenly.

It has been stated in various sections of this thesis that the USA and some European countries have moved their industrial production to countries in South America and East Asia. African countries in general and South Africa have not meaningfully benefited from this phenomenon (Bond & Ruiters, 2017). Apart from the uncertainty of the country's economic public policy, industrial powers are hesitant to move their manufacturing productions to South Africa due to its geographical location (Bond & Desai, 2006). South Africa is far from Europe and North America, and this has contributed to its deindustrialisation, moreover, poor seaport infrastructure for exporting manufactured goods and importing capital goods has exacerbated this problem. South African policy formulators should therefore recognise that geographical space and production activities are inseparable (Bond & Ruiters, 2017). Of course, proper formulation of economic public policy can go a long way towards mitigating the negative effects of the distant South African geographical location. Through public policy, resources can be channelled to infrastructure development and incentives such as tax rebates. These would attract foreign direct investment in the manufacturing sector (Armstrong & Lee, 2023b). In other words, geographical space, public policy, and production of manufactured goods are interdependent.

### 3.3.6 Overproduction of Manufactured Goods

According to Bond (1998), this refers to instances where firms have invested excessively in production to an extent that there is an oversupply of manufactured goods. Other terms that are used to describe this phenomenon are overcapacity and overaccumulation (Bond, 2018a). For the purpose of this study the researcher uses the term overproduction. Manufactured goods may not be taken to the market due to overproduction, as espoused in the economics theory of supply and demand (Bond,1998).

Bond (1998:12) lists the symptoms of overproduction as ‘unused plant and equipment; large gluts of unsold commodities; an unusually large number of unemployed workers; and inordinate rise of financial markets’. When the manufacturing sector reaches a crucial juncture of overproduction, it becomes almost unbearable for the capital and production resources to meet social needs and to sustain the manufacturing firm (Lee & Armstrong, 2022).

There is also a correlation between overproduction and uneven geographical development. Bond (1998) observes that, when overproduction becomes prevalent, excessive forms of devaluation are avoided in the commercial area under pressure. The overproduced manufactured goods are shipped to other districts, cities, economic zones, countries, and continents (Armstrong & Lee, 2023b). However, this does not always resolve the problem (Bond & Ruiters, 2017). This should be attributed to the fact that the world is oversupplied with certain manufactured goods, for example, steel-related products. If overproduction persists, the oversupplying firms may flounder and cease to exist.

In the 1970s and 1980s, British steel manufacturing firms were bloated, without buyers and had become inefficient and lossmaking (Lacerda, Xambre & Alvelos, 2015). This led to the deindustrialisation of British steel plants, which led to concern by the Thatcher administration because it had to supervise the dismantling of large plants. Due to South Africa’s small domestic market, the local steel industry has also been deindustrialising and shedding jobs (Seekings & Nattrass, 2015). Matters came to a climax in 2015 when there was a possible closure of Arcelor, the biggest South African steel firm. Amongst other things, this could be attributed to the imports of Chinese cheaper steel products, but also the failure of economic public policy to protect local production. The South African government has been forcing local steel makers to reduce their prices and offer “developmental” prices when they sell in the domestic market. While policymakers demanded “developmental” prices, they did not appreciate the cost of production and labour costs that were increasing annually (Fine, 2018).

Although China is not deindustrialising, a crash appears imminent, given its massive industrial overcapacity amid the generalised world of overproduction of manufactured goods (Lee & Armstrong, 2022). Despite all these issues, China still intends to build an integrated steel plant in Limpopo, South Africa which will enable them to reduce their pollution back at home (Bruce, 2018b; Sguazzin, 2022). According to Bruce (2018a), before the envisaged plant becomes a white elephant, it would speed-up the deindustrialisation of South African steelmakers and eventually destroy them. It should also be born in mind that at any given time, there are about 100 million tonnes (MT) of steel products floating on high seas searching for buyers and there is currently a glut of overproduced steel products globally. In South Africa, ArcelorMittal already produces 58 million MT of steel yearly and they struggle to get buyers.

Bond (1998), and Bond and Ruiters (2017) declare that when overproduction and its effects become widespread, there may be capital flight which unintentionally promotes an uneven geographical phenomenon. Once financiers detect structural bottlenecks and plunging profits, they may move their investible funds out of the struggling manufacturing firms and look for refuge in other high growth sectors, metropolis, regions, countries, and continents.

### 3.3.7 Climate Change Regulations

Climate change is a phenomenon which describes momentous long-term changes to the global climate which could lead to new weather patterns which may last for decades or millions of years (Lechtenbohmer, Scheider & Roche, 2015). Authors refer to this occurrence as global warming. Due to this phenomenon, the average temperatures of the planet earth's atmosphere have increased slowly (Hao, Herrera-Avellanosa, Pero & Troi, 2020). The main causes of climate change are human activities which have increased the quantity of global greenhouse gas emissions produced by the burning of fossil fuels. The increased use of fossil fuels has accelerated global warming (Supran, Rahmstorf & Oreskes, 2023).

Due to climate change, the earth's average temperature has increased by around two degrees. This may sound like a trivial amount but is an unusual occurrence in the earth's recorded history (Lechtenbohmer et al., 2015). By the end of the last ice age, the north-east of the USA was covered by 3000 feet of ice; this ended due to the increase in global temperatures. In effect, during that era, temperatures were about nine degrees cooler (Huang, Yu, Guan, Wang & Guo, 2016). More recently, the effects of global warming have intensified. These include the earlier breaking up of ice on lakes and rivers, trees are flowering sooner, and glaciers have shrunk. Plant and animal ranges have shifted, there is increasing loss of sea ice, longer, rapid sea level rise, and severe heat waves with continuing rise of global temperatures (Alimonti, Mariani, Prodi, & Ricci, 2022).

There have been continuous debates amongst scientists regarding various aspects of climate change (Tol, 2018; Alimonti et al., 2022). Be that as it may be, there has been sufficient consensus among sovereign states that something should be done to mitigate global warming. It is on this premise that the Paris Agreement, also known as the Paris Accord, was conceived. The major tenet of this treaty was to keep global warming below two degrees increase by the end of the 21st century. Efforts were to be implemented to reduce the temperature rise to 1.5 degrees as recommended by the Intergovernmental Panel on Climate Change.

The Paris Agreement was adopted by 195 countries at the end of the UN Climate Change Conference. It was the first global and legally binding accord on climate change, and it became effective on 4 November 2016 (Tol, 2018). The Paris Agreement includes the reduction of greenhouse gas emissions by employing affordable and clean energy in the provision of water and sanitation, manufacturing, infrastructure rollout, construction of sustainable cities and communities, and responsible production and consumption.

However, climate change considerations would possibly slow down manufacturing as part of reducing greenhouse gas emissions (Tol, 2018; Alimonti et al., 2022). Furthermore, some manufacturing firms that are heavily reliant on fossil fuel for their production may permanently close their operations. Many financiers worldwide have stopped providing funding for coal-fired power plants. In South Africa, major banks like FirstRand, and Nedbank have stopped funding coal related projects and coal-fired power stations due to environmental and social concerns (Paton, 2019). Due to potential electricity shortages, investment in industrialisation programmes may slow down during the initial stages of the implementation of the Paris Agreement (Leonard, 2014). Locally, the situation would be exacerbated by the promulgation of the Carbon Tax Act of 2019.

## 3.4 SOCIO-ECONOMIC CONSEQUENCES OF DEINDUSTRIALISATION

Deindustrialisation is primarily the decline in manufacturing jobs when industrial centres such as factories become unproductive, unprofitable, and collapse. Literature shows that the socio-economic consequences of deindustrialisation are numerous, and include a rise in unemployment, reduction in economic competitiveness, social ills, and economic recession.

### 3.4.1 Job Losses

A number of studies on the relationship between deindustrialisation and its consequences demonstrate that weak output in manufacturing leads to structural changes of the labour market (Magidi, 2023). Ferrie (2001) studied the socioeconomic consequences of deindustrialisation in the UK, especially in the 1970s with the advent of deepening domestic competition, deregulation of domestic markets, and entrenchment of global protectionism. Moreover, Doussard, Peck and Theodore (2009) analysed the consequences of deindustrialisation in the USA 'rust belt'. The major conclusion of these studies insofar as the labour market is concerned is that deindustrialisation leads to closure of factories, ghost towns, and transformation of the local economy and the profile of the labour market. These findings were recently supported by Sinnett and Norman (2023). Mills et al., (2017) who observed that, as factories close, they are replaced by service firms which are remarkably different from the old economy, and as such require new skill sets. This crowding out of manufacturing firms leads to massive retrenchments as industrial companies source input material from manufacturing centres offshore. In the USA, job losses in the manufacturing sector were most widespread in the early 1980s and early 1990s, with the latter period seeing 45% of all jobs lost being from manufacturing (Seekings & Nattrass, 2015). There were also more substantial losses of manufacturing jobs in the UK during the 1980s and 1990s (Sinnett & Norman, 2023).

It has already been mentioned in the preceding sections that President Trump and his successor, President Biden pursued a reindustrialisation public policy for the American economy by charging exorbitant foreign exchange tariffs for manufactured goods. This inevitably led to deindustrialisation in some Asian and South American countries (Smith, 2024; Ghemawat, 2017). South Africa's automotive industry nearly became one of the biggest losers due to Trump's USA reindustrialisation public policy.

This almost led to the end of locally manufactured motor vehicles, tractors, bicycles, and parts and accessories of vehicles to the USA. Unfortunately, South African public policymakers did not seem to comprehend the potential impact of Trump's "American First" policy and thus all they did was to dismiss and ridicule this.

South Africa can take the likes of President Trump for granted at its own peril – 'America First' policy is not a laughing matter; it has a large potential socio-economic impact for South Africa. The same applied to South Africa's perceived alignment to Russia during its war with Ukraine. The were concerns in international diplomatic circles that South Africa could be expelled from the African Growth and Opportunity Act (AGOA) because of its perceived alignment to Russia (Wilson, 2023). AGOA enables a number of South African products to get a tariff-free access to the highly lucrative USA market (April, 2024).

### 3.4.2 Social Impact

The consequences of deindustrialisation also include socials ills in relation to the loss of jobs and consequent health challenges amongst the genders (Seekings & Nattrass, 2015; Liu, & An,2023). Studies have shown that male employees tend to be laid off more than female employees. Moreover, layoffs also negatively impact family units (Gray, Farral & Jones, 2022). Psychological literature on deindustrialisation suggests that retrenched employees undergo severe pressures leading to illnesses due to weakening of their immune system. Stress levels tend to heighten, leading to divorces and the breaking down of family units and social structures (Seekings & Nattrass, 2015; Irving, Beer, Weller & Barnes, 2022). As family units collapse and economic options dwindle, a number of social ills fester – such as homelessness, lack of access to quality health care, and a rise in cases of child labour.

Retrenched workers experience acute health problems ranging from chronic illnesses, psychological morbidity, physical limitations, reduced morale, premature mortality, and suicides (Seekings & Nattrass, 2015). Ferrie (2001) observed that the decline in factory jobs in the UK as firms relocated their industrial operations to Asian countries in the late 1970s and the early 1980s left communities reeling from medical ailments and increased medical requirements. Doussard et al. (2009) showed that most workers felt vulnerable and weak, especially due to the loss of trade unions protection that had traditionally worked to guarantee labour rights, employment tenure, and medical insurance. The inference therefore is that deindustrialisation renders employees vulnerable, and the resultant job losses affect males predominantly, leading to medical problems, and social problems (Gray et al., 2022).

### 3.4.3 Recession and Economic Contractions

An in-depth economic analysis of the implications of deindustrialisation by the IMF economists Rowthorn and Ramaswamy (1997) noted a correlation between deindustrialisation and economic instability that manifests in frequent recessions and economic contractions. In general terms, deindustrialisation frustrates economic productivity, and economic growth tends to be retarded owing to a decline in manufacturing output (Liu, & An, 2023; Workman, 2018; Bernanke, 2000). As services assume primacy as the major contributor to the GDP, manufacturing gets eclipsed, and capital investments also decline which results in poor competitiveness. As a result, the economy's overall performance becomes increasingly dependent on services, referred to as the theory of asymptotic stagnancy (Head, 2018). The problem is that unlike agriculture, mining, and manufacturing, the services sector does not create massive jobs (Fine, 2018).

Increasing dependency on services has vast implications for productivity and output (Boettke & Candela, 2017). By such increases, and simultaneously disabling and closing factories, shareholders and public policymakers reduce technology investment in manufacturing. Rowthorn and Ramaswamy (1997) point out that 'manufacturing is technologically progressive, and services are, in general, less technologically progressive'. Therefore, decreasing technology investment in the long run reduces innovation, slows down output, and has a constricting impact on the growth of the economy (Armstrong & Lee, 2023b). Moreover, the economy produces uneven growth and becomes unable to produce high incomes which feeds into surging unemployment rates. In some instances, business cycles anchor on the trough, leading to a decline in wages and regression in living standards (Seekings & Nattrass, 2015).

In part, the solution lies in the aggressive growth of services, but very few markets can drive accelerated technology-based services growth (Irving, et al., 2022). As a result, of the combination of weak structural transformation and aggressive deindustrialisation, the economy experiences contractions, recessions, and depression in some cases (Smith, 2018). For example, the 1991 recessions in the USA were triggered by a period of sectoral transformation of the local economy into a mainly services stronghold (Wolf, 2014). This observation was underlined by Robert Solow's (1956) treatise, supported by Bernanke (2000) that aggressive economy growth requires investment in technology for sustained success. It is no coincidence that Solow authored this treatise in the mid-20$^{th}$ century, the time of the shift in manufacturing to services in advanced economies. The next section provides a conclusion and summary of these arguments.

### 3.5 CONCLUDING REMARKS FOR CHAPTER 3

Notwithstanding the value of manufacturing, both developed and developing nations are deindustrialising. Advanced economies are deindustrialising owing to advances in their economy towards services, outsourcing, and offshoring. Emerging and pre-emerging economies are experiencing premature deindustrialisation which is attributable to the effects of the sector succession theory, the role of technology cost, price competition of manufactured goods, South-South secondary sector erosion, cheap imports from China and other countries, and domestic policy failure. Furthermore, South Africa is losing in the current evolution of the global industrial economy owing to both domestic public policy failure and international competition.

This chapter has discussed deindustrialisation within the context of economic policy development. It has argued that deindustrialisation should be understood as the rise in unemployment as manufacturing capacity becomes eroded owing to multiple factors. Economic history shows that, post-World War II, deindustrialisation in Germany was a function of international relations statecraft designed to prevent the outbreak of another world war. However, in developed economies, other factors have contributed to deindustrialisation which include offshoring-outsourcing, globalisation, access control, and visa regimes. The chapter has highlighted South Africa-aligned causality such as weak economic public policy formulation and implementation, and collective bargaining which came to the fore.

# CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN GENRE

## 4.1 INTRODUCTION

In this chapter, a full narrative of the research design is presented, including the depiction of the research methodology and data collection methods. Qualitative data analysis methods used in this study are described, and the trustworthiness of the study and the ethical issues relating to this study are discussed.

The researcher has deliberately chosen the term *genre of design* for the purpose of this study as an alternative of the term *design type*. His reason for doing this as part of the research method was to include his knowledge and professional experiences in the interpretation of collected data and the formulation of certain conclusions (Lautenbach, 2005). This viewpoint is supported by Henning, Van Rensburg and Smit (2004) who observed that the term *genre* captures various types of qualitative research more effectively than the terminologies *type* and *format*. Other authors support this assertion (Kenny, Doyle & Horgan, 2023).

For this study, the researcher employed a research design appropriate to determine what kind of information would provide answers to the research questions, and what methods would be the most effective in data gathering and the analysis of the collected information (Kuiper & Smit, 2022). His first question was not which research methodology he would use, but rather what he wanted to find out and why. The way in which this study was conceived and conducted, and how findings were analysed was inter-connected and grounded in his philosophical perspective (Lautenbach, 2005; Kenny et al., 2023). Authors such as Henning et al. (2004:30) refer to this as the 'epistemological and thus the methodological home of the study'. This is in line with what Alvesson and Skoldberg (2000:7) wrote, 'it is not methods but ontology and epistemology which are the determinants of good social science'. It is on this basis that the study was an interplay between the researcher's personal philosophical perspective and the empirical findings of the enquiry (Lautenbach, 2005). His views and interpretation of the issues (the researcher's ontological position) determined what questions the study should address, and how he should design the enquiry (Alvesson & Skoldberg, 2000; Truman, 2023).

## 4.2 PARTICIPANTS IN THE STUDY AND SAMPLING

As mentioned in Chapter 1, the participants in this study were academics, technocrats, specialists, senior executives, policymakers, lawmakers who were based in universities, think tanks, advisory services consultancies, prominent publishing houses, unions, and various spheres of government. All 83 interviewees were mature persons over 35 years of age and most of them had a post-matric (Grade 12) qualification. The gender, race, and age of the participants were not documented as this was not necessary to the study. However, their positions were recorded as this depicted their responsibilities and jobs and indicated the relevance of their input in this study.

According to Miles and Huberman (1994:27), Kenny et al., (2023), sampling is imperative because the researcher cannot *'study everyone everywhere doing everything'.* In the data-gathering component of the study, convenience and purposive sampling were used to select participants who were mostly based in South Africa. It was inexpensive and convenient to interact with them because the researcher is also based in South Africa. He was also able to select a few participants who were abroad because they had access to online meeting platforms such as MS Teams or Zoom. The employment of public policy to reindustrialise the economy in other countries is mainly reflected through the literature reviewed in Chapters 2 and 3. Convenience sampling as applied in this study may not have assured an impartial representation of the South African situation. This perceived limitation was mitigated by use of purposive sampling (Kenny, et al., 2023).

Participants for this study were purposefully chosen because of the perceived contribution that they could make to the study. According to Truman (2023), the strength of purposive sampling is based on the selection of the participants who would narrate data-rich cases for an in-depth study.

This section provides a picture of the context in which this investigation took place. The positions/responsibilities of the participants and the nature of the organisations they worked for are briefly presented in Table 4.1 below.

**Table 4.1: List of research participants**

| NO. | JOB TITLE AND TYPE OF ORGANISATION AFFILIATION |
|---|---|
| 1. | Executive director based in a fund manager |
| 2. | Executive director based in a think tank |
| 3. | Professor & director of macro-economics |
| 4. | Political economy editor-at-large based in one of the large media houses in South Africa |
| 5. | Managing director based in a fund manager |
| 6. | Professor of finance based in a British university |
| 7. | Executive director of international trade in an Australian university |
| 8. | Senior lecturer of doing business in emerging markets based at a postgraduate business school |
| 9. | Fellow based in a research institute focusing on regional and international affairs |
| 10. | Lecturer of strategy management in a postgraduate school of public management |
| 11. | Executive director based in a policy research and advocacy organisation |
| 12. | CEO of a liberal institute focusing on research and policy |
| 13. | Chairman of free market economic policy advocacy institute |
| 14. | Professor based in education and labour centre |
| 15. | Chief risk officer based in corporate and investment bank |
| 16. | Group executive for infrastructure delivery based in an invest bank |
| 17. | Professor in a university-based institute which promote pan-African developmental dialogues. |
| 18. | Director based in a niche consultancy focusing on risk management in Africa |
| 19. | CEO of a UN funded developmental agency |

| NO. | JOB TITLE AND TYPE OF ORGANISATION AFFILIATION |
|---|---|
| 20. | Senior researcher based in competition regulation research centre |
| 21. | Head of policy on global services and manufacturing research programme in a university |
| 22. | Professor of economics |
| 23. | Professor focusing on global services and manufacturing research |
| 24. | Secretary general of trade union federation |
| 25. | Deputy general secretary of a political party |
| 26. | General secretary of one of the biggest private sector trade unions |
| 27. | Lecturer of economics based in a university |
| 28. | Senior lecturer of economics |
| 29. | President of trade union federation |
| 30. | President of a trade union which operates in resources sector |
| 31. | Associate professor and head of macro-analysis |
| 32. | Economist at based in independent development economics centre |
| 33. | Executive based in a manufacturing association |
| 34. | Professor of development economics |
| 35. | Chief economist based in a bank-owned asset manager |
| 36. | Award winning financial journalist |
| 37. | Director based in clothing related NPO |
| 38. | Country head of multinational asset manager |

| NO. | JOB TITLE AND TYPE OF ORGANISATION AFFILIATION |
|---|---|
| 39. | CEO based of a bank-owned asset manager |
| 40. | Analyst based in a real estate advisory firm |
| 41. | Investment specialist based in an independent actuary and financial consulting firm |
| 42. | Wealth specialist based in a full-service stockbroker |
| 43. | Head of strategic clients in diversified financial services conglomerate |
| 44. | Agricultural economist based in a development financier |
| 45. | Senior fellow based in a USA university |
| 46. | Senior financial services lawyer |
| 47. | Economist based in a private economic research house |
| 48. | Director based in a poultry association |
| 49. | CEO of a capital markets & financial services research house |
| 50. | Executive coach & director of companies |
| 51. | Managing director of an investment advisory firm |
| 52. | CEO of corporate and investment bank |
| 53. | Executive chairman of a public affairs consultancy |
| 54. | Executive chairman of a private equity firm |
| 55. | Executive head of stakeholder affairs in a public mining company |
| 56. | Managing executive of an executive recruitment firm |
| 57. | CEO of global entrepreneurship network |

| NO. | JOB TITLE AND TYPE OF ORGANISATION AFFILIATION |
|---|---|
| 58. | Director of Department of International Relations and cooperation |
| 59. | Executive based in an association for meat imports and exports |
| 60. | Head of strategy based in one of the oldest insurers in Africa |
| 61. | Head of risk in management consultancy |
| 66. | Managing director of a financial services advisory firm |
| 67. | Chief geologist based in a gold mining company |
| 68. | Managing director based in private equity firm focusing in the mining sector |
| 69. | Managing director & principal mining engineer in a mining consultancy |
| 70. | Managing director of an environmental consulting firm |
| 71. | Mining manager of a mining consultancy |
| 72. | Executive vice-president of global of a global chemicals and energy company |
| 73. | Executive chairman of a private equity investment firm |
| 74. | Senior credit risk based in one of the big banks in South Africa |
| 75. | Executive chairman of a travelling agency |
| 76. | Professor & head of a developmental policy analyst |
| 77. | Executive member of regional airline association |
| 78. | Reginal director based in a continental travel business association |
| 79. | Chief financial officer of a South African based-entity responsible for tourism |
| 80. | General manager based in a car rental association |

| NO. | JOB TITLE AND TYPE OF ORGANISATION AFFILIATION |
|---|---|
| 81. | Managing director of construction & engineering firm |
| 82. | Senior policy specialist based in social justice institute |
| 83. | Interview with the professor of education |

During the first engagement with the interviewees, all possible means were used to ensure that their participation in the study was not to their disadvantage and that their identities would be protected. The researcher does not believe that the information depicted in Table 4.1 would reveal the identities of the participants. For example, there are several professors of economics and CEOs of renewable energy firms in South Africa.

Participants from financial services dominated interviews of this study, since financial and private equity firms have dedicated investment teams which analyse companies in various sectors such as agriculture, tourism, mining, construction, ICT and retail. Contributions of these analysts are largely derived from extensive research, and analysis of audited financial statements and annual reports. These investment teams also conduct research on macro-economic factors; for example, one of the equity firms has an analyst who solely studies East Africa's infrastructure. The others mainly focus on West Africa infrastructure. Some investment banks in South Africa have teams which analyse risk in each African country.

## 4.3 DATA COLLECTION TECHNIQUES

The study used generic techniques for qualitative data collection and analysis (Lautenbach, 2014). This study complied with the principle of triangulation by employing multiple data-gathering methods and sources (Camp, 2000; Shrivastava & Shrivastava, 2023). Data-gathering methods included one focus group interview, individual interviews, observation, and document collection and analysis thereof. A total of 25 participants were included in the focus group interview.

Data were collected by means of semi-structured individual and focus group interviews **(see Appendices A, B, C,F, G, H and I)**. In all, there were 58 individual interviews. The interviews made it possible to obtain information from the numerous informants (Shrivastava & Shrivastava, 2023). These multiple sources included academics, technocrats, specialists, senior executives, policymakers, and lawmakers. Interview protocols were employed to gather data and to provide responses to the research question and its sub-questions.

Interviews were a particularly suitable data-gathering method and made it possible to collect valuable information with reference to the types of research questions (Small & Calarco, 2023). They also provided me with opportunities to obtain facts directly from the research participants.

The researcher employed observation as one of the data collection methods (Shrivastava & Shrivastava (2023). **(See Appendix D)**. This enabled me to record the impact of infrastructure, advanced robotics, and applications (apps) in the manufacturing production processes. I also observed the quality of public infrastructure such as roads, ports, and water, and electricity distribution networks. This infrastructure has a major impact both on the deindustrialisation and reindustrialisation of the South African economy (Fourie, 2021). Grabs and Carodenuto (2021) declare that observation as a data collection method has several advantages over interviews. The researcher's attitude is that observations and interviews complemented each other in this study and also enriched its findings.

During observations, the researcher took notes, thus he sought permission from organisations where he intended to conduct interviews, make observations, and collect documents.

Some qualitative data in this study were collected by means of document analysis (Truman, 2023) **(see Appendix E)**. Employment of the public policy framework to reindustrialise the South African economy could not have fully investigated without conducting document analysis. Documents containing development policies, manufacturing strategies, reindustrialisation plans, public policy positions, input submission to legislative process, annual reports, etc. were collected, reflected upon, and analysed. This revealed the causal link between the collected documents and how they depicted (or did not depict) the perceived or preferred use of public policy to reindustrialise the South African economy.

Data from the interviews, observation notes, and the document analysis were evaluated against the literature dealing with deindustrialisation. These data were used to answer the research question and its sub-questions.

## 4.4 DATA ANALYSIS

Data gained from individuals and focus group interviews were analysed using open coding (Li & Zhang, 2022). A recurrent comparative method was applied to analyse data within as well as between interviews. Content analysis was also applied to the interviews data (Merriam, 1998). This process entailed the coding of raw data and the formation of categories (Merriam, 1998).

Data were analysed to discern common patterns and to put together categories. These were weighed against the literature (Li & Zhang, 2022). These categories were used to answer the research question and its sub-questions. Data collected through document analysis and observation notes were analysed by matching them with the data collected from the interviews, and also through content analysis.

## 4.5 THE TRUSTIWORTHINESS OF THE RESEARCH

Prior to each interview, participants were assured that their identities would not be revealed. The following sections explain the steps embarked on to guarantee the trustworthiness of the study.

### 4.5.1 Measures to Ensure Validity of the Study

According to Shrivastava and Shrivastava (2023), there are different views of validity. Derrida (1997:31) observes that several things, including validity, *'do not have definable meaning'*. The following discussion illustrates how validity was established in this study.

*What is internal validity?*

Internal validity indicates how the research findings connect with reality (Truman, 2013). In this study, the research findings corresponded with the reality of deindustrialisation of the South African economy. The following themes, as advocated by Merriam (1998), illustrate actions that were taken to ensure the validity of the study.

(a) Triangulation

This study employed four data collection techniques to investigate perceived public policy factors that influence the deindustrialisation of the South African economy. These were semi-structured individual interviews, one focus group interview, observations, and document analysis. The use of many sources during the fieldwork also enhanced the validity of this study. These included academics, technocrats, specialists, senior executives, policymakers and lawmakers. Various data analysis methods were used, and this boosted the validity of the study.

(b) Member checks

Organisations and some interviewees who participated in this study were given the opportunity of examining the evolution of the thesis as it was being written up. This enabled them to identify information which may not have a true reflection of what was said, read and/or observed during the fieldwork. Further engagements took place between participants and the researcher to ensure that the findings of the study were valid. Moreover, research participants occasionally enquired about the progress of the study and the writing-up of the thesis.

(c) Peer examination

During the study, ideas, findings, conclusions, and recommendations were subjected to peer review and discussion to enhance credibility of the study. This was achieved by publishing the following peer-reviewed research outputs:

- Dagada, R., & Lekaba, F. (2025). South Africa should import skilled labour to export manufactured products. *Proceedings of the 24th South African Association of Public Administration and Management Annual Conference*, University of Venda, 22 – 26 September 2-25.
- Dagada, R., & Lekaba, F. (2025) *Borderless Africa and blockchain technology: Catalysts for South Africa's reindustrialisation?*( (In: Gregory John Lee & Rabelani Dagada, (Editors): Research in Southern African Digital Business Volume V). Johannesburg: Silk Route Press.
- Dagada, R., & Lekaba, F. (2024a). Borderless Africa and blockchain technology: Catalysts for South Africa's reindustrialisation? The *Third International Engaged Scholarship Conference*, 13th – 15th September 2024, Kigali, Rwanda.
- Dagada, R., & Lekaba, F. (2024b). South Africa should import skilled labour to export manufactured products. The *Third 3rd International Engaged Scholarship Conference*, 13th – 15th September 2024, Kigali, Rwanda.
- Dagada, R., & Lekaba, F. (2024c). South Africa's foreign policy should put more emphasis regionalisation than globalisation. The *Third International Engaged Scholarship Conference*, 13th – 15th September 2024, Kigali, Rwanda.

- Dagada, R., & Lekaba, F. (2024d) Has South Africa's macroeconomic policy framework been successful in reindustrialising the economy? The case for further research. *Journal of Public Administration*, 59(2), 188-209. https://doi.org/10.53973/jopa.2024.59.2.a3
- Dagada, R. (2023). *The impact of regulatory overreach to digital transformation: Lessons from South Africa*. (In: Gregory John Lee & Rabelani Dagada, (Editors): Research in Southern African Digital Business Volume II). Johannesburg: Silk Route Press.

The feedback received from editors and reviewers during the blind peer-review process was valuable and enhanced the quality of this study.

*External validity*

A prominent challenge for qualitative researchers concerns the justification for generalising the findings of a specific study to some wider context (Henning et al., 2004). According to Kuiper and Smit (2022), transferability is used to determine the applicability of the findings to other contexts. It was mentioned in Chapter 1 that this study will provide insight into the public policy measures that may be employed to reindustrialise the South African economy. Various stakeholders in South Africa may use the findings of this study and the conceptual framework which the researcher formulated as a resource and guide. It is also envisaged that some of the findings and recommendations of this study may be transferable and applicable to other developing countries and developed economies that are deindustrialising.

In this study, external validity also guaranteed adequate description of the context to enable readers to match it with other contexts. To improve the ability of the reader to make the findings of this qualitative study transferable to other contexts, the following techniques were applied as espoused by Merriam (1998:211):

a) Rich, thick description

Since adequate description about interviewees and the organisations has already been provided, the reader should be able to ascertain how their own situations relate directly to the research setting, and whether the findings can be generalised. Section 4.2 describes the sample and participants in the study as fully as possible by:

- Providing positions of the interviewees. The job titles of participants would enable readers to determine the trustworthiness of the respondents that provided information during the fieldwork; and
- Evaluating the findings, conclusions, and recommendations of this research against the literature. The literature also contains what is happening in terms of the deindustrialisation of economies in other countries and thus readers could compare the South African context with other settings globally.

b) Multisite design

This study involved 58 interviewees from more than 29 organisations, and the observations were therefore conducted in different locations. This strengthened the validity of the study.

## 4.6 RESEARCH ETHICS

Ethical aspects were observed in this research even though some readers may not perceive this study as being sensitive work. Research participants were requested through delivered e-mailed letters to participate in this study. All interviewees agreed to take part in this study by providing written approval **(see Appendices F, G, H, and I).**

Participants also agreed to the recording of interviews during data gathering. The researcher coded the audio-recorded conversations using slightly amended job titles and put the recordings in a password protected computer and a locked facility. These data may be used by other researchers in future for secondary analysis. Researchers who intend to use these data will have to go through the process to obtain ethical research clearance certificates.

Participants were at liberty to withdraw from the study at any time without having to give a reason. The researcher took all necessary measures to guarantee that persons contributing to this study were not harmed by participating. For that reason, job titles, were used to protect their identities and to make certain that any information, either personal or professional, revealed during the interview was handled as absolutely confidential. Having said this, the focus group interview activity could not be anonymous or confidential because participants were exposed to each other.

However, this thesis does not include the names of the participants or anything that could identify them.

The only benefits for participating organisations and individuals included provision of preliminary and final findings, and conference papers and articles which would emanate from this study. Ethical clearance was requested from the University's Research Office – Human Research Ethics Committee (non-medical). Prior to obtaining the ethical clearance certificate, the researcher successfully completed Introduction to Research Ethics training through TRREE and obtained a certificate on 22 September 2023. TRREE is affiliated to the University of Hongkong and recognised by the University of the Witwatersrand, Johannesburg.

## 4.7 SUMMARY OF CHAPTER 4

This chapter started with an overview of the research context, followed by brief descriptions of the sample and participants in the study. This information enabled readers to contextualise the findings, conclusions, recommendations, and the conceptual framework of this study.

It was mentioned that this study adopted a generic qualitative methodology. The use of individual interviews, focus group interviews, observations, and document analysis as data collection methods employed in the research was discussed. It was indicated that qualitative data analyses were used in this study. Trustworthiness of the study and ethical considerations were discussed. The next chapter presents the findings of the study pertaining to the shortage of skilled labour and rigid labour legislation.

# CHAPTER 5: FINDINGS AND DISCUSSIONS PERTAINING TO THE SHORTAGE OF SKILLED LABOUR AND RIGID LABOUR LEGISLATION

## 5.1 INTRODUCTION

The previous chapter focused on the research design of the study. Details of the research approach and procedures were provided. This chapter discusses the findings that were obtained through the interviews. Throughout this chapter the researcher offers his own interpretation and understanding of the data. This is in line with the selection of the 'genre of design' research approach as mentioned in Chapter 4.

This chapter contains three major findings as follows: that migration regulations deter reindustrialisation in South Africa; that rigid labour laws deter reindustrialisation; and that shortage of skilled labour thwarts reindustrialisation. This has contributed to the poor growth of the economy in this country.

A major weakness of the South African economy is that the country imports more than it exports. This should be attributed to the fact that its manufacturing sector has been declining, and even goods which were previously manufactured locally are now being imported. The country's economy remains largely reliant on mining for exports, and this is not sustainable. The result is that South Africa exports raw materials which are processed into finished products in other countries and then imported back. For some years, base metals and minerals constituted 71% of South Africa's exports to China, while at the same time, machinery, car components, textiles, and footwear comprised 64% of China's exports to South Africa.

Except for the services sector, the South Africa economy has not realised a large enough expansion in critical sectors, particularly manufacturing and agriculture. During the interviews, the president of a trade union federation lambasted the government for neglecting the manufacturing sector and largely relying on minerals. Petrochemicals, mining, basic iron and steel account for 69% of South African total exports; moreover, the mining industry is highly capital and energy intensive. This unionist further argued that unemployment in South Africa was around 39%. Due to deindustrialisation, South Africa has the lowest labour force participation rate amongst the emerging markets. It has been the biggest gold producer for nearly a century, but production has recently fallen.

Availability of skilled technical workers and managers, coupled with political-will in the ruling party, the ANC, can help in turning the economy around. Knowledge can and should play a fundamental role in shaping the country into a manufacturing and knowledge economy. Countries such as Japan, Malaysia, Germany, and Singapore are not endowed with rich mineral resources like South Africa, yet they are prominent manufacturing and knowledge economies because they have both knowledge and technical skills. The presence of raw materials in a country which does not have knowledge and skills will not lead to economic growth.

South Africa needs skilled professionals to ensure that its mineral resources are maximised to drive development. The South African national planning commission, which was led by the previous Minister in The Presidency, Trevor Manuel and the prominent businessman, Cyril Ramaphosa[3], released a diagnostic document in 2011. Renowned educationist, Professor Jonathan Jansen and other experts supported the analysis which attributed the lack of job creation to poor schooling and lack of knowledge. The issue is that we need policies that would help South Africa to develop the technical skills to run manufacturing plants that would process the country's rich raw resources into finished products. In a nutshell, South Africa needs expertise to keep the economy in the country.

Furthermore, South Africa needs to transform its educational system to successfully reindustrialise. Radical improvement of early childhood education, primary (foundation), and secondary (high school) education are of utmost importance. Findings of this study indicate that technical college education should be overhauled urgently. Thus, a major factor in the reduction of poverty, mitigation of economic polarisation, and reindustrialisation of the economy is equipping the nation with good quality education. Nevertheless, this is one area in which the ANC government has failed miserably since 1994. Quality education must be offered, and there is no silver bullet for this. Regrettably the government has allowed many teachers to abuse the leave of absence policy. The government has also let the South African Teachers Union (SADTU) take-over the management and governance of some schools; thus primary and secondary education has largely become a fiefdom

[3] Ramaphosa was elected the president of South Africa in February 2018

of SADTU. Many teachers who belong to this union do not meet their teaching responsibilities, and the union succeeds in protecting them.

There is no doubt that the legacy of apartheid had devastating effects on the socio-economic trajectory of the new democratic South Africa. But still, when it comes to the country's education system, much could have been done during the last 30 years to enable it to fully recover from the 1953 Bantu (black) education law. This law was enacted by the architect of the apartheid system and the Minister of Native Affairs, Dr. Hendrik Verwoerd. Verwoerd also served as the prime minister and governed South Africa from 2 September 1958 to 6 September 1966 (Thobejane, 2013).

The major tenet of the Bantu education law was to keep black people as unskilled labour and to enforce racially segregated educational facilities. Even universities functioned along racial and tribal lines. Another law was passed in 1959 to degrade "non-white" universities and colleges. The University of Fort Hare was taken over by the government and relegated to become part of the Bantu education system. Verwoerd was determined that black children should grow up to become part of the cheap labour market and thus there was no need to provide them with good quality education (Morrow & Gxabalashe, 2000).

The architect of apartheid, Dr. Verwoerd once asserted: *"There is no place for [the Bantu] in the European community above the level of certain form of labour. What is the use of teaching the Bantu child mathematics when it cannot use it in practice"?* (Thobajane, 2013). Verwoerd regarded South Africa as a white country ("European community"). He was a scholar who specialised in applied psychology and sociology.

Abuse of knowledge gained in these studies was used to craft the apartheid system. This system was designed to keep South Africa's majority black population oppressed and marginalised from the political system and upper echelons of the economy (Du Toit, 2019). Findings of this study show that the ANC government has not made substantial progress away from Bantu education even after twenty-seven years of democracy. Unfortunately, the quality of teaching, learning, and infrastructure is worse than that of Bantu education.

More than 30-years after the attainment of democracy, many pupils in South Africa still feel the impact of the "Verwoerdian philosophy". For example, the Progress in International Reading Literacy Study 2021 was released in May 2023. This report indicated that 81% of the South African Grade 4 learners could not read for meaning in any language. This was the highest percentage of all 57 countries which participated in the study. These results are devastating, a generational catastrophe, and a great injustice to the affected pupils. This will have a long-term impact on the production of skilled labour in the country.

The major findings of this study are that a shortage of skilled labour and rigid labour legislation in South Africa together with migration regulations deter reindustrialisation. The remainder of this chapter provides more details of the above-mentioned findings, and provides concluding remarks.

## 5.2 FINDINGS CONTAINED IN THIS CHAPTER

These findings answer the research questions and sub-questions. Interview transcripts and documents that were collected were analysed and this generated categories and sub-categories. The three main categories were listed in the introduction as follows: migration regulations deter reindustrialisation; rigid labour laws deter reindustrialisation; and that shortage of skilled labour thwarts reindustrialisation. Table 5.1 below summarises the analysis and shows the relationship between categories and sub-categories.

**Table 5.1: Summary of analysis showing the relationship between categories and sub-categories**

| Data collection technique | Main category | Sub category |
|---|---|---|
| Individual interview<br>Focused group interview<br>Document collection and analysis | Migration regulations deter reindustrialisation | • It has been difficult for foreign skilled labour to enter South Africa's labour market.<br>• Foreign skilled labourers struggle to renew their work permits.<br>• It is difficult for foreign skilled labour to live in the country.<br>• Visa regulations discourage tourists from entering the country. |
| | Rigid labour laws deter reindustrialisation | • Minimum wage regime discourages foreign direct investment.<br>• Labour laws contribute to volatility at the workplace.<br>• Labour laws encourage prolonged and violent strikes.<br>• Collective bargaining discourages direct investment.<br>• Investors are concerned that the Employment Equity Amendment Act of 2022 will increase compliance red tape and employment of automation in workplaces. |

| Data collection technique | Main category | Sub category |
|---|---|---|
| | Shortage of skilled labour thwarts reindustrialisation | • The legacy of apartheid is persisting when it comes to skills development.<br>• South Africa is depleting skilled labour and is approaching a skills cliff.<br>• Poor basic education contributes to the production of untrainable labour.<br>• Poor university education contributes to the production of untrainable labour.<br>• The wealthy, skilled, and educated are emigrating. |

Each of these sub-categories will be discussed in more detail.

### 5.2.1 Migration Regulations Deter Reindustrialisation

The sub-categories related to this finding appear in Table 5.1. as follows: a minimum wage regime discourages foreign direct investment; foreign skilled labour struggles to renew their work permits; it is difficult for foreign skilled labour to live in the country; and visa regulations discourage tourists from entering the country. Each of these subcategories is detailed in the next sub-sections.

#### 5.2.1.1 It has been difficult for the foreign skilled labour to enter South Africa's labour market

The country is in dire need of artisans for manufacturing plants[4]. Artisans create jobs for unskilled labour and university graduates. The unskilled labourer will physically push a wheelbarrow carrying pieces of wood for the artisans. The artisan will assemble the pieces of wood to complete a piece of furniture, for example, a table, and pass it to the university graduate in the firm who will take care of marketing and supply chain management. One artisan can create an average of ten other jobs. Unfortunately, between 1994 and 2009, the ANC government neglected the technical colleges[5]. The technical colleges sector was characterised by paralysis, high student dropouts, and a high failure rate. Since Dr. Blade Nzimande became Minister of Higher Education, Science and Technology, he has shown some noteworthy interest

[4] Interview with an executive director at an institute focusing on international trade in an Australian university

[5] Interview with a senior lecturer of doing business in emerging markets based in a business school

in technical colleges. One hopes that he will succeed in revitalising them in order to produce the artisans which South Africa really needs to re-industrialise the economy.

An editor-at-large of political economy asserted during an interview that twenty-nine years ago, South Africa was the 44th-most complex economy globally. South Africans then could train patternmakers and re-engineer Mirage engines to supply to the Argentinian air force during the Falklands War in 1982. These had an adequate range to search for and destroy the UK's guided-missile destroyer HMS Sheffield, with an Exocet missile, also made in South Africa. In 1995, South Africa produced and exported a greater variety of goods than countries such as Thailand and China.

Today the situation has changed for worse when it comes to South Africa's manufacturing capacity. The country has lost its stature as one of the most complex economies and is now the 67th-most complex economy. This has been exacerbated by skilled people, black and white who continuously leave the county. Unfortunately, South Africa is neither replacing the depletion of skills through trainable higher education graduates nor imports of skilled labour. Due to the beauty of this country and its excellent weather, many skilled people would be happy to live and work here. Nevertheless, there is an increasing number of highly skilled white-collar professionals and workers who are emigrating.[6] This country can neither manufacture goods nor create jobs without the necessary skills. The starting point for job creation, beneficiation, and massive exports of finished products is to import skills. South Africa needs 800 000 skilled immigrants to reindustrialise and to create jobs.[7] What the government must do is to relax its work permit regulations and conditions pertaining to the issuing of permanent residence status to enable skilled workers and professionals to enter the South African job market.

The political economy editor-at-large furthermore asserted that there is no better way to transfer skills than to practically demonstrate to the learner at the workplace how to do certain things. He declared: "Let me give you an example, Rabelani. I enjoy the best ever made pizza in an Italian outlet in Cape Town. The restaurant is run by Italian nationals, and they employ six South Africans". Restaurants like these provide workplace training for making pizzas. The editor-at-large of political economy

[6] Interview with senior lecturer of economics
[7] Interview with the CEO of a bank-owned asset manager

continued: *"The three political parties in South Africa campaign largely on job creation, but none of them appear to know how the jobs they are talking about will be created. But outlets like that Italian restaurant are the answers staring us in the face. Sadly, it is our dislike of foreigners and inferiority complex that prevent us from seeing that skilled foreign professionals and entrepreneurs are the solution to our jobs crisis"*.

The South African government should therefore enable more foreign skilled workers and entrepreneurs to get business and work permits. The editor-at-large of political economy was very emphatic on how foreign skilled entrepreneurs were essential in job creation and hands-on training. He said: *"Here is the thing Rabelani, for us to be able to create more employers. The quickest way to create employers would be to import them – let's make it easy for them to enter the country, operate businesses, and train local people at workplaces. There is no better way to pass on skills other than physical display. For example, the chef at my favourite restaurant could write me his pasta recipe a hundred times and it would never produce a similar outcome compared to him standing next to me in his kitchen, guiding my hands, demonstrating to me exactly how. As he is training me in his kitchen, thousands of immigrants would be training other South Africans in various workplaces. The problem is that the ANC is deaf, and senior government officials are even worse, they are constantly preventing skills from coming into the country"*.

There is a lack of appreciation of the role of the Department of Home Affairs as a major enabler in skills creation in the country. In effect, this department should form part of the government clusters on economics, investment, employment, and infrastructure development, international cooperation, trade and security. Unfortunately, it is not, but is rather part of the governance, state capacity, and institutional development, and justice, crime prevention and security clusters. Because it decides who visits, works, operates business, and lives in South Africa, the Department of Home Affairs has one of the most crucial economic public policy formulation responsibilities. It should enable this country, to create jobs, mostly through the private sector. This can be done by liberalising our immigration regulations. Furthermore, this department should find ways of encouraging skilled foreigners to live, work and run businesses in South Africa. Skills create jobs, not viceversa, but the country has a large shortage of artisans, welders, and other skilled technicians.

A Fellow of the research institute which focuses on regional and international affairs argued that the South African government should enlarge or do away with the critical skills list. It is also referred to as the list of scarce skills. This is because the list keeps on getting shorter which closes out critical skills from entering the country. This list indicates to companies the kind of critical skills that they can recruit outside of the country and is updated every five years. Although it is crafted by the Department of Home Affairs, it is controlled by the department responsible for employment and labour in conjunction with the department responsible for higher education and training. The above-mentioned Fellow reasoned that it would make some sense to shorten the list if South Africa was producing the skills required by the economy, but we are not. The editor-at-large asserted that some of the skilled people who were leaving the UK because of Brexit would be happy to live and work in South Africa, but our *“xenophobic and rigid migration regulations”* would not allow this to happen.

The executive director of a Johannesburg-based think-tank focusing on Africa’s development said that the South African government tended to be disingenuous. He observed that the government has reduced the list of scarce skills every five years as if the local skills-base has increased. He stressed: *“If it were not that our government is constantly asleep, they would have realised that the country was losing skilled professionals such as engineers, medical doctors, academics, and entrepreneurs”*. He quipped: *“In this instance – what makes the government to think that our pool of skills labour has increased”*. The department responsible for employment and labour has a large say over the critical skills list.

The department responsible for higher education and training had recommended that business managers should be put on the top of the list, but the final list did not have business management as a scarce skill, probably because the department responsible for employment and labour had considered that the University of Venda has produced some graduates in business management. This boggles the mind; can recent graduates be on top of the economy as sophisticated as that of South Africa. This country is an upper-middle income country, its businesses compete with other global players, and thus managers at the helm of its enterprises should be the best that the world can offer. To think we now have skills merely because of a few graduates from the University of Limpopo, Walter Sisulu University, and University of Venda defies any logic.

To appreciate how the local enterprises have become sophisticated and global players, one must consider Naspers, British American Tobacco, Discovery Group, Richemont, Nandos, Mondi, FirstRand Group, MTN Group, Anglo-American, SABMiller, Foodcorp and Barloworld. This list is not exhaustive. These companies compete with the best in the world[8] and cannot afford to appoint their managers solely based on affirmative action and sentiment. Even those companies which operate within our borders, for example, Santam, Clicks, Sanlam, and Mr Price, require highly skilled managers. It should also be born in mind that they compete with eminent global players who have operations in South Africa.

While these companies rely on local expertise, many of those skilled people are leaving the country because of the high crime rate, deteriorating infrastructure, poor service delivery and questionable property security. The situation is aggravated by the overregulation of private business, increasing public policy uncertainty, affirmative action, and broad-based black empowerment[9]. The CEO of a liberal institute focusing on research and public policy indicated that people leave for various reasons. It was not only white people who were leaving the country – even some educated, skilled, and wealthy black people were leaving the country. For South Africa to sustain and create new successful enterprises like Discovery, Capitec, and PSG Group, the country may have to import foreign skills.

Another anomaly regarding the 2019 list of scarce skills was the reduction of ICT competencies allowed to enter the country. This is despite of the fact that President Cyril Ramaphosa has advocated for the Fourth Industrial Revolution (4IR). As part of his determination, Ramaphosa has established the presidential commission on 4IR. The 4IR encompasses advanced technologies such as internet of things, artificial intelligence, robotics, blockchain, 3-D printing, big data, nanotechnology, decision making, material science, quantum computing, autonomous vehicles, and biotechnology.

[8] Interview with an executive director based in a policy research and advocacy organisation
[9] Interview with a CEO of a bank-owned asset manager.

An executive director of a policy research and advocacy organisation concluded that the ANC is not enthusiastic about many skilled professionals coming to South Africa because they would be largely white. She asserted that this country should not allow its racial obsession to sabotage our economy. In this instance, common sense should prevail, and public policy makers should open the country to the skilled people who will in turn train and create millions of jobs.

#### 5.2.1.2 Foreign skilled labour struggle to renew their work permits

In the preceding section, the researcher mentioned an Italian restauranteur in Cape Town who employed six black South Africans. In his ice-cream business he had four local black workers. The Department of Home Affairs refused to renew his son's work visa[10]. This should be ascribed to administrative inefficiency at the department and a lackadaisical attitude regarding these matters. They treated his work permit submission as a new application instead of a renewal. They would have to go back to Italy to apply for the new work visa and this could take something like five years. Unfortunately, the family lost patience and decided to leave rather than to insist staying in a country where they felt unwelcome. They are entrepreneurs and would be fine wherever they had gone to. But one cannot say the same about South Africa; we are poorer without that Italian family. Ten black South Africans became unemployed instantly and with our dire economic situation, they would have struggled to find new employment. The most devastating aspect about this is that the country has lost a workplace hands-on training ground.

A banking analyst in an independent capital research and training firm related to me how skilled foreign nationals in South African suburbs were struggling to get their work and residence permits renewed and approved. One of the married couples who are both medical doctors applied for permanent residence, but Home Affairs decided to only approve for the husband and the wife was given a ninety-day visa. Another highly skilled foreigner had applied for permanent residence and had not received a response after three years in spite of constant inquiries. The sad thing about this is that skilled foreigners like this are a lifeblood to this country's economy. Their

[10] Interview with political economy editor-at-large based in one of large media groups in South Africa

contribution leads to economic growth, job creation, and hands-on workplace skills transfer.

Moreover, most of the highly skilled foreigners who live in South Africa own houses, and this serves as evidence of their loyalty to this country[11]. There is a large socio-economic value chain which comes with foreigners owning homes in South Africa. They make use of housekeeping, gardening, plumbing, electrical, maintenance, and home letting agencies.[12] Due to the fact that the specific group of foreigners are part of the upper-middle class, they would inevitably use other services such as golf courses, accountants, lawyers, car dealerships, mechanics, private schools, universities, shops, and supermarkets[13]. Unfortunately, Home Affairs restricts these economic activities to ninety-days only. What could be wrong about the government providing these professionals with long-term work permits or permanent residence? This defies logic.

To gauge the extent of Home Affairs officials' obstinance, resistance, and administrative bungles, one can cite the example of the 2019 supreme court judgement in the case, of the director general of Home Affairs Vs De Saude Attorneys[14]. Court judgements are not known for using harsh words, and judicial pronouncements are expressed with restraint. The Supreme Court of Appeal must have been pushed to its limits when its then acting deputy president, justice Mahomed Navsa, accused the Minister and Director General of Home Affairs of being *"disgraceful", "unconscionable", "deliberately obstructive'*, and *"dilatory"*. Once one has read the whole judgement and comprehends the extent of the administrative rot in the Home Affairs, one immediately realises that the language used was actually not strong enough. Eight years of adverse court judgements against Home Affairs' poor treatment of immigrants failed to make the department mend its ways. That is why justice Navsa declared: *"It could also rightly be described as disgraceful"*.

In this particular judgement, the judge referred to the case of Louse Batty, an Australian nurse whose 2015 visa application for a critical skills work permit became

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[11] Interview with an analyst based at a real estate advisory firm.
[12] Interview with the CEO of capital markets and financial services research house.
[13] Interview with wealth specialist based on full-service stockbroker.
[14] Analysis of the judgement in the case of director-general of the department of Home Affairs, and others v De Saude Attorneys, and another [2019] 2 All SA 665 (Supreme Court of Appeal) (29 March 2019).

a case of *“immense hardship”*. Batty did what she believed was her answer to a divine calling when she set up a non-government organisation (NGO) called ‘Keep the Dream”, in Tzaneen, Limpopo in 2003. By the first quarter of 2019, the NGO had transformed the lives of 9000 girls by decreasing teenage pregnancy rate from 13% to 0.07%, and pulled up the Grade 12 pass rate to 90%. Batty got extremely frustrated and appealed against the Department of Home Affairs’ imperious rejection of her critical skills visa.

The two migration firms, De Saude Attorneys, and Visa One, filed papers with the Western Cape High Court in 2017. They informed the high court that Home Affairs inefficiency and undue delays were prejudicing their clients and killing their businesses. The aforementioned firms were granted an order which compelled the department to process visa applications and appeals without *“prolonged delays”*. The Minister and Director General of the Home Affairs did not accept this lying down. They dragged De Saude Attorneys, and Visa One, back to court by lodging an appeal to the Supreme Court of Appeal. It is that appeal that the full bench of this court deemed unnecessary, compelling justice Navsa to lash out: *“baffling”*, and *“deliberately obstructive and dilatory”*.

De Saude Attorneys, and Visa One had told the high court judge, Roshni Allie, who heard the original case that for several years the Department of Home Affairs had failed to process immigration in any *“reasonable or lawful”* period. They asserted in their court papers: *“Applications, even simple applications, to the department can take years to be resolved, if they are resolved at all”*. They also mentioned numerous court judgements which were delivered against the department between 2011 and 2016. In these judgements, Home Affairs was ordered to improve its performance.

Surprisingly, Home Affairs did not even repudiate the substance of the complaint against it. The counsel representing the department in fact agreed in the high court that Home Affairs had basically ceased to process simple applications due to inefficiency. That is why the justices of the Supreme Court of Appeal were so furious and found the department’s appeal to be openly cynical. You cannot cease to carry out your constitutional duties, admit this in an open court, and still lodge an appeal – thereby continuing to infringe applicants’ rights, wasting everyone’s time and the state resources. The Home Affairs had hoped to win the case on a technicality, but the Supreme Court of Appeal could not be fooled. Court papers indicate that Home Affairs performed some of these duties fairly and completely shortly after President Jacob Zuma's administration came to the office. This constitutes a whole decade of squandered opportunities in recruiting much-needed skilled foreigners to rejuvenate our economy in general and manufacturing sector in particular. It should be borne in mind that government departments are interdependent; if Home Affairs were this dysfunctional – how about others and how does this affect the reindustrialisation agenda?

It was not only Batty who was part of this case, there were another 473 skilled foreigners whose attempts to get Home Affairs to determine their applications and appeals ended-up as a futile exercise. Other applications were for critical skills visas, for temporary and permanent resident status, appeals against the refusal of such applications, and other related visas. Temporary and permanent resident visas constitute a large component of work permits.

From the court papers, one deduces that the department of Home Affairs apparently ceased to be functional since 2010. Ironically, this department cynically fights to stay dysfunctional. This defies any logic.

When De Saude Attorneys, and Visa One, contacted the department's call centre, they were told that they should produce a power of attorney letter indicating that they were mandated by their clients to engage Home Affairs. Once the power of attorney letters were produced, there were no further responses from the department. When they called the Home Affairs again, new demands of power of attorney letters were made, and the whole merry-go-around continued.

It should be appreciated that the stakes are very high for most of these immigrants who get *"raw deals"* from Home Affairs[15]. They have built careers, and businesses in this country. Some of them have fallen in love with the country, have houses and other assets, and their children attend schools here. If these foreign nationals leave after waiting for the renewal of their visas, and their commercial and non-profit organisations collapse, the South African government declares them undesirable and bars them from returning. Conversely, without work, temporary or permanent resident visas, they

[15] Interview with a senior lecturer of doing business in emerging markets based in a business school

can neither live nor work in South Africa[16]. And while they are waiting for their applications and appeals, their business bank accounts are frozen.

It also becomes a very large disruption to leave the country abruptly - public policy formulators and Home Affairs officials should start taking these highly skilled immigrants seriously. One cannot help but think that the Home Affairs department has done more harm than good to the South African economy and its people[17].

#### 5.2.1.3 It is difficult for foreign skilled labour to live in the country

A professor of development economics was at pains to explain how his wife, a fellow economist who holds PhD from Harvard University "went through hell" before she could get a permanent residence certificate. It was relatively easy for her to get an initial work permit. However, after living in South Africa for a while, she got married to the above-mentioned professor. After five years of being married to this South African citizen, she applied for a permanent residence permit to which she was constitutionally entitled. After waiting for the response from Home Affairs for five years, her temporary resident permit expired, and the department was swift to declare her undesirable. To regularise her continued stay in South Africa she went through an ordeal and was reduced to despair. The situation was exacerbated after she was arrested, had to share a room with common suspects, and was urged to plead guilty. Nevertheless, she stuck to her guns and refused to plead guilty which would have destroyed her career because of the criminal record.

Years later and after lodging an appeal, the learned economist received her permanent residence permit. While all this was happening, the South African economy was robbed of the much-needed skills she offered. As indicated in preceding paragraphs, if she had not spent spend years out of work due to the Home Affairs inefficiency, her contribution could have led to the creation of some jobs and to training of young economists.

A former Wits Business School academic[18] narrated how in 2006 the school lost a highly acclaimed scholar and renowned professor of marketing management, Mukul

[16] Interview with an economist based at an independent development economics centre
[17] Interview with executive director based in a fund manager
[18] Interview with an executive director of an institute responsible for international trade in a prominent Australian university.

Gupta. The researcher has decided to reveal the name of Prof. Gupta because his abrupt departure from South Africa was very public. Other than his professorship, Gupta was also the director and head of the Wits Business School. In fact, it was the headship of the school that brought him to South Africa. Prior to this, he occupied the positions of dean of executive education and professor of marketing at the Management Development Institute in Gurgaon, India.

As you would have already noted from the preceding paragraphs, it took a long time before Home Affairs granted Prof. Gupta a working visa. When the department eventually issued his visa, they also provided his wife and two daughters multiple entry visas that would enable them to come and go as they deemed necessary. Gupta's excitement about heading-up the Wits Business School, the best in Africa, was short-lived when he applied for the study permits for his daughters. As part of this application, he filled-in eleven documents. This was a time consuming and complex process[19]. Furthermore, Gupta was required to fill in four additional forms and provide proof of the authenticity of educational qualifications that his daughters obtained from Indian schools. These qualifications had to be certified by the South African educational authorities.

Home Affairs required Prof. Gupta to send them a letter explaining why his daughters wanted to study in South Africa. He should further demonstrate that he was in a position to pay for their school fees. Gupta duly complied with these requirements. Unknowingly, the biggest hurdle was waiting for him and his family. The department asked him to provide an admission letter from the school where he had intended for his daughters to attend. The school indicated that they could only provide such a letter if there were study permits from Home Affairs, but Home Affairs would not issue study permits without the admission letters, and *"the school stuck to its guns"*[20]. While this impasse remained, Home Affairs required repatriation guarantees from institutions. This meant that if one's child fails at school, they could be sent back to country of their origin.

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[19] The researcher analysed documents that an applicant had to complete in 2005 when applying for the study permit.
[20] Interview with an executive director of international trade in an Australian university.

What troubled professor Gupta was that it would be the middle of the school calendar by the time all the Home Affairs requirements were met. He confided to colleagues that it felt like the South African government's attitude was that he could come to work in the country "*but his family could go hang"*[21]*.* What the Department of Home Affairs failed to understand is that family comes first in many cultures.

A senior lecturer who was familiar with Prof. Gupta's ill-treatment by Home Affairs was quick to indicate that this department did not only became inefficient under Zuma's administration: *"Home affairs was incompetent during the large part of Mbeki's presidency despite the fact that he and his deputy president used to make the right noises about bringing-in highly skilled people onto the country"*[22]*.* The senior lecturer pointed out that Mavuso Msimang who was the director-general of Home Affairs at that time drastically improved Home Affairs.

A prominent banker also stated that President Mbeki's administration improved efficiency at the Home Affairs with the appointment of Msimang who served from May 2007 until his employment contract expired in April 2010. He came to the department with impressive credentials such as an MBA from the United States International University in San Diego, California, majoring in project management. He also had remarkable experience of heading-up government entities such as the South African National Parks, the State Information Technology Agency, and Tourism Kwazulu-Natal.

As the director-general of Home Affairs, Msimang did not disappoint. He dealt with corruption relentlessly, and 400 officials were dismissed for corruption and fraud. The department implemented an automated fingerprint identification ICT system and online fingerprint authentication. This project led to Msimang receiving the (TIGA) Technology in Government in Africa Award from the United Nations (UN). For example, the turnaround time for issuing of identity documents and passports improved drastically from 127 to about 40 days, while passports would now be issued within seven to 14 days.

Within a short space of time, Msimang cleared a large backlog of refugee applications. The processing of visas of all kinds also improved considerably and this

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[21] Ibid.

[22] Interview with a senior lecturer of economics based in a university.

could have boosted the efficiency and urgency that accompanied the 2010 FIFA World Cup which was hosted in South Africa. After the departure of Mismang, President Mbeki's appointee, *"things fell apart at the Department of Home Affairs"*[23].

#### 5.2.1.4 Visa regulations discourage tourists to enter the country

For a country to be a manufacturing powerhouse, it needs a big local market to buy its products. This is the case with countries like China, USA, India, Canada, Russia, Brazil, and India. In the absence of a large population, such a country will need strong regional links to serve as its market. Unfortunately, South Africa, with a population of just about 60-million has neither a considerable local market nor strong regional links[24].

Apart from corruption, a highly regulated market, high political risk, poor public policy implementation, all of which pose a significant limitation to the fast economic growth of South Africa, there is the relatively small size of its domestic market. Because of this, the country lacks sufficient local market to drive its manufacturing sector. An analysis of Stats SA's website indicates that South Africa's population is growing slowly compared to most of its counterparts in the African continent. This is despite of the fact that the child mortality rate and HIV/AIDS related deaths have dropped substantially. The white population is also declining due to several factors. Economies that do well in manufacturing are those that have large populations[25].

Nigeria has recently become Africa's largest economy due to the combined buying power of its vast population[26], thus surpassing South Africa. China has had to amend its one child public policy per couple to two children to moderate the aging population phenomenon, maintain its manufacturing sector, and enhance local consumption. If South Africa wants to build-up its domestic market, the country should abandon its rigid visa regime and attract tourists from other countries. It should also tighten-up its porous borders while simultaneously permitting most Africans to lawfully enter the country to look for socio-economic and tourism opportunities[27].

[23] Interview with the director based in a niche consultancy focusing on risk management in Africa.
[24] Interview with the professor focusing on global services and manufacturing research.
[25] Interview with the head of policy on global services and manufacturing research programme in a university.
[26] Interview with the professor in a university-based institute which promotes African development dialogue.
[27] Interview with the lecturer of strategy management in a school of public management.

The obsession in South Africa has been to make it difficult for the law-abiding foreign nationals to come to the country for tourism and other socio-economic reasons. However, the irony is that its borders are porous, and illegal immigrants easily enter the country[28]. Matters came to a head when the Minister of Home Affairs, Malusi Gigaba, announced new regulations on 16 September 2014 which came into effect on 01 June 2015. These required that parents entering South Africa with minors had to produce unabridged birth certificates reflecting relevant information about the father and mother.

This was applicable even in instances where both parents were travelling with their children. In an instance where it was only one of the parents travelling with the child – the parent travelling with the child should produce parental consent from the other parent proving consent for the minor to travel. There was a huge outcry in the South African tourism industry. As expected, these regulations substantially reduced the number of tourists visiting the country. This led to many complaints from organisations such as the Tourism Business Council of South Africa.

Economists, analysts, and opposition politicians argued that the local tourism industry would create more jobs if the visa regulations were relaxed[29]. The new immigration regulations which were issued by the Home Affairs and came into effect on 01 June 2015 had a very devastating effect on the number of tourists vising South Africa. During one interview the executive chairman of a travelling agency decried the ill-considered regulations. This view was supported by a prominent CEO in the tourism sector: *"The tourism sector is still reeling from those regulations. Those changes had huge negative impact in the tourism sector in this country. We were contacted by international operators expressing frustrations about this. They were clear that they were advising prospective tourists not to come to this country. Those operators and tourists had been very essential when it came to advertising South Africa through the word of mouth. Foreign visitors who come to South Africa tell their families, friends, and colleagues about our extraordinary weather, beautiful landscapes, and cheap, but delicious food. Unlike most developed and upper-middle income countries, we don't advertise a lot abroad – word of mouth had worked wonders for us. The moment*

[28] Interview with the professor based in an education and labour centre.
[29] Interview with the country head of a multinational asset manager.

*foreign tourists experience inflexible immigration regulations, they provide negative verbal reports to their professional associates, friends, and families. It is that simple"*[30].

One of the things that made life difficult for those visiting South Africa was introduction of the biometric system which captures foreign visitors' details when they enter South Africa's ports of entry. This was introduced by the Department of Home Affairs in April 2015; there was nothing wrong with this, many countries have similar technology. The problem was that the system was not efficiently managed in South Africa. Just to give one example, in OR Tambo International Airport, visitors at peak times would queue at immigration for between ninety minutes to four hours. Some of these travellers would even miss their connecting flights due to the delays.

The Tourism Business Council of South Africa reported to the parliament portfolio committee on tourism the results of a study of disruption for travellers measured during 1-8 October 2016. This revealed that twenty-four domestic and nine international flights were delayed, while international migration services counters were only staffed to 40% capacity on average during peak times – an indication that South Africa does not take foreign travellers seriously[31]. As it has been alluded to in the preceding paragraph, when some of these travellers returned to their countries, they would probably have reported the ordeal that they were subjected to in our ports of entry.

In a normal country where there is some work ethic in the public sector, the management of a biometric system should not be a problem. A press conference was hosted in Johannesburg in April 2016 by the Department of Home Affairs. Its director general, Mkuseli Apleni, reported that the extended waiting period for travellers in various ports of entry was caused by the fact that the department was short-staffed. He was at pains to explain that the department did not have an adequate staff complement to deal with the increasing numbers of foreign tourists. It seemed as if the increasing numbers of travellers to the country was an irritation. If the truth is told, tourism is an essential commodity in South Africa. It creates lots of jobs in the value chain.

[30] Interview with the CEO of business tourism association.
[31] Interview with the country head of a multinational asset manager.

Tourism is one South Africa’s biggest exports; foreign travellers bring hard foreign currencies to the country which brings down the trade balance deficit[32]. If tourism is critical to this country, then more people should be employed to work at the ports of entry. Apleni went on to articulate the importance of biometric capturing including its ability to distinctively identify individuals, enhancement of efficiency, and its massive contribution to the protection of national security. No one has qualms with that, but its contribution to the lengthening of the processing time was unjustifiable. With regard to the biometric system, more resources should have been deployed to process the travellers quickly as it is with entry ports in other sophisticated economies like ours[33].

Whereas the biometric system caused enormous delays and great inconveniences – the biggest deterrent to international travellers was the requirement to produce unabridged certificates of minors that foreign visitors were travelling with[34]. As much as biometric capturing was very tedious, some travellers still wanted to come to South Africa. Actually, tourist arrivals in South Africa’s airports went up by 18.5% before the introduction of the unabridged certificate requirement[35]. Once the unabridged certificate regulation came to effect, thousands of travellers with pre-paid holidays from various embarkments were turned away from travelling to the country internationally[36]. According to the South African Airways records, 3 974 passengers were refused boarding because they could not produce unabridged certificates for the minors they intended to travel to South Africa with. If one extrapolates this to all airlines, the number goes to 13 246 passengers who were denied boarding[37]. Thousands of other tourists who had already pre-paid to travel to this country just cancelled their trips, while other potential tourists changed their plans and redirected their holiday travelling to other jurisdictions with better visa regulations[38].

Tourism is very important for the socio-economic wellbeing of South Africans. Cyril Ramaphosa, who was elected as the president of the Republic on the 15th February

32 Interview with the CEO of corporate and investment banking.
33 Interview with the director based in a niche consultancy focusing on risk management in Africa.
34 Interview with the executive member based in an airlines’ association.
35 Interview with the regional director based in a continental business travel association.
36 Interview with the chief financial officer of a South African based-entity responsible for tourism.
37 Interview with the general manager based in a regional car rental association.
38 Interview with the managing director of a regional hospitality association.

2018 mentioned this in his state of the nation address in February 2018[39]. The president reported that tourism had created and was sustaining 700 0000 direct jobs in South Africa. This means that there were other jobs that were indirectly created by tourism in the value chain. He asserted that there was no reason why the number of jobs created through tourism could not be doubled. The truth is there were several plausible reasons why those jobs could not be doubled. One of the things was the rigid visa regime[40]. It seems President Ramaphosa recognised that because a few months later, he announced that South Africa's visa regime should be changed to make it easy for tourists and businesspeople to travel to the country. He mentioned this as part of his stimulus economic package[41]. Indeed, a few days later, the Minister of Home Affairs, Malusi Gigaba, announced some changes to visa regulations.

While Ramaphosa's heart had been in the right place regarding some of the changes that had to be made to stimulate economic growth, one constantly felt that his ministers sabotaged him. The researcher does not think that this was intentional because most of the ANC's government ministers had never run businesses or held jobs outside of politics and they did not really appreciate how an economy works. They were also products of nationalism as a political ideology. The word nationalism has an apartheid connotation in South Africa due to the National Party which sponsored and implemented apartheid. Due to this, the best way of describing most ANC politicians would be to say that they are social democrats with somewhat of a leaning towards socialism. The researcher is saying this as a prelude to what was perceived by analysts and practitioners in the tourism industry as Gigaba's reluctant visa's reforms. The biggest expectation that the minister was expected to deliver was the eradication of the unabridged certificate requirements.

Unfortunately, the minister made a half-hearted, confusing announcement:

*"Travel reforms will include amendments to regulations applying to foreign minors travelling to South Africa, visa waivers and relaxation of visa requirements for certain*

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[39] Analysis of state of the nation address by the president of the republic of South Africa, Mr. Cyril Ramaphosa, 16th February 2018

[40] Interview with the head of strategy at one of the oldest insurers in Africa.

[41] Analysis of statement delivered by President Cyril Ramaphosa on economic stimulus and recovery, 21 September 2018.

*countries. The key changes will be that rather than requiring all foreign national travelling with minors to carry documentation proving parental consent for the travelling minor to travel, we will rather strongly recommend that travellers carry this documentation. Our immigration officials will only insist on documentation by exception – in high-risk situations – rather than for all travellers, in line with practice by several other countries"*[42].

This announcement dampened the spirits of those who were largely involved in the tourism sector and led to mixed reactions. The above message merely served to confuse travellers[43].

The minister was criticised for partially retaining the requirement that foreigners who were entering South Africa should produce documentation proving parental consent. A managing director commented: *"Truly speaking, nothing has changed as far as we have noted. You cannot have a tourist all the way here from America, Europe or elsewhere abroad just to be questioned at the airport as to whether they are in possession of an unabridged birth certificate or not. It's either these documents are required or not; there should be no ambiguity – otherwise it creates grey areas and unnecessary policy uncertainty"*[44]. The South Africa government has crafted laws that are self-destructive and counterproductive – *"this has been tantamount to shooting one's foot.*[45] Most tourism practitioners deemed Gigaba's visa regulations amendments as additionally confusing rather than a solution that would increase more visitors to the country and facilitate job creation in the tourism sector and its entire value chain.

This view was supported by a chief economist: *"Prior the outbreak of the Coronavirus pandemic, South Africa had around 2.6-million long-haul tourists per annum, much lesser to the 9-million tourists who travelled to Australia. The Australians had attracted tourists from China fifteen times more than us. Same applies Indian tourists – their numbers to Australia have increased substantially while at the same time declining in South Africa. It was very apparent that rigid visa requirements were*

[42] Analysis of the statement by the minister of Home Affairs, Mr. Malusi Gigaba MP, at the media briefing on visa-related reforms in Pretoria on 25 September 2018.
[43] Interview with the executive chairman of public affairs consultancy.
[44] Interview with the regional director based in a continental business association.
[45] Interview with the executive chairman of a public affairs consultancy.

*working against us"*[46]. Thailand is another country that has attracted a large number of tourists, over 36-million per year. They achieved this by making it easy for foreign travellers to enter their country, and the spinoffs to their economy are massive. With the right public policy, South Africa can attract far more tourists than the number who visited the county before the Coronavirus outbreak. It can be done.

The immigration public policy improved after Dr. Aaron Motsoaledi became the Minister of Home Affairs on 30 May 2019. He decreed that travellers who enter South Africa for holidays, and business-related purposes from New Zealand, United Arab Emirates, Saudi Arabia, and Qatar, would no longer be required to have visas with effect from 15 August 2019[47]. This measure went a long way in clearing the bureaucratic mess which deterred tourists, entrepreneurs, businesspeople, and skilled labour from entering the country. Travelling and immigration for both pleasure and business are an essential part of contributing to inclusive growth in South Africa.

What is also crucial is the amendment of the scarce skills list which was approved by the Department of Home Affairs under the political leadership of Minister Motsoaledi. This time around the aforesaid list was topped by managers – people skilled to run complex enterprises[48]. It was expected that after the relaxation of the Covid-2019 pandemic related lockdowns, Motsoaledi's visa regulations would pay off.

The next section and subsections deal with the categories which address the impact of rigid laws and their sub-categories.

### 5.2.2 Rigid Labour Laws Deter Reindustrialisation

The sub-categories related to this finding appear in Table 5.1. The minimum wages regime discourages foreign direct investment; labour laws contribute to volatility at the workplace; labour laws encourage prolonged and violent strikes; and collective bargaining discourages direct investment. Each of these subcategories is discussed in detail in the next sub-sections.

[46] Interview with a chief economist based in a bank-owned asset manager.
[47] Analysis of the statement by the minister of Home Affairs regarding the implementation of visa waivers. for four countries which are among the big tourist sending nations, 15 August 2019.
[48] Analysis of list of scarce skills in South Africa in 2020.

#### 5.2.2.1 Minimum wage regime discourages Foreign Direct Investment

Stakeholders in the national economic development and labour council (NEDLAC) which included business, labour, and government[49] signed the national minimum wage agreement. Organised labour had been advocating for a unified national minimum wage since the ushering of democracy in 1994. The minimum wage regime came into effect on 1st January 2019 after the introduction of the National Minimum Wage Act of 2018. The legislation had stipulated a minimum national hourly rate of R20, and monthly rate of R3500. These rates would be reviewed and increased annually by the national minimum wage commission. The consequence of the introduction of the Act was that all the previous minimum wages which were governed by sector determinations would fall away if they were less than new rates determined by the commission.

In some economies and political circles, minimum wages have been viewed as essential interventions for labour protection and wage support. In the philosophical world, a minimum wage regime, goes part of the way to mitigate against income polarisation.[50] Consequently, many countries have adopted some form of minimum wage legislation as a standard instrument of labour market public policy. The debate and consideration of this kind of intervention is increasing in developed countries where inequality is increasing unabatedly. Other than the introduction of minimum wage legislation, the rich and better paid earners are being taxed more. A minimum wage is not a totally new invention in South Africa; there have been a few sectorial wage determinations. Local public policy formulators believed that the implementation of the minimum wage legislation would increase the wages of millions of working-class people. After this legislation came to effect at the beginning of 2019, some employers reduced the hours on individual workers to avoid paying higher wages[51].

There is some evidence that the minimum wage regime has contributed to the worsening unemployment in South Africa by excluding those who are outside the labour market. It is also a deterrent to foreign direct investment[52]. Even before the national minimum wage was introduced, a once-off sectorial determination increase

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[49] Analysis of Nedlac's agreement on the introduction of national minimum wage of 2017.
[50] Interview with a professor and head of macro-finance analysis at a university.
[51] Interview with the professor of economics.
[52] Interview with the managing executive of a recruitment firm.

in agriculture in 2013 led to large job losses. This should have served as a warning against passing a national minimum wage legislation because consequences could be very severe in sectors where large numbers of part-time labourers can easily be laid-off or where there is a high potential of capital substitution[53]. Inasmuch as the minimum wage public policy can benefit low-paid workers, it also carries the threat of massive job losses. One wonders if the governing politicians really care about this, since South Africa has sacrificed jobs for expediency from the inception of the new democratic dispensation.

Minimum wage public policy can be a punishment to the poor as it prevents them from accepting payment below the bar set by organised labour and government[54]. Various business associations have made it clear that people in this country are unemployed because of the minimum wage public policy requirement. This policy also pushes up the price of labour artificially. This leads to less demand of labour – this is the law of supply and demand and has nothing to do with power dynamics and oppression of the working class. The law of demand, supply, and prices constitutes the basis of economics. *"This is how the real world operates; the sooner some ANC leaders and those of its alliance partners come down and live in a real world, the better. There is a large gap between their thinking, public policy formulation, and reality on the ground"[55].* Once prospective employers realise that the cost of acquiring new labour exceeds their perceived utility, they would choose not to do so. This notion is even more prevalent when it comes to unskilled labour.

It is startling to note that, when the National Minimum Wage Act of 2018 came into effect, South Africa's official unemployment rate was at 27.6, or 38% if one includes those that have given up on looking for jobs. Surely this kind of legislation was counterproductive. At the end of the first quarter of 2020, the official unemployment rate had increased to 30.1%, while the expanded rate went up to 39.7%[56]. These numbers did not reflect the devasting impact of the lockdown implemented by the government to mitigate spreading the coronavirus. What the above-mentioned unemployment percentages mean is that there were 10.8-million unemployed people

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[53] Interview with the head of risk management based in a management consultancy.
[54] Interview with the chairman of a free market economic policy advocacy institute.
[55] Interview with the director based in a clothing related non-profit organisation (NPO).
[56] Analysis of data on Stats SA's website.

in South Africa by the end of March 2020. Between December 2008 and March 2020, the number of unemployed has increased by 4.9-million persons, mostly black Africans. The same trend was applicable to unemployment; 44% of black Africans were unemployed.[57]

The minimum wage regime does not make it easy for these people to get jobs. If one is desperate to sell any product or service, it would not be wise to increase the price. In this case it is labour that is being sold. It is not just mere bad luck that there is such high unemployment in South Africa. These are the consequences of poor public policy. The minimum wage regime adds to rigid labour laws which deters local and foreign direct investment into the economy. For those living in abject poverty, upward social mobility is not easy, and it gets worse when the government passes laws that add  stumbling blocks to getting employment.

By May 2019, the economy was starting to show the strain caused by several factors, including the implementation of the national minimum wage regime. Numbers produced by Stats SA in the first quarter of 2019 showed that the economy has shed many jobs since the implementation of the minimum wage public policy. Those who lost their jobs include 15 000 domestic workers. An economist asserted: *"The introduction of national minimum wage was premised on faulty economics. It will worsen the hardship among those who live in grinding poverty, and retrenchments and unemployment will increase. The biggest weakness of this public policy is that it doesn't distinguish between rural and urban employers, and thus it imposes the same minimum rates. This would have devastating effects to the rural economies. As they say, history repeats itself. The same mistake was done in 1995 when the government passed the Labour Relations Act. The prescripts of this law stipulated that collective bargaining should be centralised, and that spelled a death knell to the South African textile sector"*[58].

By the end of 2019, it had become apparent that the minimum wage regime had started to eat jobs away. The new referrals related to the implementation of minimum wage legislation had increased labour for the Commission for Conciliation, Mediation

[57] Interview with an economist based in an independent development economics centre.
[58] Interview with an economist based in a private research house.

and Arbitration (CCMA) by just over 25%[59]. There were more than 19 500 referrals in 2019 pertaining to the minimum wage public policy and the Basic Conditions of Employment Act. This jobs bloodbath stretched the CCMA. Whereas technology has replaced some workers, retrenchment of workers between the beginning of January 2019 and March 2020 was mainly attributable to the implementation of the minimum wage legislation and the poor state of the economy. After March 2020, the Covid-19 pandemic and the lockdowns enforced by government compounded the retrenchments and increasing joblessness[60].

Moreover, businesses are steadily adopting mechanisation, automation, and digitisation due to minimum wage requirements, other rigid labour relations legislation, poor economic conditions, and the advancement of technology. This was exacerbated by the lockdowns; most employers realised that they could do with fewer personnel[61] which will lead to an era of unprecedented joblessness. The best way the government can mitigate against the envisaged bloodbath is to deregulate labour relations and repeal the National Minimum Wage Act of 2018[62].

An economist has noted that, despite incredible real increases in minimum ages in eight sectors which have around 4.5-million workers, this did not improve the quality of life for the working class[63]. There had been no upward mobility, and inequality and poverty levels remained unchanged. If the truth be told, the minimum wage legislation is not the correct tool for these problems. For example, the government used the minimum wage public policy in the agricultural sector to solve welfare problems faced by workers, but the upshot of this was the loss of jobs by most of those workers. ANC politicians have a tendency of solving problems by creating bigger problems. The implementation of minimum wage legislation should not be viewed as a panacea of welfare challenges. It is a weak public policy instrument and should repealed.

While paying attention to the National Minimum Wage Act of 2018, we should not forget the implications of Basic Conditions of Employment Act of 1997 which also impacted hours worked and overtime payment. Again, this is one of the pieces of

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59 Analysis of 2019/2020 CCMA annual report.
60 Interview with a lecturer of economics based in a university.
61 Interview with an executive of manufacturing association.
62 Interview with the CEO of a global entrepreneurship network.
63 Interview with the head of policy on global services and manufacturing research in a university.

labour legislation passed to offer workers more rights, but without consideration of its effect on the reindustrialisation programme, overall inclusive economic growth, and job creation. This Act empowers the minister responsible for labour and employment to determine a salary threshold periodically. By March 2023, employees who earn equal to or below the threshold of R241 110.59 per year or R20 093.00 per month were wholly protected by the minimum conditions of employment that are stipulated in the Act.

The following provisions in the Basic Conditions of Employment Act of 1997 are relevant to this study[64]. They include a limit on the number of hours that an employee is permitted to work; overtime pay, and Sunday and public holiday pay; compressed working weeks; and rest periods. The Act also prescribes limitations on the hours an employee can work in a day and week. Some of the protections provided to employees who are paid below the threshold relate to overtime pay. An employee earning below the threshold should not work more than three hours' overtime per day or ten hours overtime per week. For each hour of overtime worked, the employer must pay the employee one-and-half times the employee's standard hourly rate.

For work done on Sundays, persons who earn below threshold and do not routinely work on Sundays are eligible to be remunerated double what they usually earn. For working on public holidays, employees are entitled to be paid double what they normally earn. The researcher is personally not against workers being afforded some rights, but public policy should compel them to play their part in terms of regular attendance to work, and maximum productivity.

#### 5.2.2.2 Labour laws contribute to volatility at the workplace

In South Africa, most employers have experienced significant abuse of sick leave by their employees.[65] Some of these workers would just stay away from work and later produce a dubious medical certificate (sick note) as evidence of their condition. Despite possible doubts, most employers feel obliged to accept the medical certificate. The abuse of sick leave should be attributed to the culture of entitlement which is very entrenched in South Africa[66]. We also have a labour related public policy regime which

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[64] Analysis of Basic Conditions of Employment Act.
[65] Interview with an executive vice-president of a global chemicals and energy company.
[66] Interview with the executive director based in a policy research and advocacy organisation.

is skewed to favour employees at the expense of productivity at the workplace and the creation of inclusive growth.

The researcher has no doubt in his mind that the framers of our Constitution did this to restore dignity to workers after many years of oppression. Section 23 of the Constitution of the Republic declares that all South Africans and those who work in South Africa have the right to fair labour practices[67]. Some of these rights are contained in the Basic Conditions of Employment Act of 1997[68]. Each employee is entitled to sick leave from the day they start employment. The Basic Conditions of Employment Act provides this right and allows a worker to prove their incapacity by submitting a medical certificate signed by a medical practitioner. However, some employees have developed a pattern of taking frequent sick leave even when they are not sick.

Some employers only require an employee who claimed to have been sick to produce a medical certificate if they have absent from work for more than two days. Again, this has opened the way for massive abuse: *"For example, an employee would claim to be sick and doesn't go to work on Monday and Tuesday. He will then go to work on Wednesday and don't have to submit a sick note from the doctor to prove his indisposition. He will then stay away from work on Thursday and Friday, claiming to be sick, and he doesn't have to submit a sick note"*[69]. It is also easy for one to get a fraudulent medical certificate from unscrupulous medical practitioners who are more interested in getting some money. Employers are held hostage by the submissions of medical certificates and do not have any quick recourse from the public policy. Of course, an employer is entitled to question the veracity of a medical certificate or to reject it. An employer can also request a detailed medical report. However, this may require a lengthy process, and it is usually time consuming[70].

The abuse of sick leave is rendering productivity in South African organisations inadequate. The situation has become troublesome, and it has been reported that around 40% of fulltime employees take leave of absence on the pretext of being sick.

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[67] Analysis of the Constitution of the republic of South Africa.
[68] Analysis of the Basic Conditions of Employment Act.
[69] Interview with a CEO of a mining company
[70] Interview with a senior credit risk monitoring manager based in one of the big five banks in South Africa

*“Patterns that have observed by employers are that employees tended to take-off Fridays and Mondays so that they can have long weekends under the disguise of being sick. This is really sickening and productivity suffers”*[71].

After 30 years of democracy, one would have expected the situation to improve through proper public policy, but the opposite is true. Recent developments in public policy indicate that the government is more interested in pleasing the trade unions at the expense of factory floor productivity, reindustrialisation, and rapid overall economic development. Nevertheless, 2018 saw a number of changes in the labour related legislation front. President Ramaphosa signed the National Wage Act into law as well as the Basic Conditions of Employment Amendment Act, Labour Relations Amendment Act, and Labour Laws Amendment Act. The researcher has already analysed aspects of the National Minimum Wage of 2018 in the preceding paragraphs, and the analysis of the Labour Relations Amendment Act is presented in the next subsection.

The Basic Conditions of Employment Amendment Act of 2018 and the Labour Laws Amendment Act of 2018 contain a number of additions to the existing legislation. With regard to the leave of absence, employees are granted a more generous dispensation for parental leave as follows[72].

- Ten uninterrupted days’ parental leave is provided when a child is born or adopted. If the adopted child is below the age of two, ten uninterrupted weeks’ adoption leave must be provided. If the adoption involves two parents, one may apply for parental leave and the other is eligible to request for the adoption leave.
- The right to claim the payment of parental benefits or adoption benefits is allowed as is applicable.
- Ten weeks of commissioning parental leave is provided to workers who are expecting a child via a surrogate mother. Only one parent can qualify for this leave while the other is eligible to apply for the parental leave.

Other than these legislative provisions contributing to volatility at the workplace due to high employees’ absenteeism from the workplace, this kind of public policy has

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[71] Interview with a CEO of a mining company.
[72] Analysis of Basic Conditions of Employment Amendment Act, and the Labour Laws Amendment Act.

contributed to the investment apathy towards South Africa and is counterproductive to reindustrialisation[73]. These laws have encouraging employers to resort to mechanisation, automation, digitisation, and doing everything possible to reduce their staff compliments.

#### 5.2.2.3 Labour laws encourage prolonged and violent strikes

Before the 1994 democratic dispensation, South Africa's labour relations regime was characterised by lengthy and violent strikes. This should be attributed to the violent and oppressive nature of the apartheid state. Unfortunately, this trend continued after the ushering in of a democratic dispensation. One of the factors causing such strikes has to do with the poorly crafted labour relations public policy. In Chapter 8 of this thesis, the researcher proposes what must be done to improve legislation regarding this.

South Africa's labour relations are under extreme pressure, and industrial actions have marred by increasing violence during the last decade. In 2012, the platinum mines in Rustenburg were rendered dysfunctional, as illegal strikes became violent. This culminated in what is famously known as the Marikana tragedy. At that time, 34 Lonmin mineworkers were brutally killed and seventy-eight miners were injured on 16th August 2012 by members of the South African Police Services (SAPS) who were trying to restore law and order. Some media commentators, media outlets, and politicians have referred to this tragedy as a massacre. Prior to this tragedy, however, some of the mine workers who were embarking on a wildcat strike murdered two police officers, two security guards, and six fellow mine workers. The striking workers were members of the Association of Mineworkers and Construction Union (AMCU).

Before the police got involved in the Marikana strike, there was violence among members of two major unions, AMCU, and the National Union of Mineworkers (NUM). AMCU members were in support of the illegal strike while NUM members wanted to continue with work. The Marikana strike in general, and the resulting tragedy highlighted the crisis weighing down labour relations in South Africa. A managing director has observed that prolonged and violent strikes have intensified, post-

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[73] Interview with the CEO of a mining company.

apartheid[74]. He had however observed that there was a decline of strikes between 1995 and 2003. He blamed poorly formulated labour relations laws as well as employers for acceding to workers' demands after they embarked in violent actions. As revealed by a union leader, a membership survey found that most respondents believed that violence was an effective tool during strikes[75]. There appears to be a growing belief among the working class and the disaffected that the quickest way to be taken seriously by authorities both in private and public sectors is to destroy infrastructure and burn down facilities – including classrooms in learning institutions, libraries, and community halls.

The dominant factor in prolonging strikes and triggering violence has been wage disputes[76]. The working class in South Africa usually demand that their salaries should annually increase beyond the inflation rate. However, due to high operational costs, price competition, and shareholder dividend expectations, executives are normally not keen to increase workers' salaries above the inflation rate. One of the concerns among employers is that annual salary increments in South Africa do not correlate with productivity. Local unionists and socialists have adapted this model from Brazil, where the national minimum wage is determined by the average of two past years' increments of GDP, and last year's inflation rate[77]. Interestingly, unions in South Africa do not include the GDP's increase as determining the percentage of their annual salary raise. This omission is deliberate, because unions know that the local economy rarely grows, and this would work against them[78].

If there is inflation, the price of goods and services go up. This occurrence is called the Consumer Price Index (CPI) (Jamil, 2022). The CPI increases over a short period of time, between six and eight months. If the CPI goes down, then there is deflation and prices of goods and services decrease steadily. In reality, the CPI does not gauge changes in consumer prices, rather it measures the cost-of-living. In other words, the CPI measures the percentage change in the price of a basket of services and goods consumed by a household. This means that if consumer prices rise, and households

[74] Interview with the managing director of a private equity firm which invest in the mining sector.
[75] Interview with a president of a trade union which operates in resources sector.
[76] Interview with a head of strategic clients based in a diversified financial services conglomerate.
[77] Interview with a deputy general secretary of a political party.
[78] Interview with an executive head of stakeholder affairs based in a public mining company.

substitute products, the CPI formula would not be a reliable instrument for measuring inflation because in this instance it would not report the increased prices.

The reason why workers demand annual salary increments that are above the Consumer Price Index (CPI) is because sticking to the inflation rate would not yield what they consider to be living wages[79]. They also argue that items that consume most of their wages annually increase far more than the inflation rate; these include transport, food, medicine, school fees, and electricity. According to unionists, the CPI does not properly portray the living expenses of the working class. Thus, a few more percentage points should be added on top of the inflation rate to determine fair annual salary increments for the blue-collar employees[80]. However, if employers were just to simply agree to workers ridiculous annual salary demands, the wellbeing and sustainability of their companies would be severely threatened. These fundamental differences lead to prolonged and violent industrial actions. Some of the prolonged strikes in South Africa after the 1994 democratic dispensation include the following:

**Public servants strike in 2007**

Hundreds of public sector employees participated on a four-week industrial action. This had a major impact on hospitals and schools, where patients and learners were largely left unattended. The striking public servants were demanding a twelve percent salary increase, but they ended up settling for seven percent[81].

**Public servants strike in 2010**

In July and August 2010 public sector workers embarked on a major strike. Trade unions representing employees demanded a salary increase of 8.6 percent, and an additional R1000 housing allowance backdated to 1st April 2010. The Department of Public Service and Administration, representing the government, and the unions representing around 1.3-million workers, eventually agreed to a 7.5-percent increase[82].

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[79] Interview with an executive coach and director of companies.
[80] Interview with general secretary of one of the biggest private sector trade unions.
[81] Interview with a lecturer of strategy management based in a postgraduate school of public management.
[82] Ibid.

**Marikana strike in 2012**

The researcher has referred on this strike on the preceding paragraphs. This wildcat strike resulted in a major tragedy. Mining houses, Lonmin, Anglo American Platinum (Angloplat), and Impala Platinum (Implats), helped by the SAPS, displayed a resolute attitude against the striking platinum mineworkers. Workers, carrying traditional weapons, showed aggressiveness and charged towards police officers which resulted in a violent clash between police officers and mineworkers. Workers first downed tools on the 10th August 2012 and by the time the strike ended on 20th September 2012 forty-five people had lost their lives. The wildcat strike was initiated by rock drillers who were demanding to be paid R12 500 per month. This figure was equivalent to tripling of their monthly wages[83].

**Harmony's Kusalalethu mine strike in 2012/2013**

This illegal strike started in December 2012 and ended in February 2013 leading to this gold mine being closed for two months[84]. Workers forfeited their wages when the violent strike was raging due to the no work no pay policy and were locked out of hostels. The strikers stopped working on 20th December 2012 demanding the reinstatement of about 580 mineworkers who were suspended for participating in an illegal and unprotected strike in October 2012. The strike was led by AMCU and violence was fuelled by the rivalry between this union and NUM. In January 2013, Harmony responded by issuing retrenchments notices to the striking workers. An agreement between the unions and the employer was reached in mid-February 2013, and workers returned to work. After the strike, many mineworkers dumped NUM for AMCU.

**Platinum belt strike in 2014**

On 23rd January 2014, about 70 000 platinum mineworkers downed tools. This strike affected three mining companies, AngloPlat, Implats, and Lonmin. Mineworkers were demanding a basic wage of R12 500. This strike was the most prolonged

[83] Interview with the managing director of a private equity firm which invest in the mining sector.
[84] Ibid.

industrial action in the South African history and went on for five months. In the end, mineworkers settled for a modest wage increase spread over a three-year period. It cost workers earnings of about R10.6-billion and the mining companies lost about R24-billion in revenue. Moreover, the employer spent around R2.4-billion on overheads for mines that were closed during the industrial action. Several companies in the value chain were also hit hard by this strike. Some of these enterprises lost revenue and had to retrench employees.

The country's GDP contracted in 2014 because of the drop in mining production[85]. This was the first time the GDP tanked since 2009. International credit rating agencies, Fitch Ratings, and Standard & Poor downgraded South Africa's outlook. In its report, Standard and Poor cited the devastating effect of the 2014 platinum strike. This strike made it very clear that South Africa's labour relations legislation encourages prolonged strikes. The country lacks public policy which empowers the government or judiciary to exercise strike-breaking powers.

**Pikitup strike in 2016**

Refuse removal workers in the City of Johannesburg entity, Pikitup downed tools in March 2016. Garbage in townships and suburbs was not collected for just over three weeks which piled up, causing inconvenience to households and organisations. One of the biggest concerns was the potential health hazards caused by rotting uncollected garbage[86].

**AMCU strike against Sibanya-Stillwater in 2018/2019**

This prolonged strike lasted for months, starting on 21st November 2018 and ending on 17th April 2019. The strike was about an agreement reached with other unions besides AMCU. AMCU was opposed to the three-year salary agreement that Sibanye-Stillwater signed with NUM, Solidarity, and the United Association of South Africa (UASA). This allowed for wages to rise by R650 for the initial year, R700 for the second year, and R825 for the last year. AMCU'S demand was for the minimum pay

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[85] Ibid.

[86] Interview with a lecturer of strategy management based in a postgraduate school of public management.

increase of R12 500 with R1000 raise for three years. When the employer, under the leadership of the CEO, Neal Froneman, refused to budge, AMCU members downed tools.

Members of other unions were prevented from going to work, the strike was characterised by violence, nine people were murdered and more than 60 houses of NUM members were burnt. The strike was devastating to Sibanye-Stillwater production; output was reduced by 11 000 ounces and the company lost over R1.6-billion in revenue. The work stoppage also thwarted Sibanye-Stillwater endeavours to reduce its debt. Due to this prolonged strike, South Africa's production of precious metals plunged substantially.

In a clear victory for Froneman, Sibanye-Stillwater's CEO, AMCU agreed to sign the same three-year wage agreement which was signed by the other three unions. Again, the biggest losers were the ordinary mineworkers who were AMCU members. Because of no work no pay policy, they spent five months without any income. It will take AMCU's members fifteen years to recover their lost wages. The irony is that the mines they work for also have an average of fifteen years lifespan left. This means that employees who embarked on the prolonged strike are net losers[87].

Working conditions and union rivalry are the other major causes of violent strikes in South Africa[88]. Competition between trade unions has led to exorbitant demands and an uneven approach between the trade unions in their endeavours to improve workers welfare. Each union wants to appear to be doing more for the workers; in the process, employers are confronted with unreasonable and economically unaffordable demands. This has led to trade unions becoming more radical, political and violent. Trade unions in South Africa appear to have forgotten that their primary mandate is to advocate for the improvement of workers welfare within an economically sustainable business environment[89].

Perfect examples of trade unions who operate in the same sector and have become arch enemies are AMCU and NUM[90]. These unions use different strategies to advocate for the welfare and benefits of their members. Because of its experience

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[87] Interview with a managing director & principal mining engineer in a mining consultancy.
[88] Interview with a senior financial services lawyer.
[89] Interview with an investment specialist based at an independent actuary and financial consulting firm.
[90] Interview with a mining manager in a mining consultancy.

in the mining sector, NUM is more reasonable and diplomatic in its dealings with the employers. AMCU, on the contrary adopts a confrontational and para-militaristic stance towards the mining houses. Its demands are mostly often ridiculously exorbitant.

In July 2013, gold mining houses represented by the Chamber of Mines of South Africa proposed a salary increase of five percent. On the other side of the negotiation table, mine workers were represented by AMCU and NUM. NUM rejected the offer outright, declared a deadlock, and demanded a wage increase of 60% for the most junior gold miners. AMCU responded by making a counterclaim of 150% wage increase[91]. Both proposals from the two trade unions were absolutely ludicrous, but it is very telling to observe that the two trade unions chose two different approaches to negotiate for workers who work in the same sector. Is it not astonishing to observe that AMCU proposed an increase of 150%? The different approaches around the negotiation table between trade unions is a major weakness for the working class because it allows employers to use the divide and rule tactic.

As a way of retaining current members and attracting new ones, each union tables different proposals during negotiations with employers. They also tend to be outrageously militant towards their employers. When employers do not accede to their demands that are not commercially sustainable, they embark on lengthy and violent strikes. This violence is targeted towards fellow workers who choose to continue working, security personnel of the employer, members of the opposite union, and employer's and public infrastructure. Vehicles and shops owned by private persons and businesspeople who have got nothing to do with the strike but are in the vicinity where the striking workers are protesting are sometimes damaged and public streets are sometimes trashed. The saddest part of union rivalries in South Africa is that their violent skirmishes sometimes lead to loss of lives. The working class can sometimes be their own worst enemy.

One of the factors that leads to lengthy strikes is that some employers accede to unaffordable demands once workers embark on violence [92]. Other companies and government can learn from Sibanye-Stillwater on how to reduce unions' destructive

[91] Interview with the managing director of the private equity firm which invests in the mining sector.
[92] Interview with an executive chairman in a private investment firm.

stronghold to the South African economy. Trade unions know that they cannot play mind games with Sibanye-Stillwater's CEO, Neal Froneman and his executive team. Froneman has demonstrated how to refuse acceding to ridiculous demands from organised labour. Unions should not be allowed to control major socio-economic issues in this country.

One of the mistakes made by platinum producers after the 2014 platinum belt strike is that they agreed not to pursue criminal charges against mineworkers who were suspected of violence. Lawlessness thrives where there are no consequences[93]. Entitlement, greed, and consumerism are also major contributors to lengthy and violent strikes. These include the lefts' and nationalists' campaigning for wealth redistribution to mitigate inequality. It is the researcher's considered view that policy makers, corporate South Africa and trade unions should put more effort into on poverty reduction instead of inequality. While the reduction of poverty is achievable, you cannot do the same to inequality – it is a bottomless pit. The researcher agrees that inequality has the potential to destabilise our social fabric. Having said that, he would hasten to indicate that the biggest problem in South Africa is poverty. Instability in this country is caused by three evils – sense of entitlement, greed, and consumerism. Whereas our counterparts in most African countries are preoccupied with production and self-sustenance, people in South Africa expect the government to provide them with free services and the private sector to redistribute the wealth freely to them.

Some unionists and leaders have attributed the escalation of labour relations violence in South Africa to the perceived low wages, mainly in the mining sector. The researcher disagrees with this notion because South African mining workers are paid fairly well compared to their counterparts worldwide. One of the big mining houses in South Africa, Exxaro, made provision for its workers to get some shares within the company. Some of the shares disbursed to each employee were cashed-in and the average amount received by each employee was roughly R135 000. Yet, within few months of getting the shares and money, miners embarked on a strike, grumbling about their living conditions and demanding better pay.

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[93] Interview with a head of risk management based in a management consultancy.

Even after receiving share-ownership, employees still felt entitled to more wealth redistribution. Interestingly, their expectations for more redistribution of wealth were not complemented by more productivity on their part. Most of the cash that was received was apparently used to buy luxury cars. In a normal society, you would have expected these miners to use their cash to build their homes, educate their children, and save some money. Regrettably, in a society where greed and consumerism rule, this would not happen.

Some people were very concerned by the continuation of the 2014 platinum mining strike. The socio-economic impact of that strike would be felt for many years to come[94]. Most platinum mineworkers were retrenched. How do you embark in such a lengthy strike when your sector is already on its knees in terms of sustainability? Mineworkers who did not lose their jobs will reach retirement without having recovered lost wages due to the 'no work no pay' policy. If Lonmin, AngloPlat, and Impala Platinum succumbed to the ridiculous demands of the striking workers, it would have set a very bad precedent. It was also good that Sibanye-Stillwater refused to accede to AMCU's exorbitant pay demand. Otherwise, this would likely have led to many strikes by workers in other industrial sectors demanding R12,500 per month for entry level employees. This kind of wealth redistribution would not be feasible. How do you increase wages excessively while the production levels remain the same for years?

To put an end to the crippling platinum strike, producers moved closer to the demands of the union by offering to pay entry-level underground miners R12 500 cash remuneration by 2017. This would have translated to R17 500 cost to company for the lowest-paid underground workers per month. One would have thought AMCU would have agreed to this generous offer, but they demanded more money; R1 050 a month and the platinum producers objected to this demand. This undoubtedly shows that pursuance of closing the wealth gap is not attainable, but the more wealth is redistributed, the greater the demands. Other than the platinum and gold mining workers, the government lost a lot in terms of corporate and personal income taxes.

By the time the 2014 platinum belt strike took place, Impala Platinum had already mechanised production in some of its mines, including the Mogalakwena

[94] Interview with a managing director of financial services advisory firm.

mine[95].During the next few years, mining houses will mitigate outrageous pay demands by employing highly skilled labour, mechanisation, and automation. This will see thousands of mineworkers on the streets without jobs. We cannot lay the blame for inequality on all these, but rather those three evils: sense of entitlement, greed, and consumerism.

Even the Marikana tragedy, where forty-five people lost their lives had much more to do with consumerism than low wages. Most mineworkers were living beyond their means and were highly indebted to loan-sharks who were charging them excessively high interest rates. Wage increases would not necessarily have solved the problem and could even lead to more debt.

In his 30-year career in academia, private business, and public and private sectors, the researcher has observed in many workplaces how people have become victims of consumerism. It is generally the needy and previously disadvantaged employees who put on branded clothes and glamorous hairstyles. While people who come from upper-middle class go to work from their homes with lunch boxes, the previously disadvantaged will spend their money on unhealthy fast-food.

Analysts and leaders in various spheres should embark on initiatives to teach our people about values, financial management, and living within one's means. For South Africa and its people to prosper, we need more productivity and the creation of new wealth to reduce poverty. There are no simple solutions and not all of us will be as rich as Patrice Motsepe and Nicky Oppenheimer.

It is very clear from the preceding paragraphs that no one really benefited from the lengthy and violent strikes except the union bosses. Even the boost to the egos and popularity that the union bosses get is temporary[96]. The wage increases that unions win after lengthy strikes are usually followed by job losses. Between 2007 and 2017, South African mining output decreased by eight percent and mining employment fell by six percent. In contrast, Australia's mining output increased by seventy percent and its employment grew by thirty-four percent. Chile's mining output rose by two percent in the same period with its employment increasing by forty-two percent. During the 2018/2019 gold mining strike at Sibanye-Stillwater, some AMCU members left their

[95] Interview with the managing director of a private equity firm which invest in the mining sector.
[96] Interview with a CEO of a mining company.

union and joined NUM. Instead of entrenching AMCU's place in the mining sector, the five-month strike diluted the radical union and handed its counterparts a peculiar kind of victory.

In the long term, trade unions will lose more members due the increased use of advanced 4IR technologies[97]. In effect, most of Cosatu's affiliates are now in the public sector, but union membership will also decline in the public sector in the future. Consequently, unions should work with employers to grow companies they work for. In the process South Africa's economy will reindustrialise and there will be inclusive economic growth. This is also applicable to employees in the public sector who have an important role to play in economic development. Furthermore, the economy cannot grow if the public sector is constantly incapacitated due to endless strikes. The public sector provides and manages infrastructure such as energy generation plants, power and water distribution networks, airports, harbours, railway lines, roads, etc. This infrastructure is critical for economic development and the socio-economic wellbeing of South Africans.

South Africa should tighten its labour relations legislation to curb prolonged debilitating lengthy strikes. As part of preventing the loss of lives, injuries, and damage to property from violent strikes, a declaration was signed by parties to NEDLAC in 2014 which has yielded a code of good practice: collective bargaining, industrial action, and picketing. This code was gazetted and signed by the minister responsible for labour on 12 December 2014 and it became effective on 1st January 2019. The code committed all parties to work towards collective bargaining, proper conduct during negotiations, timeously submitting demands, avoiding engaging in violent strikes, and participating in appropriate picketing arrangements before embarking on full-blown strike action.[98] This was a step in the right direction. However, this code of good practice has not practically been effective in curbing violent strikes. Since then, we have witnessed the blocking of roads, burning of trucks, and destruction of property during labour strikes.

Prior to the signing of the code of good practice: collective bargaining, industrial action and picketing by parties to NEDLAC, President Ramaphosa signed the Labour

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[97] Interview with a chief geologist based in a gold mining company.
[98] Analysis of NEDLAC's code of practice: collective bargaining, industrial action and picketing.

Relations Amendment Act towards the end of 2018. The Act came into effect on 1 January 2019. This legislation was aimed at curbing violence during strikes through the following salient provisions:[99]

- The introduction of arbitration awards with the aim of settling strikes and lockouts when parties are failing to reach an agreement. This is done to ensure that workers would not use violence as a tactic to reach their preferred outcome in the event of such a stalemate.
- The requirements that workers would participate in a secret ballot before a strike or lockout happens. This would ensure that the decision to embark on a strike is reached through a democratic process. Trade unions were required to make some changes in their constitution to cater for such secret votes.
- Workers would not embark on pickets unless there are rules that have agreed on.
- If parties to a collective agreement are adequately represented, the minister responsible for labour and employment may extend the agreement to the whole sector. This will automatically extend the agreement to non-parties.

This secret ballot requirement which should precede a strike remained untested by July 2023[100]. Apparently, by the end of 2022, the registrar of labour relations had not yet issued the directives to the unions to amend their constitutions as per the guidelines issued by the minister responsible for labour. Unions have taking advantage of this loophole and have embarked on strikes without adhering to the secret ballot requirement. But, as it remains a legal requirement, its time will eventually come. It would be interesting to see how this works in the mining sector, where AMCU intimidates workers to down tools. The actual implementation of a secret ballot would also show how in touch leadership of trade unions is with their members (Norton & Lagesse, 2022). UASA was doing secret ballots for the last few years even before this became a legal requirement.

The fact that the National Union of Metalworkers of South Africa (NUMSA), has threatened to challenge the secret ballot requirement at the constitutional court is an

[99] Analysis of the Labour Relations Amendment Act of 2018.
[100] Interview with an executive head of stakeholder affairs based in a public mining company.

indication that some union leaders are prepared to compel workers to strike[101]. One may even conclude that such leaders are also not prepared to end illegal, prolonged, and violent strikes. Because of this threat, legislation governing strikes should be strengthened. As the researcher has already indicated, the law should give judiciary strike-breaking powers to mitigate against unreasonable prolonged strikes. Other measures to mitigate against regular and unjustified strikes are articulated in Chapter 7 of this thesis.

#### 5.2.2.4 Collective bargaining discourages direct investment

One of the major deterrents for foreign direct investment in South Africa has been the collective bargaining regime, also referred to as central bargaining[102]. This public policy was legislated through the Labour Relations Amendment Act of 2018. This Act became effective at the beginning of 2019. Before this happened, there was considerable debate between those who were in support and those who were against the central bargaining regime[103].

Central bargaining takes place when the employer or an organisation representing employers negotiates wages or/and employment conditions with the trade unions in a particular sector. Once an agreement is reached by most parties in the bargaining council, the agreement would be signed by the minister responsible for labour and employment. The minister will also promulgate the agreement and enforce it through the medium of bargaining councils (MIBCO)[104]. The Labour Relations Act of 1995 makes provision for the self-regulation of sectors through MIBCO. MIBCO is a bargaining council as envisaged in the Act whose mandate is to create and maintain industrial peace and stability in a specific sector. The minister has powers to extend the agreement to affected parties that do not sign the agreement. The researcher's view is that this goes against the democratic ethos enshrined in the Constitution of the Republic. It smacks of dictatorial conduct.

Trade union federations like Cosatu and the South African Federation of Trade Unions (SAFTU) lobbied very hard for collective bargaining to become mandatory in

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[101] Interview with the mining manager based in a mining consultancy.
[102] Interview with the CEO of a liberal institute focusing on research and public policy.
[103] Interview with the chairman of a free market economic policy advocacy institute.
[104] Analysis of Labour Relations Act of 1995.

all sectors[105]. On the contrary, some employers, policy analysts, and civil organisations advocated against collective bargaining agreements being extended to non-parties. Their main argument was that collective bargaining would work in favour of big employers and unions[106].

It favours big businesses because higher salaries would destroy smaller competitors and thus, they would have market domination. Trade unions would benefit in the sense that employees in small enterprises feel obliged to become members of the trade unions so that they can get protection. The truth is that employees in small organisations eventually lose their jobs when their firms close because of the increased operational expenditure which is caused by decisions taken at the central bargaining councils. Collective bargaining councils lead to the distortion of the market, thwarting of competition, and discouraging both domestic and foreign direct investment.

Cosatu had wanted collective bargaining to be imbedded into legislation to provide some level of predictability of the cycle of wage negotiations. The federation also argued that minority employees and/or employers should not be allowed to impose conditions on the majority of the sector[107]. It was disingenuous for Cosatu to make these contentions; the truth is that central bargaining councils were destructive to small and medium-sized enterprises because it interfered with their rights to conduct business. Collective bargaining compels companies in small towns to compete with big players in major centres like Bloemfontein, Cape Town, Durban, Pretoria, Ekurhuleni, and Gqeberha. Employees in major economic centres earn more than those in small towns. To therefore force employers in these marginalised areas to pay like their counterparts in major economic centres is highly unfair.

COSATU and SAFTU insist that central bargaining creates a level playing field and contributes to labour relations peace. Again, this is a simplistic view. A playing field cannot be levelled when big and small businesses are both compelled to pay the same higher wages. There is no fairness when companies in big economic centres and marginalised small towns are compelled to equal wage raises. The playing field

[105] Interview with the president of a trade union federation.
[106] Interview with the chairman of a free market economic policy advocacy institute.
[107] Interview with the general secretary of one of the biggest private sector trade unions.

is not equitable when the extension of collective agreements eventually shuts down small and medium enterprises and their employees become unemployed.

The notion that workers who are represented in bargaining councils are a majority is also fundamentally wrong. Most employees who work in micro, small, and medium enterprises are not union members and that is why they are not represented in the bargaining councils. Only around 20% of employees in South Africa are actually represented in the centralised collective bargaining system, while the other 80% of workers have their wages and employment conditions determined outside collective bargaining councils. Only 25.3% of South Africa's labour-force belong to trade unions. Moreover, there has been a huge drop in the number of registered trade unions from 504 in 2002 to about 192 by 2020. In 2005, trade unions represented more than four million workers, while in 2020 total union membership was around 3.11-million[108]. But still, the minister has the power to impose the agreement of the minority of the workers on their majority counterparts. The same scenario is applicable to employers. Because big business is far better organised into sectorial associations and organisations such as the South African Petroleum Industry Association, Banking Association of South Africa, Motor Traders Association, and Business Unity South Africa, they easily get membership of bargaining councils. Small and medium enterprises are not that well organised and are therefore mostly not part of negotiating collective bargaining agreements. In reality, small businesses constitute the biggest employer in this country.

Although employers can apply to be exempted from collective bargaining, the chances of this being approved are very slim because the very role-players that consider the application for approval have vested interests in central bargaining. Another major weakness of bargaining councils is that they never discuss how employees would contribute to increasing productivity. Discussions are usually confined to wage increments and improvement of employment conditions. This does not bode well for the attraction of direct investment. If South Africa is serious about the reindustrialisation programme and rapid growth of an inclusive economy, labour relations should start to become a two-way process. There should be give and take

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[108] Analysis of labour-force survey produced by Stats SA, 2006

between the employers and employees. Employers cannot sustain annual salary increments that are above the inflation rate without employees playing their part. It because of this that many workers lost their jobs in the mining and textile sectors. In effect, central bargaining has led to the demise of the textile industry in South Africa, while mining is on its knees.

South Africa was one of the dominant garment producers, but production has dwindled since 1994 due to trade liberalisation which has allowed cheap imports from Asia[109]. Rigid labour laws have also driven away producers to neighbouring countries like Lesotho and Eswatini. This led to the loss of approximately 150 000 jobs by 2014. When some of the local textile firms could not keep up with the competition against cheaper imports, they closed shop and jobs were lost. Another cause of significant year-on-year contraction in the textile sector output was strike activities[110]. Having said this, the truth is that the biggest reason for the closure of textile manufacturing firms has been the collective bargaining public policy. In fact, between 2005 and 2014, the textiles – clothing, footwear, and leather, shed most jobs in the manufacturing industry. The textile sector employed ten percent of the manufacturing labour-force which had 1.2-million workers by 2014.

For several years, the South African Clothing and Textile Workers Union (SACTWU), and predominantly large Cape Town-based employers used the National Bargaining Council for the Clothing Manufacturing Industry (NBC) to impose unaffordable higher wages on Chinese textile manufacturers based in Newcastle in Northern Kwazulu-Natal[111]. Most these firms were unable to comply with the required minimum wages that were determined by the bargaining council and could not pay the council's fees. Clashes between the council and these employers escalated.

The council used any legal means at its disposal to pressurise 400 clothing manufacturers in Newcastle, Botshabelo, and Qwaqwa to comply or close down. Some employers retaliated by taking the Minister of Labour and the NBC to court. Most employers who could not comply with the bargaining council were pursued through the courts and some of them were eventually pushed out of business. This

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[109] Interview with the CEO of UN funded development agency.
[110] Interview with the director based in clothing related NPO.
[111] Interview with the professor of policy research focusing on global services and manufacturing research.

threatened 16 700 jobs. Unfortunately, firms that were forced out of business provided the much-needed labour-intensive manufacturing jobs. Such jobs are very crucial in a country with such a large unskilled workforce and high unemployment.

The closure of some Newcastle firms benefited big employers who organised themselves under the auspices of the Apparel Manufacturers of South Africa, and the Lesotho-based textile manufacturers[112]. These Chinese entrepreneurs, who regarded South Africa as their home, were also referred to as fly-by-nights and subjected to racial slurs.

Due to rigid labour laws in general and central bargaining in particular, unemployment in South Africa has risen, while the absorption rate remains problematic. For instance, an analysis of the 2018/19 annual report of the CCMA revealed that the outlook has been bleak for the building and construction sector. Thousands of workers lost their jobs in this sector compared to any other sector in South Africa. During the first quarter of 2019, 142 000 jobs were lost. These include about two-thousand employees who were retrenched from Group Five[113]. Before it filed for bankruptcy in 2019, this firm was one of the biggest construction and civil engineering firms in the country. Even the dominant union in the sector, the Building Construction and Allied Workers Union (BCAWU) has given up preventing the perpetual massive job losses. This would eventually threaten BCAWU'S continued existence. It is mind boggling to note that this trade union would rather let its members lose their jobs and have its own existence rendered uncertain instead of lobbying Cosatu and the government to embark on deregulation of the job market and labour relations.

While some textile employers' firms collapsed amid the burden of collective bargaining, a few of them moved to different kinds of production, increased the use of mechanisation, automation, digitisation, or employed highly skilled professionals. Those workers who lost their jobs due to the closure of firms or retrenchments joined more than 6-million unemployed South Africans. In the first quarter of 2020, the number of unemployed people had gone up to 10-million[114]. As per the trend in this

[112] Interview with an executive based in a manufacturing association.
[113] Interview with an economist based in a private economic research house.
[114] Analysis of data on Stats SA website.

country, many of these bread winners most likely spent more than a year before they could get new employment. Some of them may never be employed again for the rest of their lives. They would eventually join the ranks of those who depend on government social grants. By the first quarter of 2020, the number of social grants' recipients in South Africa was over 18-million, and this did not include more than 3.5-million South Africans who were receiving special Covid-19 social relief of distress grants. Due to the massive job losses caused by rigid labour public policies and exacerbated by the Covid-19 pandemic, most recipients of the social relief grants became poor[115].

Due to the centralised bargaining public policy, the South African economy is increasingly becoming skills-intensive, with poor households bearing the brunt. Poorly conceived labour laws are making it extremely difficult for the economy to create large numbers of labour-intensive jobs in the productive economy[116]. It is for this reason that policy formulators in South Africa should have done everything possible to nurture the textile industry. In its endeavours to protect workers against exploitation and to bridge inequality through legislation which increases labour costs, the South African government has unintentionally destroyed jobs for those who were working and closed the labour market door for most unskilled people.

Other factors that increase labour costs in South Africa include tedious disciplinary and dismissal procedures, lengthy wage and employment negotiations, endless industrial actions, and the generous leave of absence public policy. These factors lead to costly productivity and operational disruptions. It is the researcher's considered view that the South African labour relations regime is sabotaging reindustrialisation, and has increased operational costs for employers, and job losses for the workforce. The next section and subsections address the impact of the shortage of skilled labour and its sub-categories.

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[115] Interview with an academic and consulting accountant.
[116] Interview with the executive director based in a policy and advocacy organisation.

### 5.2.2.5 Investors are concerned that the Employment Equity Amendment Act of 2022 will increase compliance red tape and employment of automation in workplaces

President Ramaphosa signed the Employment Equity Amendment Bill into law on 12 April 2024. The main purpose of the Act is to empower the government to advance 'diversity and equality in the workplace' by determining specific equity targets for economic sectors and geographical regions. The government has noted that most workplaces do not truly reflect South Africa's racial composition three decades after the attainment of democracy. This means that previous legislations that were meant to transform racial rebalancing in the workplaces were ineffective. The Employment Equity Amendment Act of 2022 provides the minister responsible for employment and labour extraordinary powers to set designated racial targets in various sectors and at regional levels. Each company with more than 50 employees must submit an employment equity plan to the department. The plain should indicate how the company will reach their designated racial targets within five years.

Companies which do not comply with the prescripts of the Act risk fines of between R1.5-million and R2.7-million, or 2% to 10% of their annual turnover. Employers that do not comply will also not be able to do business with the state. Fortunately, the Act does provide some relief. If a company does not meet the equity targets, it may give plausible reasons to justify their failure. Such compliance would require a lot of work from company management[117]. They should make proper analysis of business information, do gap analysis in various layers of the company, and align strategy with employment equity targets. The burden of evidence for these plausible grounds is exceptionally high and subject to audit.

The general secretary of one of the biggest private sector labour unions said during the interview that, although some companies have made a lot of progress since 1994, much should still be done to address inequalities in the workplaces. Another interviewee attributed persisting inequality to the fact that white people were more educated and experienced that their black counterparts. Though by 2020, 1.1-million black South Africans had university degrees compared to 630 000 white South

[117] Interview with the CEO of global entrepreneurship network.

Africans, it is the relative share that is significant: one in every four white people has a degree compared to one in twenty black people[118]. White people tend to be a bit older with more job experience[119]. This has something to do with the apartheid system and its Colour Bar Act which ensured that black employees could only be employed in unskilled jobs during much of the 20th century (Roback, 1988). Bantu education prevented black children from getting the quality education their white counterparts were receiving. Addressing the inequality through education has been very slow. In effect, the ANC has failed to provide quality education in most rural and township schools. The quality of training and education in technical colleges is also extremely poor.

There would also be some resistance from companies to implementing the provisions of the Employment Equity Amendment Act of 2022 for various reasons. These include entrenched prejudice against black employees, inadequate skills and experience among most black employees, and tedious compliance administration. This may result in some small companies adopting a ceiling of 50 employees who are mostly not black and outsourcing the increasing load of work[120]. Other employers will resort to automation and digitisation[121]. Nevertheless, determining the size of a company by the number of employees across all sectors may be problematic. For instance, a medium-sized potato farm can employ 300 employees, thus making it a big firm. On the other hand, a multimillion US$ software development firm may on the other hand only just employ 45 white employees. For example, when Facebook bought Instagram in 2012 for US$1-billion, Instagram only had 13 employees (Venter, Molla-Descals, & Frasquet, 2021). In this instance, Instagram was far bigger than the medium sized potato farm that the researcher mentioned in this paragraph.

There is a danger that racial inequality may increase if more white people end up working in small companies. Just as startups may outsource some of their work, some large companies may do the same to avoid employing more workers[122]. Another unintended consequence of this Act is that companies located in provinces that have

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118 Interview with the professor based in education and labour centre.
119 Interview with the executive based in a manufacturing association.
120 Ibid.
121 Interview with the managing director based in private equity firm focusing in the mining sector.
122 Interview with the CEO of global entrepreneurship network.

more black employees may relocate to the Western Cape, where they will mostly employ coloured and white people. Highly skilled and experienced white South Africans may leave the country to seek employment opportunities elsewhere[123].

South Africa’s poor education system remains the main stumbling block to upward mobility for millions of black people. This Act will not address inequality in workplaces but at best will lead to red tape in terms of compliance processes[124]. The researcher’s view is that corporate South Africa should mitigate against the shortage of skills by conducting in-house training programmes. The researcher provides more details about this in Chapter 7.

Another cause of concern is the trumping provision which says that if any other law conflicts with the Employment Equity Amendment Act of 2022, the Employment Equity Act Amendment Act of 2022 will take precedence. The problem is that other pieces of legislations such as Broad-based Black Economic Empowerment Act of 2003 also have a trumping provision. This is chaotic and creates confusion. The rule of law should provide certainty in order to be effective and to avoid discouraging both foreign and local investments. This recent employment equity legislation may mainly benefit a few black elites who are highly educated and are already working[125]. Because of the high demand for these professionals, they end up being highly paid.

The establishment of a new black elite has not done much to address the increasing inequality and to improve the lives of many people who are unemployed and live in abject poverty[126]. It is the researcher’s considered view that the ANC government should be commended for creating substantial middle and upper-middle classes among the black Africans. This has gone a long way to create some social cohesion in the country, but much should still be done to create massive employment for most people. The surest way of doing this is through public policies which encourage investments in agricultural and manufacturing sectors.

There is a great likelihood that the Employment Equity Amendment Act of 2022 will be challenged in the courts of law. In fact, the South African Institute of Race

[123] Interview with the chief risk officer based in corporate and investment bank.
[124] Interview with the managing director of construction & engineering firm.
[125] Interview with the CEO of a liberal institute focusing on research and policy.
[126] Interview with the executive director of policy research and advocacy organisation.

Relations, the DA, and Solidarity (predominantly white union) have already announced that they would take legal action.

### 5.2.3 Shortage of Skilled Labour Thwarts Reindustrilisation

The sub-categories related to this finding appear in Table 5.1. as follows: the legacy of apartheid is persisting when it comes to skills development. South Africa is depleting skilled labour and is approaching a skills cliff, while poor basic education contributes to the production of untrainable labour. Poor university education further contributes to the production of untrainable labour, while the wealthy, skilled, and educated are emigrating. Each of these subcategories is discussed in detail the next sub-sections.

#### 5.2.3.1 The legacy of apartheid is persisting when it comes to skills development

Although the ANC spends the biggest percentage of its budget on education, the quality of teaching activities in many schools in townships and rural areas is worse than ever[127]. Had all these moneys allocated to education not been wasted on mismanagement and corruption, large improvements would have been made[128]. Disappointingly, South Africa has the worst education among the middle-income and emerging markets countries. There is a huge mismatch between the abundance of natural resources (like minerals), large budget allocation, and the actual standard of education. South Africa's education is also hampered by a lack of political will to deal decisively with the teachers' union and errant teachers in rural areas and townships[129].

The Economist mentioned that South Africa's education system was ranked at seventy-five among seventy-six countries by the Organisation for Economic Co-Operation and Development in 2015. The Economist (2019) reported: *"In November 2016, the latest trends in international mathematics and science study, a quadrennial test sat by 580 000 pupils in fifty-seven countries, had South Africa at a near bottom of various rankings. A shocking twenty-seven percent of pupils who have attended school for six years cannot read, compared with four percent in Tanzania, and*

[127] Interview with the CEO of a liberal institute focusing on research and public policy.
[128] Interview with an executive director based in a think tank focusing on Africa.
[129] Interview with a fellow at a research institute on regional and international affairs.

*nineteen in Zimbabwe. After five years of school about half cannot work out that twenty-four divided by three is eight. Only thirty-seven percent of children starting school go on to pass the matriculation exam; just four percent earn a degree. The gap in test scores between the top twenty percent of schools and the rest is wider than in almost every other country. Of two-hundred pupils who start school, just one can expect to do well enough to study engineering. Ten white kids can expect the same result"*. The rural-urban split of proficiency is also severe, with over 40% of rural Grade-6 learners in rural schools being functionally illiterate compared to their urban counterparts where less than 15% were illiterate. The urban learners who were functionally illiterate were in townships where teachers and learners were predominantly black Africans.

Educational resources, facilities, and infrastructure are widely influenced due to location. Many learners in townships and rural areas often attend schools that do have some basic facilities like laboratories, books, electricity, and running water[130]. Nevertheless, poor education standards and a shortage of infrastructure and facilities are proof that the ANC government has dismally failed to improve education standards beyond what was envisaged when Bantu education was introduced by the apartheid government. At that time, universities that were previously reserved largely for white students also had better budgets, resources, high calibre of academics, better industry and global partnerships, and superior education than those that were established for black African students. However, technical and vocational training today *"is not able to produce the number and quality of graduates needed by the economy"*[131].

South Africa's education system is divided into three levels – elementary, secondary, and tertiary. Elementary (primary) and secondary education are regarded as basic education, while tertiary education comprises of higher education institutions (HEIs). Before 2009, the national Department of Education was responsible for both basic and higher education. President Zuma then divided the department into Basic Education, and Higher Education and Training. Each of these departments were allocated their own minister and a director-general. When Ramaphosa became the

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[130] Interview with the CEO of a liberal institute focusing on research and public policy.
[131] Analysis of the Department of Higher Education and training's strategic plan for fiscal years 2015/2016-2019/2021.

president in February 2018, he continued with this trend. Basic education is also administered by provincial governments. Basic education oversees about 26 000 schools, and around 425 000 teachers[132].

Elementary schooling, which is commonly referred to as primary education, is constituted by two phases – foundation and intermediate. Prior to starting school, children attend Grade-R (reception year which some countries refer to as kindergarten). Elementary education takes seven years of schooling to complete. The foundation phase comprises grade R to grade 3, while the intermediate phase consists of Grades 4 to 6. Assessment at elementary education is administered by each individual school, and there are no national examinations. Learners do not receive a formal qualification after completing elementary schooling.

Secondary education includes Grades 7 to 12 and is constituted by two phases – lower and upper secondary. Lower secondary is also called the senior phase, lasts through to grade nine and is compulsory. The upper secondary is also referred to as further education and training. It lasts through to Grade 12 and is not mandatory. At the beginning of upper secondary school in grade ten, learners should either choose to pursue an academic or technical stream. Learners who choose a technical track should attend a technical secondary school.

At the end of Grade 12, learners write a final exit examination which is standardised nationally. There are two standardised Grade 12 examinations - the national senior certificate (NSC), and the independent examinations board (IEB). It is mandatory for government schools to get their Grade 12 learners assessed through the NSC examination which is administered by government. Most wealthy private schools use the IEB examination which administered by a non-profit organisation[133]. Learners can get one of four levels of pass after writing Grade 12 examination as follows: a certificate pass, a higher certificate pass, a diploma pass, and a bachelor's pass. A certificate pass does not enable a learner to get admission to public universities and technical colleges. A higher certificate pass would enable a learner to gain access to certification programmes. A diploma pass constitutes a minimum requirement for gaining admission into tertiary programmes that award diplomas. A

[132] Interview with the professor based in education and labour centre.
[133] Interview with the chairman of a free market economic policy advocacy institute.

bachelor's pass enables admission to universities and to enrol for a degree. A small percentage of learners exit Grade 12 with a bachelor's pass after sitting for the NSC examination.

Almost all the learners who sit for the IEB pass with bachelor's passes. The IEB examination is a more rigorous assessment than the government administered NSC examination[134]. It is set at the same level with some of the final school year assessments in developed economies. Students with excellent IEB results have been accepted at United Kingdom universities such as Oxford, Cambridge, and other ivy league institutions without undergoing assessments such as A-levels, or the scholastic assessment test to gain admission to USA universities[135].

It has already been stated that the Department of Higher Education and Training is responsible for post-secondary education. This department is also responsible for technical and vocational education and training (TVET), and sector education and training authorities (SETA). Tertiary education in South Africa offers prospective students two streams – an academically oriented track and technical oriented track. There are fifty TVET (technical) colleges, and around 291 private technical colleges in South Africa. Public technical colleges are larger and have about 264 campuses across the country[136].

There are 26 public universities in South Africa and about 119 private colleges. Public universities in South Africa enrol more students than technical colleges and private universities[137]. Public universities are more popular in South Africa, which is anomalous, considering that private universities are better funded and more popular in other middle-income countries. Private institutions of higher education in South Africa are not allowed to call themselves universities (Child, 2022).

After the dawn of the new democratic dispensation in South Africa in 1994, the government attempted to end the separation of education and training (Dagada, 2009). Education is associated with academic qualifications while training is associated with vocational qualifications. Academic qualifications were obtained in formal learning institutions, while vocational training was conducted by technical

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[134] Interview with the professor based in education and labour centre.
[135] Interview with the CEO of UN funded developmental agency.
[136] Interview with the professor of education.
[137] Interview with the professor based in education and labour centre.

colleges and the workplace. The ANC government aspired for students to access both academic and vocational qualifications via different routes. Very little has been achieved regarding this[138].

#### 5.2.3.2 South Africa is depleting skilled labour and it is confronted by an approaching skills cliff

Ten years ago, the researcher worked for the University of South Africa (UNISA). In 2015, South African universities were asked to submit the names of three staff members who would participate in an international capacity development programme which was being co-ordinated by the University of Bath and the Nelson Mandela Metropolitan University (Dagada, 2015). Among other things, the criteria for selecting staff included the fact that they should be younger than forty-five years old. The author was forty-four years old and was shocked to note that he was the only person who qualified in terms of age in our department of around fifty people. Seventy percent of his colleagues were retiring soon. This situation is a microcosm of the aging of skilled people in South Africa (Ibid). This view was supported by some people that the researcher interviewed for this study.

These generations of South Africans are reaching retirement and include a substantial proportion of highly skilled personnel, whether employed in the public or private sectors. The implications of the large numbers of academics, dentists, doctors, electricians, welders, plumbers, and engineers of the 1950s and 1960s who are due to retire brings South Africa to a ‘skills-cliff” in the researcher’s opinion. The country is not developing replacement skills of the same quality or to the same extent as we were twenty-five years ago and this is set to radically destabilise the scope of sustainable growth[139].

South Africa has a boutique defence and security innovation industry which has been growing gradually. Other than some level of public policy uncertainty and the somewhat weak currency, the greatest risk to this industry is the shortage of skills. As with any sector of the economy, there are some silos of state entities and functions where declining skills will have the bigger impact. These include the aerospace and

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[138] Interview with the executive director based in a policy research and advocacy organisation.
[139] Interview with the head of engineering projects based in a defence vehicles manufacturer.

defence sector, and entities like the Civil Aviation Authority (which governs the registrations and operational licensing of all aircraft that fly in South African airspace). Others are the National Conventional Arms Control Committee (which governs the export of military technologies). These declines present an existential threat to the sustainability of this sector (Ibid).

Nevertheless, proper education and training can save South Africa from the skills-cliff by providing the job market with graduates who are employable and/or trainable. Unfortunately, the education sector in the country has been in regression for decades[140]. The implications of this are evidently catastrophic and are increasing in momentum. The issue dominant in one's mind is the extent of the potential impact on the future brought about by neglect of the education and training systems. The researcher does not believe that as a country we fully appreciate the magnitude of this issue, as a highly proficient and skilled fraction of the South African population has carried the economy and mitigated our human resources shortfall. Unfortunately, this segment of our population is aging and is not being replaced. This leads to the question - what will happen when large sections of these skilled people begin to retire in the coming decade. The answer is obvious – the skills-cliff may become a reality, and both the public and private sectors will suffer tremendously unless drastic steps are taken to mitigate against this.

Thus, South Africa is deindustrialising due to a shortage of technical expertise, coupled with the lack of competitiveness within the manufacturing sector. The decrease in skills has contributed to the country being obliged to export its raw materials which are then processed into finished goods in other countries and imported back into the country. The export of raw materials (mineral and agricultural products) yields low margins for South Africa and the country has as a result undergone severe losses in beneficiation income (Ibid).

The production of skilled technical workers and managers through better education and training, combined with political will in the ANC government will play a critical role in turning the economy around. Knowledge can and should play an essential role in shaping the country into a manufacturing, services, and knowledge

[140] Interview with the professor based in education and labour centre.

economy. Countries such as Japan, Singapore, Malaysia, and Germany are not endowed with rich mineral resources as South Africa is, yet they are major manufacturing and knowledge economies because they have both knowledge and technical skills. The availability of raw materials in a country which does not have the required knowledge and skills will not lead to economic growth. South Africa needs knowledge to ensure that mineral resources are used to best advantage to drive inclusive and rapid development[141].

The South African National Planning Commission released a diagnostic document in 2011 which attributes the lack of job creation to poor schooling and inadequate skilled labour[142]. Distinguished educationist Professor Jonathan Jansen, together with other experts, supported this analysis. The issue is, nevertheless, that policies are required that will help South Africa to develop the technical skills it needs to run manufacturing plants that will process the country's rich raw resources into finished products. In a nutshell, South Africa needs expertise to reindustrialise the economy[143]. If South Africa wants to avoid the skills-cliff and to improve its socio-economic situation, it urgently needs to pay more attention to skills development by improving all levels of education[144].

#### 5.2.3.3 Poor basic education contributes to the production of untrainable labour

After the disastrous failure of outcomes-based education (OBE), the ANC government is now offering our children English second language and mathematics literacy; this is highly unacceptable[145]. Another major problem is that teachers are not adequately knowledgeable to teach subjects that they are assigned to. Learners who go to some of the best public and private schools could perform far better in mathematics than many teachers who teach mathematics in predominantly black schools in townships and rural areas. It is very apparent that, after 25-years, the government has failed black Africans when it comes to the provision of quality education[146].

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[141] Interview with the head of engineering projects based in a defense vehicles manufacturer.
[142] Analysis of the National Planning Commission Diagnostic Report, 2011.
[143] Interview with an executive based in a manufacturing association.
[144] Interview with a CEO of one of the emerging markets digital commerce conglomerates.
[145] Interview with a professor based in an education and labour centre.
[146] Interview with the professor of education.

For instance, most teachers in rural and township schools are not conversant with the curriculum[147]. This has been exacerbated by the fact that the controversial, ineffective, and much maligned OBE, which was introduced after the democratic dispensation in 1998, was scrapped in July 2010. It was replaced by a new educational plan called the National Curriculum Statement, and later on, by the Curriculum and Assessment Policy Statement. Another problem is that most learners choose to do mathematics literacy which is inferior, instead of pursuing real mathematics. The NSC examination is the most used yardstick in South Africa to determine the improvement of education in public schools[148].

Learners in wealthy private schools are assessed through the IEB as has already been mentioned; the pass rate is always very high, and quality of results is exceptionally great. Nevertheless, the government, politicians, and the public pay more attention to the NSC examination. How learners perform in the NSC examination is a critical matter for the whole nation, and the Grade 12 results attract much attention. This is attributable to the fact that this is the last grade for basic education, and its examination determines whether the learner would get admission at tertiary institutions (universities and colleges). So far, the quality results have not been very good, and have shown that the crisis in South Africa's education system is deepening[149]. This is why most students are unable to get admission to universities and colleges. These learners are also not trainable for employment purposes and therefore join the ranks of millions of unemployed South Africans.

It is highly unacceptable that two out of every three Grade 10 students in South African schools do not pass the Grade 12 examinations. Of those who scrape through and pass, only one quarter achieve a university entrance certificate[150]. One of the problems that has beset our education system is the lack of funding and this has led to some students dropping out of the system before completing their secondary education. Other common reasons for dropping out of school are to look for employment or because of family commitments. There is also a widespread belief among learners in underserviced communities that being at school is not important to

[147] Interview with the professor based in an education and labour centre.
[148] Interview with the professor of education.
[149] Interview with an executive director of a policy research and advocacy organisation.
[150] Interview with the professor of education.

their wellbeing. At one point, due to the number of deaths related to the AIDS epidemic, many families in South Africa were child-headed which is why some of these students had to leave school to look after their siblings and the household. AIDS related deaths have subsided drastically in South Africa[151].

Another cause of the large drop-out rate includes poor preparation of learners in the foundation phase[152]. Learners are taught inadequate numeracy and literacy skills, and they are therefore ill-prepared for high school and university education. Teenage pregnancy, HIV/AIDS, violence (including rape in schools), grinding poverty, and deterioration of the society's moral fibre have contributed significantly to the educational woes in South African schools.

Since 1994, the announcement of the Grade-12 NSC examination results are followed by fanfare and media hype. Some education experts and analysts have consistently argued that the quality of the South African basic education should not solely be determined by the Grade 12 examination results[153]. Moreover, some have questioned the quality of these results, especially when one considers the fact that the minimum requirement of passing most subjects is just 30%. For a pupil to get university entrance (bachelor pass), he/she needs to pass at least four subjects by fifty percent. Truly speaking, if one needs to do well at university, you need to get much higher than fifty percent. Thus, one can boldly assert that South Africa's education system is largely a disservice to many learners. Government dishonestly, but expediently uses the Grade 12 examination results as an indicator of the position of the school system when all other data at our disposal show that the country's education system has been languishing[154].

When the Minister of Basic Education, Angie Motshekga, announced the class of 2021 Grade12 results, she deliberately omitted to mention the fact that over 5-million learners have dropped out of the education system between Grades 10 and 12 since 2010. This is absolutely a national crisis and unfortunately the government does not have a mechanism in place to track and keep learners in the school until they could finish their basic education. What happened to the rest of the learners who did not

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[151] Interview with the director of a clothing-related NPO.
[152] Interview with the professor of education.
[153] Interview with the director based in macro-economics institute in a university.
[154] Interview with the professor of education.

write the examinations? Most of them have dropped-out of the schooling system while others were blocked by some schools from reaching Grade 12 because they would diminish the overall performance of such schools. Had the majority of learners not dropped out, the overall pass rate of Grade 12 would have been much less.

On the other hand, if the pass mark in all subjects was 50%, only around 30% of the 2021 Grade 12 class would have passed. Of the about 1.1-million learners who started school in 2010, only 259 143 wrote Grade 12 mathematics in 2021 and of those, 7725 passed the subject with distinction. The thing is, the whole basic education system needs serious attention, not just Grade 12. The sooner we stop the hype around the Grade 12's NSC results, the better.

The ANC has been over reliant on its tripartite alliance partners, COSATU and the South African Communist Party (SACP) to win the elections. Apart from sending out their foot-soldiers to campaign for the ANC, unions within Cosatu have contributed millions of rands into the ANC election funds[155]. Nonetheless, The ANC electoral percentage has declined regularly since 2004 and this has led to the ANC's reliance on its partners increasing. As a result, unions in South Africa have become very powerful, influential, and counterproductive. The ANC government is afraid to take policy decisions that may upset and alienate the unions[156].

One of the defiant COSATU's affiliates is the SADTU. Instead of this union concentrating on labour relations matters, it has become a de facto national ministry of education[157]. In provinces governed by the ANC, SADTU has substantial influence on who gets promoted within public schools, district offices, and the head offices of the national and provincial departments of education. In most instances, one needs SADTU's endorsement to gain promotion. Some of those who get promoted are unqualified, and they must tread careful so that they do not upset their benefactor[158]. SADTU also influences the appointment of teachers who mark the Grade 12 examination papers and the payment they should receive. If this situation is allowed to continue, it will take South Africa less than ten years to qualify as a banana republic, and it will become almost impossible to reindustrialise the economy.

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[155] Interview with the deputy general secretary of a political party.
[156] Interview with the executive director based in a policy and advocacy organisation.
[157] Ibid.
[158] Interview with the professor of education.

### 5.2.3.4 Poor technical education contributes to the production of untrainable labour

There has been consistent weakening of vocational training and technical education in South Africa since 1994. The pre-1994 vocational and technical education system in South Africa was inherited from the British colonial model[159] (Fessehaie & Rustomjee, 2018). During the long period in question, technical and vocational education colleges were created in part to address the 'poor white problem' and advance white class interests, in particular regarding employment opportunities. The first policy in this sector was the Apprentice Act of 1922, which provided for the creation of vocational and technical colleges to create opportunities for on-the-job learning and apprenticeships (McGrath, 2005).

Four decades later, another public policy was enacted in the technical educational sector, namely the Advanced Technical Education Act of 1967. This legislation created technikons to provide for advanced learning in technical craft and management education. Of note, the two pieces of legislation stated above excluded black students' access to technical education, and further prohibited them to access apprenticeships[160] – consistent with the colour bar foundation of the South African Education Act of 1958. However, this was changed in 1981 with the passing of the Manpower Training Act No. 56. The latter policy allowed black students to receive technical education and apprenticeship training, occasioned by the need to satisfy the increasing labour demand in homelands.

The pre-1994 South African technical education system was characterised by notable pro-industrialisation features[161]. First, students were taught mostly engineering courses, and the aim was to teach technical craft and abilities ahead of theoretical fluency. Second, technical college students were required to undergo apprenticeship training, with the aim of increasing and refining technical craft through learning-by-doing. At that time, technical and vocational education put emphasis on artisan training and vocationally oriented and vocational education. Third, management courses were not taught, as these were not grounded on craft. Thus,

[159] Interview with the professor based in an education and labour centre.
[160] Ibid.
[161] Interview with lecturer of strategy management based in a postgraduate school of public management.

the prevailing teaching and learning methodologies at the time ensured that pre-1994 technical students enjoyed exceedingly high exposure to the practical world of work, and their vocational output aided national industrial development[162].

The year 1994 was a momentous occasion in South Africa, not just for political changes, but reformation in the education sector as well. In the technical and vocational education sphere, the initial policy infusion was affected through the government's release of the policy framework entitled '*A new institutional landscape for public further education and training colleges*' in August 2001. This policy led to the merger of South African technical colleges, from 152 colleges to 50 colleges, which were renamed further education and training (FET) colleges and later called technical and vocational education and training (TVET) colleges. The merger process entailed the coupling of formerly white colleges with previously black technical institutions, and the renaming of these institutions as TVET[163].

The Network for International Policies and Cooperation in Education and Training policy document noted that policy changes were introduced in the technical education sector, notably to the Further Education and Training Act 1998, and as amended in 2012. Amendments were designed to transfer control of TVET colleges from provincial authorities to the national government and emphasise the role of these colleges for youth empowerment.

The professor of education indicated that that the unfolding technical and vocational education policy after 1994 was influenced by international policy conversations. In 1991 the World Bank had published a policy paper entitled the 'Vocational and Technical Education and Training'. This policy promoted the notion that technical *'colleges were enjoined to become more responsive to the labour market - which, in part, dovetailed with the International Labour Organization argument about orientation towards training for the informal sector'[164].* In other words, technical colleges were to be reformed to graduate a cohort of students that will be at home in the informal sector. No longer should technical students necessarily specialise in engineering studies; instead, they should be encouraged to study a survivalist

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[162] Ibid.
[163] Interview with the professor based in an education and labour centre.
[164] Analysis of the World Bank's policy paper titled 'Vocational and Technical Education and Training'.

curriculum - anything that will enable them to thrive in the informal economy. Effectively, the prevailing international policy discourse regarding technical education denigrated old notions of structured methodology, undermining prioritisation of apprenticeships, and devaluing specialised technical education[165].

The unfolding international policy discourse was soon to adversely impact South Africa's technical colleges and lead to massive deindustrialisation[166]. Indeed, the new technical and vocational education policy in South Africa is a complete negation of the previous successful formula in several respects. First, curricula in technical colleges were no longer predominantly engineering-focused; instead, the new curriculum includes management courses. Second, teaching methodology is theory-based, and examination focused. Regarding the latter, the professor of education observed that the vast majority (93%) of technical colleges students are enrolled in theory-dominated programmes. Moreover, the requirement for students to undergo apprentice training has been discontinued, and as a result, historical relationships between technical colleges and industrial firms has waned. Notwithstanding, some technical colleges have reintroduced limited practical programmes akin to those of Education and Training Authorities' (SETA's) internships, but this is undertaken by less than 7% of the student population[167]. The quality of the technical education programmes has deteriorated, and this is worsened by poor teaching in colleges[168]. Despite notable policy amendments since 1994, TVETs remain inadequately managed, have poorly educated lecturers, weak curricula, and are undermined by prioritisation of the university education sub-sector.

The inference is that the post-1994 education policy has undermined the growth of the technical education landscape in South Africa which has contributed significantly to deindustrialisation in several ways. First, the technical education curriculum has weakened which has resulted in technical colleges not being able to produce graduates who are relevant to the manufacturing sector. Second, the apprenticeship system has effectively collapsed, and this means that TVET graduates lack technical industrial experience. The content of the curriculum is now theory-based

[165] Interview with the professor of education.
[166] Interview the professor focusing on global services and manufacturing research.
[167] Interview with an executive based in a manufacturing association.
[168] Interview with the professor based in education and labour centre.

– as opposed to craft, and graduates are bereft of critical practical skills required by industry. The current curriculum is no longer based on hard sciences, engineering and industrial education which has diminished the national industrial capacity and innovation. Crucially, these weaknesses have negatively affected the state of entrepreneurship in the country because artisanal graduates traditionally form companies and create jobs in large numbers. Moreover, their industry has positive cascading effects on the industrial value chain – therefore the weaknesses in the technical education sector is a negation of stimuli for job creation and economic development.

South Africa is the only country which has more students in universities than technical/TVET colleges[169]. It has already been stated that South Africa has 26 public universities, about 119 private colleges, and 50 technical colleges. These universities have around one million registered students while technical colleges have just over 700 000 registered students. An additional 90 000 students are studying through various private institutions which offer qualifications at the level of certificates, diplomas and degrees.

Most parents and prospective learners do not take technical colleges seriously.[170] They regard these institutions as a last resort. In other words, a learner who has just passed the Grade-12 examination will try their luck for admission to universities and private tertiary higher education institutions (HEIs). Only after they fail to get admission to study in these institutions will they consider studying at a technical college. One of the reasons why technical colleges are not taken seriously is due to their failure to attract lecturers with better qualifications and industry experience. This should be attributed to low salaries. There is no way most artisans, technicians and engineers will leave their well-paid jobs and their perks in industry for the meagre salaries offered in the colleges. The government should do something about this. Prior to 2004, some public technical colleges were actually self-funded, except for most salaries of their employees. President Thabo Mbeki had to intervene to correct this anomaly; the self-funding model was not going to be sustainable[171].

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[169] Interview with the head of policy on global services and manufacturing research programme in a university.
[170] Interview with a professor of education.
[171] Interview with the head a university-based institute which promotes developmental dialogues.

The government is mainly interested in the accessibility to colleges by prospective students rather than the successful completion of qualifications by the students[172]. The government was severely misled by the World Bank policy paper which put more emphasis on a survivalist curriculum instead of an engineering-oriented education[173]. So, you have a system which is easily accessible, but there is little education happening in these institutions. However, due to the neglect of the technical colleges by the government, prospective students shun them. The number of students in technical colleges was about 220 000 in 2000 and the government has since then increased this number substantially to over 700 000 by 2020[174]. However, it does not help to just dump students and money into technical colleges if the system itself is not drastically changed. It is a futile exercise to increase admission numbers in technical colleges if the throughput remains poor[175]. The quality of education at these institutions should therefore be improved.

Technical colleges are not good at offering management and business science courses, and they should actually be stopped from pursuing these. The purpose of these colleges should not be to compete with universities and private tertiary institutions, but rather to produce artisans, technicians, and other technically skilled people.[176] Technical colleges should be commended for their efforts in offering artisan and other technical studies such as building, boiler-making, plumbing and the electrical field. But these learning areas need well qualified lecturers to teach them proficiently. Unfortunately, TVET colleges are unable to attract better qualified and experienced lecturers due to low salaries as stated in the preceding paragraphs. One of the best ways to solve this problem is to pay college lecturers the same salaries as those of university academics.

University academics have some perks related to consulting, promotion, and research funding, but lecturers at TVET colleges do not enjoy these perks. Another way of attracting quality teaching staff in technical colleges, is to recruit retired academics, artisans, technicians, engineers, etc. The crux of the researcher's

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172 Interview with the professor based in education and labour centre.
173 Analysis of the World Bank's policy paper titled Vocational and Technical Education and Training
174 Analysis of Stats SA data.
175 Interview with the professor based in an education and labour centre.
176 Ibid.

proposal is that lecturers in technical colleges should be allowed to retire at the age of eighty-five. The current situation should be eradicated, where the majority of lecturers in colleges are former students of the same colleges and their highest qualification is a national accredited technical education diploma (N6). Moreover, many have no working experience or academic pedigree to facilitate teaching and learning.

#### 5.2.3.5 Poor university education contributes to the production of untrainable labour

University education in South Africa has a fundamental impact on the individuals and their families who go through the system [177]. One of the well-established ways to break the stronghold of poverty in a family is through the attainment of university qualifications. Higher education also plays an important role in the socio-economic development of a country. South Africa has unfortunately been hard hit by the skills shortage, and universities have never really closed the gap[178]. The poor pass rates at secondary schools, and the low throughput rates in universities are now the most catastrophic issues facing South African higher education. The crisis threatens to cripple economic growth, and fewer learners are completing their high school education. This is particularly concerning for a country that has great potential and the abundance of youth but is failing to produce suitably skilled persons. The result has been an ever-increasing unemployed population that has little hope of obtaining meaningful employment due to the knock-on-effect of poor-quality education and training. The key to resolving the South African crisis lies in the mass provision of quality education interventions.

The quality of education needs to be increased in the primary and secondary education spheres to prepare learners for the level of intellectual rigour which will be expected at university level[179]. It is noteworthy that some South African universities have sought to close the gap between secondary and higher education by providing bridging programmes. A director of a university-based macro-economics institute declared that South Africa will produce professionals of a high calibre who will play a

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[177] Interview with the CEO of a UN funded development agency.
[178] Interview with the executive director based in a policy research and advocacy organisation.
[179] Interview with a professor of education.

fundamental role in society and have a positive impact on the economic development of the country. This will transpire when the increase in quality education happens.

It should also be born in mind that universities do not operate in a vacuum, thus they should work very closely with non-profit organisations, government, industry and civil society. The private sector should continue to support higher education in various ways since it is the main beneficiary of the talent and technological innovation of the universities[180]. Nonetheless, despite education in South Africa receiving the biggest chunk of the budget, the government has failed dismally to fix higher education through a proper regulation and policy framework. Instead of fixing the overall education system from primary school all the way through to the higher education levels, all the government does is to throw money at the system. This money gets squandered while the education and skills crisis persists. The conundrum is exacerbated by the fact that there is no close cooperation between stakeholders through a sense of shared purpose. The discourse between the state, HEIs, and the private sector is erratic and is characterised by poor understanding of each other. The government should therefore play a role in facilitating liaisons between the stakeholders. Furthermore, HEIs should be assisted to attract and retain quality academics and address their working conditions through research[181].

South Africa, like other upper-middle income and developed economies has grappled with proper funding of higher education. South Africa went through unprecedented student riots during the 2015/2016 academic years. These disruptions and violent national uprisings were referred to as the "fees must fall"[182] campaign. University students rejected annual tuition fees increments and later demanded free higher education. Most universities suspended classes, and infrastructures and facilities in these universities were destroyed, with the damage estimated at hundreds of millions of rands. These violent confrontations led to major clashes between rioting students, private security guards, and police officers, and many students were arrested. The student protests were an indication of poor economic development,

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[180] Interview with an executive based in a manufacturing association.
[181] Ibid.
[182] Interview with the professor of development economics.

persistent grinding poverty, high unemployment, and income polarisation in South Africa.

Although the ANC government has improved access to universities for black Africans, funding remains a major challenge[183]. Tuition, accommodation, and other university fees are less in South Africa compared to upper-middle income countries and their developed economies standards. However, they are excessively high for South African students, and most households cannot afford them. South Africa should be commended for its National Students Financial Aid Scheme. This government financial aid scheme provides loans and bursaries to eligible students. While this scheme is impressive when compared to most developing countries, it caters only to a minority of students. By 2020, only students whose household income was less than R350 000 qualified to receive financial assistance. This led to the missing middle gap phenomenon, where students whose households were neither poor nor rich could not qualify for NSFAS financial support. Unfortunately, most families in this category could not finance their children's university education.

The funding situation has worsened because of maladministration, corruption, and poor governance of NSFAS [184]. If a better financing model is implemented and NSFAS is managed and governed effectively, the number of black African students in universities would increase from the current 14% (as opposed to 57% of white students). It is the researcher's considered view that even the number of black African and female students who are currently under-represented in technology, science, engineering, and postgraduate studies would increase with better funding. Proper funding is an important factor towards reindustrialisation.

The few people who obtain good qualifications in the fields of engineering, science, technology, and mathematical sciences have joined the brain-drain and emigrated to developed countries[185]. BRICS is an alliance between the following countries: Brazil, Russia, India, China and South Africa. If South Africa wants to catch up with its counterparts in BRICS, more emphasis should be put on the above stated educational fields, and there should be less investment in the humanities and

[183] Interview with an economist based in an independent development economics centre.
[184] Interview with the lecturer of strategy in a postgraduate school of public management.
[185] Interview with a senior fellow in a US-based university.

economic/management sciences. Nonetheless, the CEO at one of the emerging markets digital commerce conglomerates argued during their interview that humanities and management courses should not be removed totally from the university offerings.

#### 5.2.3.6 The wealthy, skilled, and educated are emigrating

During the last decade, the number of people leaving South Africa has increased steadily. Most of those emigrating are professionals with rare skills, entrepreneurs, and the rich. Although the cost of living is relatively high in Australia, New Zealand, the USA, Canada, United Arab Emirates, the UK, and Western Europe, most of these emigrants would easily resettle because their rare skills, financial liquidity, and entrepreneurial flair is highly sought elsewhere in the world[186]. The majority of those that are leaving the country would not return to South Africa which is much poorer without them. As part of leaving the country, they close their businesses and get rid of their investments. This leads to job losses, and South Africa is deprived of capital that would have been used to grow the economy and to erect the infrastructure.

Many houses in South Africa's leafy suburbs are on sale because their owners are leaving the country[187]. In 2019, emigration-boosted housing sales reached a 10-year peak. This is despite the fact that the cost of living in South Africa's suburbs is far cheaper compared to other cities in developed countries. Research released by the FNB Estate Agents Barometer in mid-2019 found that the number of South Africans emigrating to perceived greener pastures has increased sharply during the past eighteen months. The number of home sellers who mentioned leaving the country as the reason for putting their property on the market almost doubled from 7% in the fourth quarter of 2017 to 13.4% in the second quarter of 2019. One of the findings of this study was that the increase in emigration-driven home sales was no longer widespread only among the price bracket above R3.5-million but has also spilled over to the lower and middle market segments. During the period under review, the number of emigrating sellers placing properties priced below R1.6-million in the market rose from 4.3% to 10.6%.

[186] Interview with political economy editor-at-large based one of the large media groups in South Africa.
[187] Interview with the analyst based in real estate advisory firm.

Another disturbing finding of the FNB Estate Agents Barometer was that the number of South Africans disposing of their properties to exit the country has overtaken purchases of local houses by foreigners and expats. This trend has led to negative net foreign demand, implying that there are more emigration-driven property sales than inbound demand. This has exerted downward pressure on the house market prices. South Africa has not just become a net loser in the housing market, but it is also a net loser of skills acquisition. Ultimately, the country is exporting high numbers of skilled persons, while not importing sufficient skills into the country.

International market research group, New World Wealth, estimated that about 300 high-net-worth persons have left South Africa each year for the past decade. These individuals each have a net worth of above US$1-million, and the brain-drain in this country makes life more difficult for those who remain behind. The departure of the wealthy with jobs from the country leads to a tax base erosion. If this trend is not mitigated, the fiscus will not be able to support the provision of infrastructure development and social services. In effect, due to the dwindling fiscus, South Africa has not invested adequately in new infrastructure deployment and repair and maintenance of the existing infrastructure since 2011[188]. The last time there was adequate funding of infrastructure related programmes was during the preparations for the 2010 FIFA World Cup hosted by South Africa. Unless there is rapid inclusive economic development, the government will not be able to continue distributing social grants to indigents, leading to a massive anti-government uprising – something much bigger in scale than the Arab spring.

Major drivers of emigration include regular power cuts (also referred to as load-shedding), unabated crime, massive corruption, poor national and provincial government services, poor municipal services, public policy uncertainty and over taxation. There are also continued threats to property ownership, poor economic growth, high political risk, and overregulation. Consequently, there are definitely more push than pull factors. Emigrants believe the situation would be better elsewhere – they obviously do some research about their destinations. Soon, there would be over 1-million South Africans who have left the country[189]. The situation is worsened by the

188 Interview with the CEO of corporate and investment banking.
189 Interview with the analyst based at the real estate advisory firm.

fact that people take their partners with them when they leave South Africa. In most instances, the other partner is usually highly educated.

The best way to replenish a skilled labour force would be to import highly educated and technically qualified individuals from abroad. During one interview, an editor-at-large declared that foreign specialists are the only persons who can assist to broaden the complexity of South Africa's products. Complexity is a very essential measure of economic sophistication and propels its growth. Unique manufactured goods would compel other countries to buy from South Africa and thereby increase our number of exported goods. However, due to the severe shortage of skills, the country's level of complexity has gone down drastically. The editor-at-large referred to the Harvard University's Centre for International Development's atlas of economic complexity. This software application provides a picture of each country's economy ability to produce a complex assortment of products. It is not looking good for South Africa, "we have rapidly fallen down the complexity ladder since the new democratic system in 1994"[190].

The ANC has done a poor job of industrial policy, and economic public policies in general. In 1994, South Africa was in the top fifty (ranked 47th) of economies that were producing complex products – ahead of Thailand and China. By 2020, the country was ranked 63rd out of 133 countries, just ahead of Trinidad and Tobago. Other than the ANC's poor industrial policy, the country's decline in producing complex products should be attributed to the massive emigration of highly skilled people. The quickest way to arrest the decline and improve economic complexity is to attract foreign skills to replace those who have left the country. Most people with the required skills to boost South Africa's reindustrialisation are Whites and Asians[191]. Unfortunately, our policy makers are obsessed with race, and foreign skilled persons who can produce complex goods are not attracted that because they are not African blacks,[192]. It is naïve and impractical to think that South Africa can quickly produce such a sophisticated and highly technical labour force locally. The best way to create jobs, train, and empower African blacks and people in this country is to bring in highly skilled foreign Whites, Indians, and Asians. The next section concludes the chapter

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[190] Interview with the political economy editor-at-large based in one of the largest media groups in South Africa.
[191] Ibid.
[192] Interview with the chairman of a free market economic policy advocacy institute.

## 5.3 CONCLUDING REMARKS FOR CHAPTER 5

This chapter has presented and discussed major findings of this study pertaining to the shortage of skilled labour in South Africa. The findings are as follows: that migration regulations deter reindustrialisation; that rigid laws deter reindustrialisation; and that shortage of skilled labour thwarts reindustrialisation.

Among other things, strong leadership is required to introduce and implement effective public policy reforms which will make it easy for skilled foreign labour to enter South Africa. Government should make it easy for skilled foreign labour to get and renew their work visas, and to live in this country and remove regulations which make it difficult for tourists to enter the country. They should repeal labour related laws which discourage investment, contribute to volatility in workplaces, and encourage prolong and violent strikes. They should drastically improve the quality of education in the country. The role of the president is very crucial in public policy formulation and implementation.

There is nothing wrong with President Ramaphosa leadership style of extensive consultations and trying to reach consensus with social partners on pertinent issues. However, consultations and debates should not be continued perpetually, but must be followed by decisions taken and implemented swiftly. It is not possible to reach full consensus on most key issues in a diverse country like South Africa, and the ANC government should remember that it is not co-governing with the unions. Leaders should lead, managers should manage, and unions should represent the interests of their members. It is that simple.

The governing party should also bear in mind that they have given a mandate by the electorate to govern. The government, organised business, and individual enterprises should take on the fight against trade unions and their federations. Unions have been pushing back against pro-market reforms, reindustrialisation, and general economic development. The government should either amend or repeal legislation related to central bargaining.

Under normal circumstances, small enterprises would not agree to the wages set by the bargaining councils, as they are not involved in the agreements imposed by trade unions and big companies that can afford higher wages. The problem is aggravated by the fact that it is not possible for small employers and their employees to participate at the bargaining councils. Furthermore, the minister tends to extend collective bargaining agreements to non-parties without consulting them. One would expect the minister to consider the impact of higher wages on the sustainability of small and medium enterprises, and the potential job destruction. The rights of small players to trade, earn a living, and freely associate is trampled upon by the extension of collective bargaining agreements. There is something about this public policy which is inhumane to employees who work for small firms; it is also anti-competitive and displays cartel-like behaviour. It is unfair for the minister to force businesses who want to compete at lower rates to pay higher wages, where their operational environment is somewhat different. One can argue that this violates the constitutionally guaranteed freedom to trade of the entrepreneurs concerned.

There are some respectable analysts who argue that the ANC government has done a commendable work of service delivery during the last 30-years of democracy. These include the provision of water, electricity, houses, roads, and other facilities to previously underserviced places. However, this relative success has been spoiled by massive corruption and the catastrophic negligence of education and training. One of the major failures after the inception of democracy in South Africa was the provision of poor-quality education, especially in elementary and secondary schools (basic education), and technical/TVET colleges.

The researcher has argued that the quality of education in government schools is worse than the previous Bantu education. Most learners progress through grades without having mastered basic communication skills (writing and verbal presentation), elementary understanding of mathematics principles and recreational / sporting activities. Necessary measures should be taken urgently to improve the overall quality of education in South Africa. Quality education will produce skilled labour which is essential to reindustrialise the economy. The next chapter provides findings related to poor formulation and/or implementation of public policies.

# CHAPTER 6: FINDINGS AND DISCUSSIONS PERTAINING TO POORLY FORMULATED PUBLIC POLICIES

## 6.1 INTRODUCTION

The previous chapter dealt with the findings of the study pertaining to the shortage of labour and the rigid labour legislation. Throughout this chapter the researcher offers his own interpretation and understanding of the data. This is line with the selection of the 'genre of design' research approach as mentioned in Chapter 4. Details of the research approach and procedures were provided in that chapter. This chapter builds and extends on the findings contained in Chapter 5.

This chapter contains two major findings pertaining to how some tax instruments and poorly formulated public policies discourage direct investments and sabotage reindustrialisation of South Africa's economy. The remainder of this chapter provides detailed findings of the study and its concluding remarks.

## 6.2 FINDINGS CONTAINED IN THIS CHAPTER

The table below summarises the analysis and shows the relationships between categories and sub-categories.

**Table 6.1: Summary of analysis showing the relationship between categories and sub-categories**

| Data collection technique | Main category | Sub-categories |
|---|---|---|
| Individual interview<br>Focus group interview | Some tax instruments discourage direct investment and reindustrialisation. | Crime and lawlessness discourage direct investment. |

| Data collection technique | Main category | Sub-categories |
|---|---|---|
| Document collection and analysis | Poorly conceived public policy leads to deindustrialisation | • ANC's pronouncements on prescribed assets deter direct investments.<br>• Onerous B-BBEE compliance and hostility towards dominant firms may discourage direct investments.<br>• Localisation public policy discourages direct investments.<br>• Policy uncertainty related to mining charter is discouraging direct investment in the sector.<br>• Agricultural related policy discourages direct investments.<br>• Public policy on intellectual property discourages direct investments.<br>• Flip-flopping on ICT public policy derailed South Africa's universal access to technology.<br>• Inadequacy to address geographical unevenness derails reindustrialisation.<br>• International trade does not protect locally produced products in line with the WTO.<br>• Investment strike and Regulation 28 of the Pension Funds Act of 1956 (as amended) have been limiting development. |

Each of these sub-categories will be discussed in more detail.

## 6.3 SOME TAX INSTRUMENTS DISCOURAGE DIRECT INVESTMENT AND REINDUSTRIALISATION

The sub-categories related to this finding appear in Table 6.1. as follows: some tax instruments and ANC's pronouncements on prescribed assets deter direct investment and reindustrialisation. Tax instruments that discourage direct investments include taxes related to carbon, health promotional levy, expats, and national health insurance.

### 6.3.1 Health Promotional Levy Discourages Direct Investment and Reindustrialisation

This levy is colloquially known as the sugar tax. It is charged on sugary beverages according to the grams of sugar which they contain and was introduced through the Rates and Monetary Amounts and Revenue Laws Act of 2017[193]. It came into effect on 1st April 2018. In 2021, the tax stood at around 11% of the price per litre. This tax

[193] Analysis of the Act.

was introduced under the pretext of supporting the Department of Health's efforts to decrease hypertension, obesity, type 2 diabetes, various types of cancer, tooth decay, and other sugar related non-communicable diseases prevalent in South Africa. Nevertheless, the unstated aim of this levy was to boost the declining tax base[194]. Unfortunately, this tax has had unintended consequences such as the reductions in the purchases of taxable sugar-sweetened drinks which was bad for economic growth[195].

While a substantial number of individuals and households reduced their purchases of sugary beverages by half and cut sugar consumption by half, there was no study which found that the levy led to significant health among the general public. One is not at all suggesting that the reduction of sugary drinks cannot lead to public health gains.

Nevertherless, studies undertaken in some countries have found that sugar tax has indeed had a negative impact and domino effect in the consumer goods and retail sectors[196]. In countries such as Chile, the United Arab Emirates, and Barbados, the ad valorem tax on sugar-sweetened drinks decreased the consumption of these beverages while at the same time increasing the prices of bottled water and other non-sugary beverages. Another observation worldwide has been that sugar related taxes mostly fail to target the actual sugar content because they were designed to levy both high and low sweetened drinks at the same rate. This takes away the incentive for manufacturers and consumers to replace high-sugary beverages with low sugar substitutes[197].

A study undertaken in 2020/21 found that, within the first year of the Act becoming effective, the sugar sector in general suffered large job losses of around 16 621, while the cane-growing sector in particular experienced 9000 job losses (NEDLAC, 2021). Because the sugar cane farms are in rural areas, it is predominantly the struggling working class who got retrenched. The increment of the levy and its continued existence would be catastrophic for South Africa. Sugar processing firms had lost around R800-million by 2019, and this figure continues to expand. It was estimated

[194] Interview with senior lecturer of economics based a university.
[195] Interview with the head of policy on global services and manufacturing programme.
[196] Ibid.
[197] Interview with the executive based in manufacturing association

that that about 250 000 tons of sugar sales were lost since the sugar tax came into effect in 2018. In monetary value, this translated into a loss of more than R1-billion.

There is no doubt that both financial losses, industrial output, and job losses will continue going forward. It remains to be seen if the introduction of a health promotional levy will have any tangible positive impact on public health. After reading through several interviews, reports, and literature, the researcher doubts that there will be a promotion of personal health and wellbeing of many people (Sikuka, 2021; Noakes & Vlismas, 2012; Noakes & Sboros, 2019). This is because most people tend to replace sugar sweetened beverages with non-sugary sweetened drinks. Studies have proved that most of non-sugar sweeteners have the same or even worse negative health effects than sugar.

In the medium to long term, the sugar tax may not even help to increase government revenue collection, because consumption and production of sugar sweetened beverages is declining. Production reductions, closure of sugary drinks firms, and retrenchments are caused by the introduction of the health promotional levy. This may mean that the collection of other taxes such as VAT, and personal, company and dividends taxes may somewhat be reduced. It is very apparent that the sugar tax is both mute in terms of its effectiveness and counterproductive with regard to reindustrialisation.

### 6.3.2 Carbon Tax Discourages Direct Investment and Reindustrialisation

Carbon tax is aimed at companies, municipalities, and other organisations whose operations emit high levels of carbon dioxide and pollution of the atmosphere. This tax came into being through the Carbon Tax Act of 2019, and became effective on 1st June 2019. It is one of the South African government's public policy instruments to protect the environment and mitigate against global warming by promoting a low carbon economy. The rate of the environmental levy is determined in line with schedule number 1 of the Act.

Climate change is one of the most significant issues of our time. South Africa is the 14th major greenhouse emitter worldwide and this is because of its heavy reliance on coal[198]. It is therefore commendable that the country has enacted necessary

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[198] Interview with the CEO of a UN funded development agency

legislation to contribute towards the reduction of greenhouse gas emissions. The government has also made a commitment through the Paris Climate Accord to transit to a low carbon economy. Having said this, public policy related to climate change should not be implemented in a way that it discourages both domestic and foreign direct investment.

Considering South Africa's poor economic performance, one has to ponder if it was wise to introduce another tax on companies that have struggled to remain sustainable. Carbon tax leads to reduced operational and industrial output[199], and some analysts predict that this tax may lead to what they refer to as a "carbon leakage phenomenon"[200]. This would happen when some local firms move their operations to counties with lower carbon tax to avoid production costs resulting from the introduction of this levy.

Public policy makers should therefore ask themselves if businesses operating in the country can afford another tax burden in the midst of rapid increments of electricity prices, poor infrastructure, lawlessness, shortage of skilled labour, etc. On the other hand, all stakeholders should ask themselves if South Africa can continue without a carbon tax. South Africa should implement measures that mitigate global warming while at the same time ensuring that an already over-burdened industry is not constrained to grow. This can be done where there is a political will.

### 6.3.3 Expat Tax Discourages Direct Investment and Reidustrialisation

This tax was introduced through the Taxation Laws Amendment Act of 2017 and came into effect on 1st March 2020. Amongst other things, it makes provision for tax on foreign employment income, especially for expats. It affects all citizens who are working abroad but are still South African tax residents. Amendments that were introduced require South African tax residents working in foreign countries to pay tax of up to 45% of their foreign employment income if it exceeds the threshold of R1.25-million[201]. Although this threshold may appear to be generous, it includes fringe benefits, allowances, bonuses, commissions, and gratuities. The threshold is not just

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199 Interview with the professor focusing on services and manufacturing research.
200 Interview with the CEO of a global entrepreneurship network.
201 Analysis of Taxation Laws Amendment Act of 2017.

confined to one's basic salary, but all foreign earnings. The minister responsible for finance may increase this threshold annually.

Expat tax can discourage foreign nationals living in the country from becoming South African tax residents. South African citizens who earn their income from other foreign countries may also embark on financial emigration and change their tax residency to other jurisdictions abroad. This may lead to a tax base erosion in the long-term [202].

SARS has publicly mentioned their concern regarding an increase in emigration[203]. SARS captures emigration data through the number of tax residents who apply to take their money offshore and those who apply for tax clearance. Unfortunately, most of the departures are for professionals who earn more than R1.5-million per annum. This has seen the tax base plummeting. There are three factors that are leading to the mushrooming of emigration, that is: expat tax, possible implementation of national health insurance, and political talk regarding the possibility of proscribing portions of pensions and investing them in state-owned entities. According to the Rand Merchant Global Markets Research report released in October 2019 and titled "NHI: The cost of emigration", about 4 519 of South Africa's medical professionals could have left the country by 2020. This number could rise to 15 202 by 2025.

### 6.3.4 National Health Insurance Discourages Direct Investment and Reindustrialisation

The ANC government has intended to implement affordable or free healthcare since 1994. At its 2007 national congress held in Polokwane, the party resolved to implement it[204]. Since then, there have many unsuccessful efforts to implement National Health Insurance (NHI)[205]. As early as 2002, two different government task teams were established to investigate health insurance for the uninsured. Their recommendations were simply ignored.

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[202] Interview with the professor of finance based in a British university
[203] Interview with the senior lecturer of economics based in a university.
[204] Analysis of ANC 2007 national congress resolutions.
[205] Interview with the executive director based in a policy research and advocacy organisation.

In 2004, a plan was devised to make provision for low-cost medical aid to millions of people who could not afford available medical aid scheme cover. Recommendations contained in the aforementioned plan were dismissed in 2006. In 2015, the idea of conceiving lost-cost medical aid was reintroduced, but proposals that were devised were rejected by the regulator of medical aid schemes. In 2019, medical aid schemes were permitted to devise low-cost plans for the poor. Again, their plans were scrapped by the regulator. The fact that the plan has not yet been implemented more than 20-years later is an indication that the government does not have the ability to implement this insurance[206].

Judging by the NHI's two policy documents and one draft bill (of 2019), this insurance is a tax, where the those who can afford it will contribute funds into a centralised fund of the health system under the auspices of the National Department of Health. The intention is to have the rich subsidise the poor, the healthy subsidise the sick, and the young subsidise the old. The NHI bill focuses solely on the funding of the health system and thus it should be seen as an additional tax on the already burdened taxpayers.

NHI's policy documents and the bill do not address other urgent problems that are besetting our health system. For example, the urgent matter facing South Africa in terms of health is to fix the existing health system. This can be done by properly using the money that is allocated to national and provincial health departments by the National Treasury annually. The government should also improve its project management efficiency and eradicate corruption to turn around the existing health system.

It seems the government pronouncements regarding NHI are more about populism and electioneering than the actual provision of quality health care. Successive ANC's health ministers have talked a lot about the potential of the NHI to provide good quality and equitable health care regardless of health status. The government should be able to do this by improving public health care. The notion that the rich and poor can access the same quality of health care is not practical – real life does not work like that.

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[206] Ibid.

Even outside the health sector, the rich live in better houses, they fly first class, use lounge facilities in airports, stay in five-star hotels, smoke cigars, put on designer suits, drive luxury cars, and watch sport in VIP suites in stadiums [207]. Truth is that there is nothing wrong with the rich being unequal to their fellow citizens. The excessive expenditure of the rich contributes significantly to economic growth and government fiscus through various forms of tax that they pay. The rich should not be vilified.

One of the unintended outcomes of poor government performance is that it has led to double taxation for the rich as well as the creation of a parallel state for the rich and the upper-middle class. The upper-middle class, the rich, and corporate South Africa have invested a lot in privatisation of traditionally public services. This includes education, security, telecommunication, transportation (car hire, Uber, Bolt, etc), criminal investigations, prosecutions, and litigations (through arbitration – Arbitration Foundation of Southern Africa). The increasing use of arbitration to settle commercial disputes instead of resorting to litigation is also an indication that the business sector has lost confidence to the South African judiciary[208]. The government should therefore focus on improving its services and making them universal instead of being obsessed with frustrating the upper-middle class and the rich.

The biggest public policy challenge in South Africa is not to elevate the poor to live a lifestyle similar to the upper-middle class and the rich, or to downgrade the rich to the level of the poor. Our challenge is not even to close the gap between the poor and the rich, but rather to reduce poverty.

It should be borne in mind that when the ANC national congress took a resolution to introduce the NHI in 2007, the South African economic was at its peak. The GDP growth in 2005 was 5% and hovering towards 6% in 2006. In 2007 the Minister of Finance, Trevor Manuel, declared the first budget surplus since South Africa became a democracy in 1994[209]. During the preceding years, budget deficits were getting close to zero, but by 2021 the situation had changed drastically. Budget deficits had grown to 11.2% of the GDP and the country was spending around R330-billion per year to

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[207] Interview with the chairman of a free market economic policy advocacy institute.
[208] Interview with the CEO of a liberal institute focusing on research and public policy.
[209] Interview with the chief economist based in a bank-owned asset manager.

service debt costs. By February 2022, more than 46% of South Africans were recipients of social grants and youth unemployment was standing at 56%[210]. Under the circumstances, the government does not have the fiscal space to introduce NHI. This is despite of the possibility of the new Act being introduced.

It seems the government would like to see the whole population having access to private health care. If this notion is correct – what would then happen to public health facilities and services? Universal health care should be introduced by maintaining clinics and hospital infrastructure, recruiting and retaining health professionals and specialists, appointing qualified and experienced managers. It should stick to proper project and financial management, and ensure that there is proper medical equipment and medicines. The government has not done any of these to date, and it is absurd for them to think that NHI will be the cure for  the ills in the public health sector.

Instead of being the panacea for the health care related problems in the country, the NHI may make the situation worse. Due to undue interference in the private sector and poor governance, the NHI may cripple the private health care sector which is currently run efficiently. Perceptions that this may happen has led to thousands of health professionals and highly skilled medical specialists leaving the country. Some citizens have also left the country through concerns that they will be doomed if NHI destroys private health care provision[211]. There are also genuine concerns that the intended NHI fund may become a target of massive corruption. South Africa has gone through this before because, when COVID-19 broke out in South Africa, billions of rands that were meant to procure personal protection equipment were stolen through corrupt means. Those involved in corruption did not care that thousands of their fellow citizens were sick and others dying from COVID-19. We have become a greedy and heartless society, and vultures out there are lining their pockets to enrich themselves through the introduction of NHI.

Furthermore, the ANC government has drastically reduced the efficiency of many clinics and hospitals that were properly run during the apartheid era. In fact, no new

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[210] Ibid.
[211] Interview with the professor and director based in a macro-economics institute.

public hospitals were built since the ushering of the new democratic system in 1994[212]. On 15 May 2024, President Ramaphosa signed the NHI bill into the NHI Act of 2023.

### 6.3.5 Fuel Related Taxes Discourage Direct Investment and Reindustrialisation

South Africa has the most expensive diesel, petrol, and paraffin petroleum products among the emerging markets[213]. This is due the assortment of taxes included in petrol and diesel sales. These include a general fuel levy, Road Accident Fund levy, and other levies. The table below depicts the contribution of various taxes to a litre of petrol.

**Table 6.2: A litre of petrol in November 2019**

| CONTRIBUTORS TO PRICE PER LITRE | AMOUNT | PERCENTAGE |
|---|---|---|
| Basic fuel price | R9.37 | 49% |
| General fuel levy | R3.83 | 19% |
| Road Accident Fund levy | R2.18 | 11% |
| Other levies | R4.09 | 21% |
| Total amount of levies (minus basic price) | R10.90 | 51% |
| Total price of petrol | R29.47 | 100% |

*Source: O website.*

These administrative taxes have contributed enormously to the unaffordable price of fuel in the country. As a result, the cost of doing business in South Africa has become very excessive. By July 2022, the price of petrol per litre had gone up to R27. This means that between 2019 and 2022, the price of petroleum products had increased by 27%. This led to the increment of prices for passenger transport, cargo, food, production costs, and cost of living in general and made it difficult to for the South African Reserve Bank to contain inflation below 6%.

There is no doubt that the war between Russia and Ukraine contributed to the increments of fuel and food prices in 2022. However, the biggest contributor to the rapid rise of prices since 1994 has been the ANC's government administrative taxes.

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212 Interview with deputy general secretary of a political party.
213 Interview with a fellow based in a research institute focusing on regional and international affairs.

These taxes have led to artificial increments of fuel prices, and to the situation becoming unsustainable by 2022[214].

Taxes and levies applied to the price of fuel have caused above-inflation increases in the basket of twelve other charges and levies which have collectively grown by more than 125% during the course of the last decade. The average rate of these increases per annum has been 8.5% and this is above inflation[215].

By December 2021, the combination of general fuel and Road Accident Fund levies resulted in R135-billion going to the fiscus per annum. This figure was around R55-billion in 2011/2012[216]. The most unfortunate thing is that the public and the economy are not enjoying the benefits of this tax collection. Public infrastructure and services have deteriorated during since 2011/12 which does not augur well for the attraction of direct investment in South Africa. Investors analyse the cost of doing business, and public physical infrastructure, and services before they invest in a particular country.

One of the biggest failures of Ramaphosa's presidency has been ballooning fuel levies and taxes. When he was elected as president in 2018, petrol was R13.76 per litre. By July 2022, the price per litre had risen to R27[217]. While the basic fuel price has also gone up, the overall prices of petroleum products would have not gone up this much if taxes and levies had not increased by more than 30% since 2018. This government has been taxing its citizens to the point of poverty while at the same time sabotaging economic growth and foreign direct investment.

Another factor in the escalation of fuel prices in South Africa has been over-regulation of petroleum products through the Petroleum Products Act of 1977. This Act does not allow petroleum retailers to determine their own prices for fuel. Fuel prices are determined by the national government unilaterally. This is stifling prices among retailers and has resulted in petrol prices being far higher than they need to be[218]. The need to decrease the cost of petroleum products has never been more urgent in South Africa.

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[214] Interview with the head of strategic clients based in a diversified financial services conglomerate.
[215] Interview with the professor of development economics.
[216] Ibid.
[217] Interview with the president of a trade union federation.
[218] Analysis of Petroleum Products Act of 1977.

Due to the outcry of the public, and business community, and pressure from other political parties, the Organisation Undoing Tax Abuse (commonly known as OUTA), and the Automobile Association of South Africa, the government implemented a temporary reduction of the general fuel levy from March to August 2022[219]. The reduction was set at R1.50 per litre.

### 6.3.6 ANC's Pronouncements on Prescribed Assets Discourage Direct Investments

Between 2018 and 2019, senior ANC leaders advised pension funds to invest moneys under their management into government infrastructure projects and state-owned entities (prescribed assets) as part of revitalising the country's economy[220]. The invested funds would be channelled to the public infrastructure in the form of loans that would be repaid. A major risk about this was that the government or its entities may not have been able to repay loans when they matured, and the invested pension funds would be lost. The risks associated with possible implementation of prescribed assets outweigh their benefits.

The ANC's pronouncements regarding possible introduction of prescribed assets as a public policy tool led to vehement opposition by academics, analysts, and pension fund managers. Some investors, highly skilled and educated people, and the wealthy threatened to leave the country[221]. Due to this opposition, the ANC government made it clear in 2020 that it would not pursue the policy of pension prescription. Even the Pension Funds Amendment Bill which was introduced on the same year did not contain regulations for prescribed assets.

Nevertheless, during the first quarter of 2022, the South African economy was still not doing well, public finances were deteriorating, and the country's sovereign debt by the big three international credit rating agencies (Moody's Investment Service, Standard & Poor's, and Fitch Rating) was rated further below junk status. In the fourth quarter of 2021, South Africa's unemployment rate increased to 35.3% from 34.9% in

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[219] Analysis of joint media statement by the National Treasury, and mineral resources & energy departments, 31 May 2022.
[220] Interview with the chief risk officer based in a corporate and investment bank.
[221] Ibid.

the previous three months[222]. If one uses the expanded definition of unemployment, the increment meant that 46.2% of people who were supposed to be economically active were not working. This translated into the actual number of unemployed people increasing to 14.5-million. Prior to this, in July 2020, the country borrowed from the IMF for the first time since 1994. This was followed by the loan from the World Bank in January 2022. The researcher's view is that there is nothing wrong with borrowing money from the IMF and the World Bank. But still, this is a serious matter because the ANC had vowed that they would never borrow from these institutions that they perceived as being "neo-liberal". There is a perceived stigma among some ANC's nationalists related to getting loans from the IMF and World Bank. They believe getting loans from these financiers would reduce the country to "a basket case"[223].

The thinking among the governing class was that borrowing money from these development financial institutions (DFIs) was a show of weakness and failure. They did not like the fact that conditions attached to the loans from these two DFIs dictated to the government on how it must shape its public policy. According to most ANC's leading cadres, this was tantamount to handing over the country's sovereignty to "foreign white monopoly capital" and "libertarian orthodox financiers"[224]. The fact that the National Treasury under the leadership of the Minister of Finance, Tito Mboweni, could have applied for these emergency loans from the above-mentioned DFIs was an indication of the desperation of the ANC[225]. Due to this desperation, the ANC may find itself considering tapping into pensioners' savings by introducing a public policy on prescribed assets.

As part of mitigating the effects of the pandemic in 2020, the South African government introduced the Covid-19 social relief distress grant (SRD) of R350, to be paid to persons who were unemployed and were not receiving any form of income. This was supposed to run for a period of six months. However, due to the worsening economic situation, the president extended this for a longer period. There was a fear among some politicians and analysts that the termination of this grant would lead to

[222] Interview with the associate professor and head of macro-finance analysis.
[223] Interview with the chairman of a free market economic policy advocacy institute.
[224] Interview with the lecturer of strategy management based in a postgraduate school of public management
[225] Interview with the professor of finance based in a British university.

more poverty and instability in the country[226]. At the time, the Kwazulu-Natal and Gauteng provinces went through public violence, looting, and destruction of public infrastructure, and private property in July 2021 after the president had suspended the SRD.

Although R350 is a small amount, it had somewhat plugged the income gap. Since then, politicians, academics, and analysts have advocated for government to convert the SRD into a basic income grant or what some economists refer to as an unemployment relief grant[227]. As part of this, the amount of R350 would have to be increased to a minimum of R650 per month. The advocates included the Institute for Economic Justice (a think-tank), Prof. Thuli Madonsela (law trust chair in social justice at the Stellenbosch University), and left-leaning economists like Duma Gqubule, Neil Coleman, Prof. Nouriel Roubini, Colin Coleman, Prof. Pramol Dhawan, and Prof. Michael Sachs (Coleman, Dhawan & Roubini, 2021).

There was a very strong push back from Ramaphosa's presidential economic advisory council. Nevertheless, according to libertarian orthodox economists and analysts like Stuart Theobald, Isaah Mhlanga, and Thabi Leoka, the ANC government may end up agreeing in principle to the introduction of the basic income grant (Mhlanga, 2021). A major factor that may push the ANC to adopt this public policy are its dwindling electoral outcomes both in local government and the general elections (Marais, 2022). Consequently, this might contribute to the depletion of taxpayer's funds. To mitigate against this, the ANC may reconsider implementing a prescribed assets policy.

The possibility of introducing prescribed assets was no longer just confined to the ANC's election manifesto, but was moved into a green paper (discussion document) stage by 2019. This matter may resurface into public discourse as a white paper. These papers are substantial policy positions that are usually developed into law and signed-off by the president of the republic.

There is consensus among left-leaning economists, liberal economists, government, and business that increasing public infrastructure spending is essential and an important step towards the revitalisation and growing of the economy.

[226] Interview with the director based in a niche consultancy focusing on risk management in Africa.

[227] Interview with an economist based in an independent development economics centre.

Nevertheless, the introduction of prescribed assets as public policy tool would have negative and devastating consequences[228].

Firstly, it would interfere with the market function of capital allocation which is driven by investment performance and return on investment. Secondly, prescription would lead to further downgrading of the country's credit rating. Once a country loses its investment grade rating (which occurred in March 2020), foreign investors such as pension fund managers will be compelled to withdraw their investments from South Africa. If the prescribed assets policy is not implemented, the country has a fair chance to regain its investment grade rating.

Thirdly, apart from undermining the prudent and accountability duties of fund managers, this may force them to invest in assets that are not appropriate for their specific risk profile, thus increasing the chance of making losses. This would erode the value of pensions.

Fourthly and lastly, prescribing assets would be counterproductive in the sense that it would cause alarm to investors, discourage direct domestic and foreign investment, and lead to capital flight[229]. As mentioned in the preceding paragraphs, the introduction of this policy would lead to the emigration of highly skilled, educated, entrepreneurial (creators of jobs), and wealthy persons. This would shrink South Africa's tax base. In other words, introducing prescribed assets as a policy tool would destroy the economy, increase unemployment, disable the government from providing social grants, and reduce infrastructure spending.

## 6.4 POORLY CONCEIVED PUBLIC POLICY LEADS TO DEINDUSTRIALISATION

The sub-categories related to this finding appear in Table 6.1. as follows: onerous B-BBEE compliance and hostility towards dominant firms discourage investment, as does the localisation of public policy. Mining related public policy, agricultural related policy and public policy on intellectual property discourages direct investment. Finally, flip-flopping on ICT public policy has derailed South Africa's universal access to technology, while inadequately addressing geographical unevenness derails

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[228] Interview with the CEO of corporate and investment banking.
[229] Interview with the chief risk officer in a corporate and investment banking.

reindustrialisation. Each of these subcategories is discussed in detail the next sub-sections.

### 6.4.1 Onerous B-BBEE Compliance and Hostility Towards Dominant Firms Discourage Direct Investment

While it was important and commendable for the ANC government to introduce B-BBEE as a public policy tool to redress the past injustices wrought by the colonial and apartheid regimes, the policy was poorly conceived and implemented[230]. Injustices included denying others the right to political affiliation and to vote for the government of the day. Black people in general and black South Africans in particular were denied opportunities to accumulate specialised skills, were offered poor education, and were prevented from participating in meaning entrepreneurship that would yield commercial enterprises.

The apartheid regime relegated the majority of black South Africans to underdeveloped bantustans. The few who could live in major commercial centres had to have permits to be in urban areas and they largely occupied jobs that required unskilled labour. This led to the South African black population being disadvantaged both politically and economically[231].

On the other hand, the white population enjoyed massive educational, political, and economic privileges. They lived freely in major commercial centres, owned vast parts of the land, practiced farming in fertile land or land with favourable conditions for the type of farming they were pursuing, and had access to cheap labour in the form of black people. Consequently, when the country attained democracy in 1994, most black South Africans were either unskilled, poorly educated, and lived in poverty. Major companies were owned and run by white shareholders and executives. There was great inequality between the white and black population which the ANC rightly felt obliged to address. As part of this, the party instituted the RDP, and introduced BEE as a policy tool to address the past injustices. Its purpose was to economically empower black people through good equality education, access to capital, affirmative action, procurement opportunities, and ownership of businesses[232].

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[230] Interview with the CEO of a liberal institute focusing on research and public policy.
[231] Interview with the secretary general of a trade union federation.
[232] Interview with the professor of economics.

Since the ushering in of the new democratic dispensation, the ANC has enabled many Africans to have access to electricity, and millions of houses have been built and allocated to the poor. There has also been a substantial increment of the black African middle and upper-middle classes. Many upper-middle class black African households live in what were historically exclusively white suburbs, and their children either attend advanced private schools or schools that were exclusively for the children of the white population[233]. Unfortunately, due to massive corruption, poor public policy formulation, and poor implementation of BEE, unemployment has increased substantially, the rand has lost value, and the economy has mostly deindustrialised since 1994. Only a few Africans, mostly those linked to the ruling class, have accumulated massive wealth through BEE[234]. This wealth was acquired by getting shares from established white companies. This constituted wealth redistribution instead of the creation of new wealth.

When it was conceptualised, economic empowerment was meant to be broad instead of being confined to the black elite with political connections. After realising that B-BEE did not yield the required results, the government passed the Competition Amendment Act of 2018. This piece of legislation was championed by the left-leaning Ebrahim Patel, who was serving as the Minister of Trade, Industry, and Competition. Prior to becoming a cabinet member, Patel was a senior unionist and was known to be against free market principles. As a general secretary of SACTWU, he contributed to the collapse of a thriving clothing and textile industry in this country. By introducing localisation and the Competition Amendment Act of 2018, Patel unintentionally brought the whole economy to its knees. This Act was a product of misdiagnosed and undisclosed analysis which will discourage both domestic and foreign direct investment[235].

The common view among the likes of Patel, the unions, the SACP, and ANC's radical economic transformation faction has been that South Africa is failing to industrialise due to the economy being "highly concentrated". President Ramaphosa, who is a close confidante of Patel, signed the Competition Amendment Bill into law in

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233 Ibid.
234 Interview with the CEO of a liberal institute focusing on research and public policy.
235 Interview with the CEO of a global entrepreneurship network.

February. The passing of this law marked a watershed and a regression of South Africa's industrialisation public policy. This law is targeted against perceived "dominant" companies which are not allowed to embark on price discrimination and unfair procurement practices. If they do this, they will face harsh punishment[236].

Indeed, firms that become involved in price collusion and unfair procurement practices should be subjected to punishment; this was done to those who were colluding in stadium construction, those that were fixing bread prices, and others. However, the focus on so-called dominant firms and highly concentrated sectors is misplaced and will serve as an impediment to investment.

Each sector in South Africa has at least six major players which compete strongly for the market share. Nevertheless, South Africa is fairly low down regarding the prevalence of concentrated economic sectors compared with other upper-middle income economies. There is also no proof that pricing in the country is discriminatory[237]. For instance, the Consumer Price Index has shown that prices have increased consistently at around 2.4% per annum; thus inflation is under control in the country. This proves that there is no widespread price abuse. Some of the firms that used to be dominant in the Johannesburg Stock Exchange (JSE) in the 1990s now have their percentages substantially reduced.

The government has the responsibility to create a conducive environment for new enterprises to enter the market and take some market share. Nevertheless, this should not be done by using public policy to cripple big firms by forcing them to be less competitive. This is counterproductive and degrades productivity, thwarts industrialisation, and deters direct investment. The notion that big companies are gaining bigger market share by implementing discriminatory prices and unfair purchase practices is wrong. Factors such as the provision of quality products, efficient services, marketing strategy, and affordable prices should be considered. New entrants to the market and established firms should co-exist. We have seen this before in South Africa.

As an example, Capitec Bank got its banking licence in 2000 and operated as a microlender. By 2022, its share price was much higher than those of its competitors

[236] Interview with the CEO of a global entrepreneurship network.
[237] Interview with the senior fellow based in a U.S. university.

who were already dominant by the time it was established. These included Standard Bank (founded in 1862), First National Bank (founded in 1838), Nedbank (1888), and Absa (1991). By the end of February 2022, Capitec Bank's customer base had increased to 18.1-million and it became the biggest bank measured by the number of customers. The bank's profit had grown by 84%[238]. This is far higher than pre-COVID-19 era. The point being made here is that policy makers do not have to throttle big companies to enable new enterprises to enter the market. Capitec Bank was not enabled by some competition law to take the largest market share from the four dominant banks – three of which were in the market for more than 100-years.

Using legislation to victimise "dominant" firms would lead to further deindustrialisation, capital flight, more unemployment, and a shrinking tax base. It appears that government is using big firms as a scapegoat for its failures and to win over the unions. It is a populist stance for a government whose electoral fortunes have declined rapidly. To reindustrialise South Africa's economy, a concerted effort should be made to produce skilled labour, attract highly skilled foreign nationals, increase productivity, and restore law and order. Big firms should be allowed to thrive and to grow the country's economy.

During the interviews, it became very apparent to me that BEE as a public policy is not considered as a deterrent for direct investment. Interviewees were rather more concerned with perceptions of BEE favouring those who were politically connected. This means that if this policy was fairly implemented, these concerns would nor arise. There was also a concern that executives are becoming overwhelmed by compliance requirements. Mentioning the word "compliance" to a group of mining and financial services executives elicits a negative reaction. These executives are expected to comply with a myriad of policies, laws, regulations, and procedures. Executives in the banking sector are buckling under the weight of 150 non-banking pieces of legislation and the requirements of Basel III regulations. There was consensus among those interviewed that the Competition Amendment of 2018 constituted regulatory overreach; thus its implementation may deter foreign direct investment.

[238] Analysis of Capitec Bank annual reports.

### 6.4.2 Localisation of Public Policy Discourages Direct Investment

Minister Ephraim Patel has successfully introduced localisation as a major public policy for economic recovery in South Africa. As part of implementing this policy, manufacturers should use locally made inputs when producing goods. State-owned entities and business should target 20% of non-petroleum imports for domestic replacement within a five-year period. This policy comprises localisation master plans – which include state subsidies and other various forms of support for "local champions"[239]. A major tenet of localisation is the increment of tariffs on imports and the implementation of trade barriers on foreign procured services, inputs, and products.

The localisation of 30[240] selected industries and the master plans that were crafted by Minister Patel's department are doomed to disastrous failure and will cause great damage to South Africa's devastated and deindustrialised economy[241]. It will lead to the increment of products in selected industries and may result in poor quality in the absence of competition from imported goods. There may also be production delays and shortages at the retail level. Consumers, especially the poor, will bear the brunt of this ill thought out public policy.

In the absence of competition from imported goods, local producers may increase their prices. On the other hand, higher tariffs for imported goods will result in the increment of their prices. Localisation constitutes a regression when it comes to South Africa's integration to the global supply chain. In fact, local companies which are protected through high tariffs of imports will end up being less competitive. Competition is good, it keeps manufacturers on their toes, standards high, and prices competitive[242]. Minister Patel has claimed that his master plans and the import barriers which his department have implementing are working. This claim has not been verified by an independent entity and it is unbelievable.

The notion that localisation will lead to industrialisation and will grow the country's economy is fundamentally wrong. The problem is worsened by the fact that local manufacturers of the 30 products that have been selected for localisation are not even

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239 Analysis of localisation policy.
240 The list of selected industries keeps on growing.
241 Interview with the CEO of a bank-owned asset manager.
242 Interview with the professor focusing on services and manufacturing.

competitive. To reach Minister Patel's target of 2025, the local textile sector has to grow by 30%, while machinery and electronics would have to increase by 50%. This is not going to happen[243]. Corporate South Africa, through NEDLAC, has agreed to the localisation policy. Each localised sector has a private sector "champion"[244]. When localisation eventually collapses, its failure will be blamed on the private sector instead of poor public policy formulation. The quickest way to get the 30 selected products produced locally is to invite manufacturers who are already doing that elsewhere to come and operate manufacturing plants in South Africa. The country is already doing this in the motor vehicle assembling scheme through production incentives. The next step should be to get various parts of a motor vehicle produced here through a similar incentive scheme.

The implementation of the localisation public policy was boosted when the National Treasury issued a circular in October 2021 banning the usage of imported cement on all public sector projects. This boosted the share price of PPC, a local cement producer. Some commentors and corporate South Africa praised the National Treasury for boosting the fortunes of the local construction and cement industries that were hit hard by the outbreak of COVID-19 pandemic[245]. This euphoria might be short-lived, because localisation could unintentionally put pressure on the local processing of cement resulting in lower quality of production[246]. It has been stated in one of the preceding paragraphs that South Africa has implemented localisation in industries where there is poor capacity which may lead to price increments of 20%. There are only two big players in cement production in the country, PPC and Sephaku Cement. In an environment where companies are protected from competition, they tend to relax. There is no innovation, and they lag behind regarding pricing curve[247].

A major concern arises around which criteria the Department of Trade, Industry, and Competition used to select the cement industry (and other 29 selected sectors) to be the beneficiaries of localisation and state protection. There are no criteria, economywide considerations and assessment, nor data that the government used to

243 Ibid.
244 Analysis of NEDLAC reports.
245 Interview with an executive based in a manufacturing association.
246 Interview with the CEO of a capital markets & financial services research house.
247 Interview with the senior researcher based in a competition regulation research centre.

do the selection. It would seem the cement industry and its fellow 29 beneficiaries had lobbied hard to be included in localisation. This policy has largely been imposed on industrial sectors that do not require state protection. For example, the percentages for cement and poultry products imports have been relatively low.

Imports for cement are about 5% when it is busy, and less than 20% for poultry products[248]. But surely this an arbitrary way to formulate public policy. As a result, this policy may not have the desired effects on the economic recovery and reconstruction that it was intended to drive. Formulation and implementation of public policy depends on a practical, case-by-case approach to the impediments on different manufacturing sectors. The benefits of industrial policy should outweigh the costs, poor innovation, low quality products, and lack of competitiveness.

Transnet, a major state-owned entity, has raised some concerns regarding this public policy (Phakathi, 2021). This logistics and rail group noted that as part of implementing localisation, state-owned entities would be compelled to procure goods from local middlemen who import products and add their own mark-up. Other than this being unethical and contrary to the requirements of the policy, it pushes up prices unnecessarily.

It is a serious contradiction to note that one aspect of enforcing localisation is the introduction of exports tariffs on certain products. Exports bring hard currencies to the country and contribute massively to economic development[249].

Although one of the objectives of localisation is job creation, it does not seem that the public policy will lead to substantial creation of new jobs. Instead, it will retain jobs of unionised workers while preventing the unemployed from entering the market[250]. Since the construction of stadiums leading to the FIFA World Cup, there has been very little building happening in South Africa; therefore, the cement industry may not create many new jobs despite being a beneficiary of localisation. At the same time, big business will be enjoying protection through the state while making large profit margins through uncompetitive pricing. In the medium to long term, localisation in South Africa will prove to be self-defeating and economically untenable.

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[248] Ibid.
[249] Interview with the professor of finance based in a British university.
[250] Interview with the chairman of a free market economic policy advocacy institute.

### 6.4.3 Policy Uncertainty Related to the Mining Charter is Discouraging Investment in the Sector

When the ANC became the first democratic government in 1994, they commited to transform all sectors of the economy. This would enable black people to get some ownership and get involved in the running of companies in all economic sectors. Because the mining sector was the largest sector of the economy, the ANC targeted it as the first sector that should be transformed[251]. One of the public policy tools that the ANC intended to use to transform and deracialise ownership and management patterns was the mining charter. After this charter yielded little success, revisions were made in 2010 and 2018.

The Minerals Council of South Africa, an association of mining companies, successfully challenged the 2018 version of the mining charter in the high court. The court judgement came out in 2021; since then, there has been some speculation in the mining sector that the government may convert the mining charter into a law (an Act). The fact that public policy related to the transformation of the mining sector has not yet been finalised since 1994 has created a lot of anxiety among the existing and potential investors[252].

Due to the hostility between the government and the mining sector, public policy uncertainty, unstable provision of electricity, inadequate infrastructure, excessive crime and lawlessness, and slow processing of prospecting and mining rights, BHP has left South Africa. Anglo American and Anglo Gold Ashanti have substantially reduced their operations in South Africa; in fact, Anglo Gold Ashanti does not have any mining operations in this country, it only has its head office even though its mining operations span every continent worldwide[253].

During an interview, a chief economist based a bank-owned asset manager, asserted that investors were shunning South Africa as a mining investment destination because of *"public policy flip-flopping"*. This is despite of the fact that the country is still endowed with vast mineral resources. This assertion was confirmed by an annual

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[251] Interview with the lecturer of strategy management based in a postgraduate school of public management.
[252] Interview with managing director of a private equity firm which invest in the mining sector.
[253] Ibid.

report which was released by a Canadian think tank[254] The country was once the top gold producing country in the world, but now is ranked among the least attractive places globally for mining investment[255].

In the 20th century, when South Africa was the largest gold producer, the mining sector was the backbone of industrialisation. At its peak in the 1980s, it employed just over 760 000 mine workers[256], however, since 1994, the situation has changed drastically for the worse. Production has declined substantially, and investors are deploying their funds to countries with favourable public policy and less political risk[257]. This claim is supported by the Fraser Institute report[258]. According to this report, South Africa ranked a lowly 75 among 84 jurisdictions that were surveyed regarding attractiveness to mining investment. Ranked among the bottom 10 countries pertaining to public policy, South Africa was joined by Zimbabwe, Venezuela, and the Democratic Republic of Congo among others. The 2022 report also placed South Africa among the worst jurisdictions for mining investment[259]. Policymakers in South Africa should understand that the abundance of mineral deposits is not the only factor that would attract investment in the country's mining sector.

It was mentioned in one of the paragraphs above that, other than financiers avoiding investment in new mining projects, production in the current operations has declined significantly. While the country has been the world's largest gold producer for nearly a century, production has recently dropped, and South Africa is now the eighth major gold producer after China, Australia, Russia, USA, Canada, Indonesia and Peru[260]. This is a big concern when one considers that gold production was previously the driver of the South African economy. This observation is supported by Whitfield (2020:29) who declared:

> *Gold mining in South Africa is all but dead. Gold Fields operates just one mine in South Africa, at South Deep, and at the time of writing, AngloGold Ashanti is in the process of selling off its last mine to focus more on profitable projects*

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[254] Fraser Institute Annual Survey of Mining Companies 2021. Vancouver.
[255] Interview with the head of risk management based in a management consultancy.
[256] Interview with the managing director of a private equity firm which invests in the mining sector.
[257] Interview with the head of risk management based in a management consultancy.
[258] Fraser Institute Annual Survey of Mining Companies 2021. Vancouver.
[259] Fraser Institute Annual Survey of Mining Companies 2022. Vancouver.
[260] Interview with the managing director of a private equity firm which invest in the mining sector.

*elsewhere, while the once-mighty DRDGold now concentrates on extracting gold from tailings dumped a hundred years ago by using better technologies than their forebears. It is hard to believe that on the day Nelson Mandela was released from prison in 1990, 23 of the top 40 companies listed on the JSE were gold miners. But reserves have become depleted, and a mix of safety concerns and rising costs means that even South African miners with an appetite for risk, operating at the deepest levels of any mines in the world, 4 kilometres below the surface, are calling it a day*.

While interviewees who participated in this study acknowledged that mining production has considerably declined in South Africa, they did not attribute this to mineral depletion, but in fact said the opposite. They mentioned that while the country was still endowed with enormous mineral resources including gold under its soil, policy uncertainty was preventing most investors from directing capital to the local mining sector. This observation is supported by some prominent scholars.

One of these scholars, Johnson (2020: 109), was very disparaging of the BEE mining charter and its destructive impact on mining:

*An even more clear-cut case was the mines, in which successive editions of a mining charter compelled higher and higher equity shares (30% by 2018) for black investors. The result was to stifle the mining industry almost completely, and many thousands of mining jobs were lost. Clearly, these lost jobs mattered much less to the ANC than the help they were trying to give to would-be black capitalists*.

Some interviewees further argued that the ANC had caused an investment strike because of its poorly formulated policies. South Africa holds greater mineral wealth than any other country in the world. Nevertheless by 2017 these policies had given rise to a situation in which no capital had been invested in a new mine for more than ten years and in which mining firms had come across opportunities in other countries with less tedious regulatory regimes.

The mining sector is dying under the ANC's watch, and many workers in this sector have lost their jobs. This was a manifestation of how the ANC has recklessly created an investment strike by inserting a new black and parasitic upper social layer that would own 30% equity share into prevailing social structure. In fact, the insertion of this new social layer would wipe out the profitability of the money invested in mines and destroy the sustainability of the sector in South Africa.

All these have ruined new capital investments in the mining sector, and as a result heightening the investment strike by the private sector. It is very apparent that the South African economy has been in trouble since the ousting of President Thabo Mbeki in September 2008.

It is not only the poor formulation of the B-BBEE public policy which has prevented significant new investments in South Africa's mining sector. Other factors include lawlessness, endless and violent industrial strikes, rampant power outages, and water disruptions. Foreign investors are also discouraged by the onerous and inefficient process to get study, working, and business visas. Road, railway, and ports infrastructure has drastically deteriorated during the last 17-years. Mining companies lost R35-billion in 2021 owing to Transnet being unable to rail minerals to ports and other destinations; this claim was supported by the Minerals Council of South Africa.

Despite of all these problems, the South African government has pushed ahead with its empowerment public policy. This has led to regular conflict between it and miners, ending in court over the mining charter. Investments are also hampered by backlogs of more than 4000 prospecting and mining rights and mineral rights transfer applications gathering dust in the Department of Mineral Resources and Energy. The department has delayed replacing the failed South African Mineral Resources Administration cadastral system. This possibly explains why mining exploration activity in South Africa has continuously declined from its peak of 5% expenditure in 2003 to its lowest point of 1% of global investment[261].

### 6.4.4 Agricultural-Related Public Policy Discourages Direct Investments

Several people who participated in this study emphasised the importance of agriculture as part of reindustrialisation and growing the economy. Attention paid to the East reveals that countries such as South Korea and Vietnam were once subjected to subjugation by foreign powers, military autocracy and wars. Their economies were poor; however, a combination of both political will and economic reforms led to

[261] Interview with the executive head of stakeholder affairs based in a public mining company.

substantial investments in agriculture. This led to rapid economic development and significant industrialisation[262].

The vast Asian economic growth points to a connection between agriculture development and rapid industrialisation through well formulated and implemented agriculture and industrialisation public policies. These observations are supported by Greg Mills in his highly acclaimed books – *Why Africa is poor: What Africans can do about it (2010)*, and *Africa's third liberation (2012*). In these, Mills repeatedly asserts that African leaders at large and South Africa's leadership should pay more attention to agricultural development as the solution to poverty. He declares that there would never have been an industrial revolution without an agricultural revolution. Although most parts of Africa and South Africa are endowed with arable land, the African continent has never undergone what could be referred to as an agricultural revolution (Mills & Herbst, 2012).

South Africa's economy in fact relies on agriculture, mining, and tourism however, the country has not prospered in recent years in these three sectors due to poorly formulated policy positions. Agricultural production has declined gradually, and the country is often an importer of food[263]. Moreover, policy uncertainty has led to disinvestment in crucial economic sectors. As Mills (2014) concurs: *"The key reason behind economic failure is politics"*.

When it comes to agriculture, there has been uncertainty around on public policies dealing with three major issues – land restitution, agricultural sector transformation, and land repossession without compensation.

Since the dawn of democracy, land restitution policy and redistribution has dominated public policy discussions in South Africa[264]. There is general agreement that some land reforms should be implemented to right the wrongs of colonisation and apartheid legacy – specifically the implications of the 2013 Natives Land Act[265]. The application of this law led to millions of black people being forcibly removed from their land by the apartheid government. This law decreased African black land ownership

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[262] Interview with the head of policy on global services and manufacturing research programme at a South African university.
[263] Interview with the senior lecturer of doing business in emerging markets based in a postgraduate business school.
[264] Interview with the deputy general secretary of a political party.
[265] Interview with the CEO of a liberal institute focusing on research and policy.

to 7%, and later on the ownership slightly improved to 13% due to the 1936 Native Trust and Land Act of South Africa[266]. This has been a very big irregularity when one considers the fact that the composition of ethnic groups in South Africa consists of 80.7% black Africans, 8.8% coloureds, 7.9% whites, and 2.6% Indians [267].

Apartheid era public policies allocated 87% of the land to the white population. A large part of this land was arable and fertile (Fourie, 2021). Black people were not allowed to buy pieces of this land and could only occupy it as servants of their white masters. They had to stampede for the 13% of land provided to them and were mostly confined to poor homelands and underdeveloped townships in the fringes of urban areas. As a result, black people struggled to provide for themselves and their families[268].

Due to apartheid legislation, black people were left with very little land for smallholding and commercial farming activities[269]. The only land available to them was communal, owned by the Bantustan governments under the custodianship of traditional leaders. The main form of agricultural activity happening in this land was subsistence farming because there was no security of tenure for communal land. It was not possible for farmers working on it to get funding from banks and other financial institutions. Since then, there has been very little transformation in the agricultural sector[270].

From the onset after being unbanned in 1990, the ANC has advocated for land restitution and redistribution which would support agricultural production. The party has attempted to use land restitution as a public policy tool to address land dispossession, rural development, and food security but has largely failed to implement its policy[271].

Since the dawn of the new democracy in 1994, South Africa has relied on the market-based land reform programme largely referred to as the willing-buyer-willing-seller approach (Ganta, 2019). The ANC, Economic Freedom Fighters (EFF) (radical socialist political party) and some analysts have argued that this approach has not

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[266] Interview with the professor of development economics.
[267] Analysis of Statics SA data published in 2022.
[268] Interview with the professor of development economics.
[269] Interview with a senior policy specialist based in an economic institute.
[270] Interview with an agricultural economist based in a DFI.
[271] Ibid.

produced its intended results. The target of transferring 30% of white-owned land to Africans by 2014 has not been achieved yet. In effect, 2014 was not even the first deadline set to attain the aforementioned target.

To counter the EFF and its own radical economic transformation faction, and to appease its predominantly black African constituency, the ANC adopted the policy of expropriating land without compensation (December 2017, 54th national congress)[272]. The process to change the Constitution of the country to make provision for this began in 2018 but has moved extremely slowly. In December 2021, the national assembly failed to pass the 18th constitutional amendment bill that would have allowed the expropriation of land without compensation[273]. The ANC could not get the required two-thirds majority, as both the Democratic Alliance (DA) and EFF voted against the bill.

Although both the ANC and EFF agreed in principle with the policy of expropriating land without compensation, they had irreconcilable philosophical differences about the matter. The governing party had wanted the expropriated land to be transferred to black people, while the EFF argued that all land ownership should be transferred to the custodianship of the state. This has made local and foreign investors extremely worried that property rights and ownership in South Africa would no longer be protected[274]. Without these significant investments, the agriculture sector cannot grow to its full potential. There has also been insubstantial public policy support for agricultural activities in the former homelands and floundering farms. Most of these are smallholdings that have been acquired by a few black aspirant farmers as part of the land reform programme.

In May 2023, Senzo Mnchunu, the minister of water and sanitation published draft regulations which stipulated that only farms which have satisfactory black-ownership would be granted new water use licences. According to these regulations, farms that irrigate 250 hectares (ha) must have 35% black shareholding, those that irrigate 500ha or more must allocate 50% to black shareholders, and bigger farms that irrigate more than 1000ha must give black people 75% shareholding. Most people the researcher

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[272] Analysis of ANC 2017 national congress resolutions.
[273] Interview with the senior policy specialist based in an economic institute.
[274] Interview with the chief risk officer based in a corporate and investment banking

interviewed were very critical of these regulations. Although this public policy had not yet been implemented at the time of this fieldwork of this study, the publication of these regulations created lots of uncertainty in the agriculture sector. This has the potential to discourage both local and foreign direct investments into South Africa[275]. The proposed new water uses licences also constituted a real threat to food security in the country[276].

It is absolutely irrational to expect white farmers to freely give away between 25% and 75% shareholding. Government appears not appreciate the fact that farmers were already financially burdened by electricity load-shedding, regulated labour wages, and excessive input costs. The costs of packaging and logistics are also very high. If this public policy gets implemented, it will decollateralise the farming businesses. This will make almost impossible for them to raise funding from financiers[277].

Farmers use their land as surety for loans. In the absence of these loans, commercial farming and food production in South Africa will virtually come to a standstill. Government does not understand this because it takes food production for granted despite section 27 of the Constitution of the Republic which gives people the right to have access to sufficient food[278]. By August 2023, farming businesses owed banks around R250-billion[279]. This constituted a large risk to commercial farmers, and the least the government should do is to support them and stop burdening them with ill-considered public policies.

With the rand weak and the inflation that is periodically stubbornly high, South Africa cannot afford to solely rely on food imports. The poor, and middle class will bear a large brunt for this. Policymakers should appreciate the fact that the core agriculture sector, employs approximately 880 000 people in the country, not including the whole food production value chain [280].

[275] CEO of a liberal institute focusing on research and policy
[276] Agricultural economist based in a development financier
[277] Senior financial services lawyer
[278] Director based in a poultry association
[279] Interview with the chief risk officer based in a corporate and investment banking
[280] Agricultural economist based in a development financier

### 6.4.5 Public Policy on Intellectual Property Discourages Direct Investment

The term intellectual property in the context of this study includes issues pertaining to copyright, patents, and trademarks. Rapid availability of digital platforms and internet of things (IoT) has led to the abundance of information available in many forms. Digital platforms that network globally give rise to avenues for access to ever-increasing amounts of information. Yet the same IoT and digital platforms that enable access to information are accompanied by intellectual property rights challenges.

The internet has provided many platforms for globally sharing information, music, art, books and other works. Nevertheless, while the IoT has opened a broad range of benefits to its users, there are serious concerns among copyright owners to keep control over the copying, using and distribution of their work[281]. Digital platforms make it possible for audio-visual items, literature, music, film, and other copyrighted materials to be easily copied and/or distributed without disturbing the original product. Besides, these digital materials are universally available, while internet users can conceal their identity. Given the risks presented by the copying, using and distribution of copyrighted materials in digital formats, producers, writers, artists and creators have demanded that the South African government should adopt public policy measures to assist them with the protection of their rights[282].

In the absence of well formulated and implemented public policy to protect copyrighted materials, owners and investors feel vulnerable in South Africa due to the entrenched culture of entitlement. This is because users of the copyrighted information in digital, print, or whichever form, have some beliefs about their own right to copy and use that information and to share it with others without the required payment being made. This is wrong because, even if users have expectations, they do not have a legal right to such actions without buying the materials or getting the permission of the copyright owner. However, users in this country have abused intellectual property for many years without consequences[283].

In various jurisdictions around the world, public policies are informed by relevant pieces of legislation. One of the laws which regulates intellectual property in South

[281] Interview with the managing director based in investment advisory firm.
[282] Interview with the director based in a niche consultancy focusing on risk management in Africa.
[283] Interview with the professor focusing on services and manufacturing research.

Africa is the Copyright Act of 1978. Although this Act is old, it is still in force and was last augmented by regulations published in 1985. In 2017, the relevant ministry introduced the Copyright Amendment Bill, but by the first half of 2023, this Bill had not yet been passed into law. That is a regular problem in South Africa which takes many years to finalise and implement legislation. This creates policy uncertainty for practitioners, businesspeople, current investors, and potential investors in the affected commercial sector.

After a length parliamentary process, the Copyright Amendment Bill of 2017 was taken to President Ramaphosa to be signed into law. However, on 23 June 2020, the President sent back the above-mentioned Bill, and the Performers' Protection Bill to the national parliament to be reconsidered. He said that he was concerned that if the Bill became an Act without some changes, the intellectual property of artists, writers, creatives, and other producers would be abused[284]. Ramaphosa also voiced his reservations about the constitutionality of two Bills which seemed to promote infringements of the copyrights of the owners. He further asserted that some aspects of the two Bills would "substantially" and "arbitrarily" deprive creatives of their copyrights. It is important to quote Ramaphosa verbatim:

> *These provisions mean that going forward, copyright owners will be entitled to lesser share of the fruits of their property than was previously the case. The impact of these provisions reaches far beyond the authors it seeks to protect – those that live in poverty as a result of not having been fairly protected in the past*.

The president took this unusual step after a large outcry from analysts, scholars, investors film producers, publishers, record companies, and many others in the creative sectors. These strongly argued that the Copyright Amendment Bill of 2017 undermined their rights and would deprive them of their income[285]. Another anomaly was that substantial changes were made to the Bill after public hearings were held in 2017, yet those amendments were not made available for public comment before the Bill was finalised by the national parliament. This Bill could also have been in contravention of international treaties such as the World Intellectual Property

[284] Analysis of the statement issued by the presidency of the Republic of South Africa.
[285] Interview with the professor focusing on services and manufacturing research.

Organisation Treaty (WIPO), and the WIPO Performance and Phonograms Treaty. South Africa has been signatory to these treaties. The Bill had the potential of violating some artists' constitutional rights.

Investors were shocked that the Bill had the support of ANC members of parliament, most institutions of higher learning, teachers, and librarians[286]. These stakeholders felt that the clause that introduced "fair use" would provide access to information and learning materials. For those who earn a living by writing, producing, creating, recording, publishing, and selling these materials – the "fair use" principle would not be fair to them. Ramaphosa was probably aware that if he signed the Copyright Amendment Bill 2017 into law in its initial format, it would possibly be successfully challenged at the Constitutional Court.

Another thorny matter to the investors is that software patents are illegal in South Africa[287]. According to the prescripts of the Patents Amendment Act of 2005, software or a programme for a computer cannot be registered as a patent in this country. In the absence of patentability of software programmes – how can this country expect investors to direct capital that will build large software companies like Uber, Facebook, Tencent, Google, Twitter, Amazon, and others. South Africa's public policy does not support innovation, invention, and entrepreneurship. The innovation side of business is highly regulated with too many costly administrative processes, excessive red tape, and delays. This does not bode well for direct investment and reindustrialisation of the economy.

Even the minister of Small Business Development, Stella Ndabeni-Abrahams does not appear to understand her role. During her department's roadshow in Mpumalanga in January 2022, the minister said that: "as government, we have a responsibility to enforce regulatory compliance in the small, medium, and micro enterprises (SMMEs) sector and close businesses that are trading illegally"[288]. It is clear in this instance that she does not understand that her role is to assist small businesses to grow and thrive. Instead of helping informal businesses to be formalised and to remove the regulatory impediments which make doing business difficult in South Africa, the minister resolved

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[286] Ibid.
[287] Interview with head of risk management consultancy.
[288] Interview with the CEO of global entrepreneurship network.

to hunt down informal enterprises and get them punished[289]. Most of these enterprises are small businesses which enable breadwinners to provide for their families. The lack of political will to create a conducive environment for new businesses and information technology innovation to thrive is a major impediment in attracting direct investment and to reindustrialise the economy.

The mushrooming of counterfeit goods in South Africa is another major concern to investors [290]. A large percentage of counterfeit goods that are being sold in South Africa are imported from China and other foreign countries. Although South Africa's customs and border police have tried their best to detect and confiscate containers and small consignments containing counterfeit goods in various ports of entry, a significant portion of this filters through. There are various reasons for this. Firstly, due to large logistical loopholes, some of the airfreight and containers purporting to be destined to neighbouring countries end up in South Africa[291]. Secondly, since the dawn of democracy in 1994, South Africa has neglected the management of its borders. Thus, it is easy to access and leave the country without proper documentation and with illegal goods. Thirdly, corrupt Home Affairs officials and police officers allow counterfeit goods to gain access to the country.

While South Africa has sound public policy pertaining to counterfeit goods, its implementation has been disastrously poor. Some of the counterfeit goods are manufactured illegally and sold in townships in small shops commonly known as spazas. Most eCommerce sites in South Africa are taking down the adverts for counterfeit goods, nonetheless, many unscrupulous dealers are creating their own websites. They also use social media like Facebook, Twitter, and Instagram as well as messaging platforms such as Telegram and WhatsApp[292]. To get their products to their customers, traders use courier services companies. Instead of paying through a legitimate bank account, payments for some counterfeit goods are made through cash and eWallet.

It is very difficult for brand owners to trace, litigate, and open criminal cases against online counterfeit goods traders. Nevertheless, it is not just the brand holders who are

289 Ibid.
290 Interview with an executive based in manufacturing association.
291 Interview with the director based in a niche consultancy focusing on risk management in Africa.
292 Interview with the head of risk management based in a management consultancy.

losers, but also the public, because SARS too finds it difficult to track and collect taxes from these businesses, especially tax on their legitimate goods. The contact numbers that are listed on the websites are mostly not registered through the RICA system and thus it is difficult to trace them (the so-called burner phones).

When the brand holder takes down a website selling counterfeit goods, they witness two websites popping up two days later, thus, it is strenuous, tedious, and expensive work to police this constantly. Law enforcement officers pay very little attention to the activities of the counterfeit goods dealers, and the responsibility to police these activities is solely in the hands of the brand holders. Unfortunately, brand holders who have not focused on this have suffered enormous damage. Truly speaking, the biggest loser in this instance is the country. Investors would not open manufacturing plants or export their branded goods in a country where counterfeit dealers are thriving[293].

### 6.4.6 Flip-flopping on ICT Public Policy Derailed South Africa's Universal Access to Technology

Access to ICT services for socio-economic purposes is a fundamental human right[294]. However, bridging the digital divide between the developed and underserviced areas in South Africa has proved to be a difficult mission. This should be attributed to poor public policy choices. Firstly, the government has endeavoured to shield the incumbent and sole fixed-line operator, Telkom against free market competition[295].

Policymakers enforced this by passing the Telecommunications Act of 1996. This Act made it illegal for operators to provide telecommunications services without a licence and it gave Telkom a sole mandate to provide public switched telecommunication services (PSTS).

Owing to the government's telecommunications managed liberalised public policy, there were only two mobile network operators in South Africa, Vodacom and MTN. They were both granted licences in 1994. Another mobile network operator, Cell C, was launched in November 2001, while Telkom Mobile was launched in October 2010.

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[293] Interview an executive based in manufacturing association.
[294] Interview with a senior policy specialist based in an economic institute.
[295] Interview with the CEO of one the emerging markets digital commerce conglomerate.

Instead of adopting a managed liberalised policy, the government should have allowed competition and licensed as many aspirant operators as possible[296].

Management's liberalised policy led to exorbitant prices of telecommunications services in South Africa and hindered universal access to internet services. These universal service and access principles should be sacrosanct in a developing country like South Africa because of the direct effect they have on the use of internet services for socio-economic purposes. It is concerning to observe that the country did not fulfil most of these principles.

The path to what would have been an exemplary universal service and access worldwide was disrupted by the Telecommunications Amendment Act of 1997. This prolonged the Telkom monopoly for five years, forcing other telecommunications operators to continue leasing broadband capacity from Telkom. It is because of this monopoly that there was no competition in the market and that is why telecommunications services were terribly costly. Through its disastrously managed liberalism telecommunications policy, the government granted Neotel (now called Liquid Telecom South Africa) a fixed-line licence (PSTS) in 2006.

To date, large parts of South Africa continue to be underserviced when it comes to broadband network infrastructure and services[297]. Even in 2022, affluent areas regularly experienced poor quality network connections when using Telkom Mobile in places like Johannesburg, Pretoria, Cape Town, Durban, and other major economic hubs. The quality of internet services leaves much to be desire since South Africa embraced mobile network operators in 1994. The quality of service has slightly increased since some operators started to deploy fourth generation (4G) technology (LTE spectrum). Unfortunately, this improvement is confined to major economic hubs.

Although ICASA published the regulations stipulating minimum standards for the end-user and subscriber service charter in July 2013, the provision of poor-quality mobile network services has persisted. This is aggravated by the high cost of broadband services in South Africa, with users having to occasionally pay for inaudible or terminated voice calls. This problem has escalated because ICASA has mostly

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[296] Interview with the senior researcher based in a competition regulation research centre.
[297] Interview with the CEO of global entrepreneurship network.

been passive and toothless[298]. The regulator has allowed itself to be bullied and directed by network operators and politicians whose vested interests were obviously conflicted.

Apart from not letting ICASA discharge its regulatory mandate, the South African government discouraged competition in the network operations sector. Owing to the lack of meaningful competition, broadband services' costs kept on increasing, becoming extremely expensive despite the fact that they were generally poor. Victims of this were mostly small businesses and low-income people[299]. The high costs of internet services drove up the cost of doing business in the country. This hampered direct investments.

The slow pace of universal access to internet services has left South Africa a decade behind its counterparts in the upper-middle income countries. This is highly problematic, and it shows how the government's managed liberalism policy was poorly thought out. Public policy should not have been employed to protect Telkom, against competition. Policy makers had thought that protecting sole fixed-line operators would deploy telecommunications infrastructure to underserviced areas without it being distracted by competitors. Unfortunately, Telkom did not pay significant attention to these areas, and to date, consumers and the economy at large are still paying heavily for poor policy formulation.

Secondly, on 2 September 2004, the minister of communications, now the late Dr. Ivy Matsepe-Casaburri, made an important public policy announcement where she promised the liberalisation of the telecommunications sector to encourage competition. This would be enabled by making some changes to the Telecommunications Act of 1996[300]. Provisions would be made to allow value-added network providers (VANS) to self-provide their own network infrastructure with effect from 01 February 2005. This means that they were no longer compelled to procure services from the incumbents and sell to the retail market at higher cost.

VANS had been mostly known as internet service providers. ICASA officially approved the proposed policy change, but a few hours before the deadline, the

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[298] Interview with the senior researcher based in a competition regulation centre.
[299] Interview with the general secretary of one the biggest private sector trade unions.
[300] Statement by the minister of telecommunications, 2 September 2004.

minister unexpectedly revised her policy pronouncement by insisting that the self-provisioning would only be applicable to the mobile network operators and selected VANS. Other VANS would hence continue to lease the network infrastructure from any licensed operator as prescribed in the determinations. This was a serious policy misstep as it discouraged competition and deterred local and foreign direct investment.

In effect, the minister's change of mind was an impediment to meaningful liberalisation of the telecommunications sector because VANS were essentially being compelled to procure all their network services from the same operators they were competing with[301]. Besides, this policy flip-flopping gave rise to an atmosphere of uncertainty. Potential investors in South Africa's telecommunications sector could not trust the public policy directive when the minister made an about-turn a few hours before the regulations became effective. It was very apparent that both the ministry of communications and ICASA were protecting the market dominance of big network operators. Nevertheless, the minister eventually relented after being successfully challenged and lost the case in the high court. The most concerning aspect of such policy uncertainty is that it affected stakeholders who were needy people, small businesses, educators and learners, the reindustrialisation programme, and the economy at large.

Thirdly, the South African government unjustifiably interfered with deployment of undersea cables by stipulating the structure of the ownership. This was pronounced by the ministry of communications through a draft policy released in May 2006. This policy insisted that the majority shareholding of all undersea cables in South Africa's waters must be allocated to local firms[302].

The main concern was that this policy directive would deter much needed foreign direct investment from coming into the country. It also increased uncertainty and had the potential to be a stumbling block for expanding access to internet and decreasing the high cost of telecommunications services (Kasonde, 2006). There were also serious concerns that this could sabotage the deployment of the two broadband undersea cable projects, EASSy and SEACOM. The ministry of communications only

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[301] Interview with the CEO of one of the emerging markets digital commerce conglomerates.
[302] Statement by the minister of telecommunications, May 2006.

withdrew its policy directive after being pressurised by development DFIs, fund managers, analysts, and other stakeholders[303]. The managed liberalism policy has thus been instrumental in undermining universal access to telecommunications services in South Africa.

Fourthly, government failed to implement the local loop unbundling (LLU) public policy. The LLU regulatory policy framework was derived from the Electronic Communications Act of 2005. If this public policy was successfully implemented, several telecommunications network operators would have accessed the local loop and delivered internet to homes, offices and other customers' premises. The physical cable network between the customer's premises and network operator is called a "local loop" and was owned by the incumbent network operator. In the South African context, the incumbent local exchange carrier was Telkom. The company solely owned and operated the local loop infrastructure[304] (Dagada & Carmichael, 2011).

To give effect to the public policy, the minister of communications, the late Dr. Matsepe-Casaburri established the LLU committee on 25 May 2006[305]. The committee was given a mandate to produce the LLU implementation model and gave its report to the minister on 25 May 2007 (Marwala, 2007). Based on the recommendations of the report, the minister issued a policy directive to ICASA to start the unbundling process and set 01 November 2011 as a deadline. This due date was never met, and it is very apparent that LLU will never ever be implemented [306]. In any event, this is no longer worth pursuing because Telkom copper cables are an outdated technology and expensive to roll out. The fact that most telecommunications related public policies are either poorly conceived, and badly or never implemented, does not inspire confidence in current and potential direct investors.

Fifthly, there have been endless delays in freeing-up the radio frequency spectrum in South Africa. In the absence of a high-demand spectrum, telecommunications network operators struggled to provide 4G services[307]. In the absence of this spectrum, mobile network operators have had to invest in massive infrastructure by

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[303] Interview with the CEO of corporate and investment banking.
[304] Interview with the CEO of one of the emerging markets digital commerce conglomerates.
[305] Statement by minister of communications, Dr. Ivy Matsepe-Casaburi, minister announces key policy decisions for the ICT sector, 25 May 2006.
[306] Interview with the CEO in one of the emerging markets digital commerce conglomerates.
[307] Interview with the CEO of corporate and investment banking.

rolling out high masts. This enabled them to provide 4G service, albeit in a costly mode. This had to be passed to end users which resulted in exorbitant costs for internet services in the country. Before the March 2022 auction, the last time had ICASA auctioned the spectrum was in 2004/05 (Dagada & Carmichael, 2011). The allocation of the high-demand spectrum would have drastically reduced the internet services cost because it is wireless and does not require too much investment on infrastructure. South Africa has thus fallen 15-years behind its peers in emerging markets with regard to the provision of advanced wireless technology.

In March 2022, after the insistence of President Ramaphosa, ICASA auctioned a high demand radio frequency spectrum. This was an important step, because network operators would be able to provide fifth generation (5G) technology. While policymakers and the regulator should be commended for this, more of this precious national resource should be made available to mobile operators, because 5G technology requires a lot of high-demand spectrum. The expanded presence of 5G technology in the country would eradicate technological elitism, realise universal access to technology, boost reindustrialisation, and drive economic growth.

Provision of 5G technology will usher in an era of faster internet connectivity, with gigantic capacity for moving vast amounts of data across various networks. This will in turn lead to rapid growth of autonomous vehicles, flying cars, 3D printing, autonomous factories, artificial intelligence, big data, IoT, blockchain-enhanced services, digital currencies, and advanced robotics[308]. The integration of 5G technologies biotechnology and longevity research will prolong human life to around 150-years. However, if South Africa wants to be part of these technological developments, it has to allocate 100MHz of contiguous 5G spectrum to some of its mobile network operators.

Sixth, there has been excessive and unjustifiable delay to migrate the broadcast transmission network from the outdated analogue system to the highly efficient digital terrestrial technology[309]. South Africa has failed to meet its own deadlines to do this migration. The delays have continued for many years, and the country even failed to meet the June 2015 cut-off date fixed by the International Telecommunication Union.

[308] Interview with the CEO in one of the emerging markets digital commerce conglomerates.
[309] Interview with the chief risk officer based in a corporate and investment bank.

Digital migration would clear the radio frequency spectrum being used by broadcasters to enable the provision of faster wireless internet services and other digital applications. Someday, South Africa will ultimately switch-off the analogue broadcasting system, but the opportunity cost to social wellbeing, reindustrialisation, and economic growth will be enormous.

Lastly, the public policy dealing with the protection of personal information (PoPI) was introduced in 2009 as PoPI. This only became a law many years later as the PoPI Act of 2013 and was fully implemented in July 2021[310]. Although most of its provisions are essential, there are concerns that some of its prescripts may restrain technology innovation and the much-needed reindustrialisation of the economy[311].

The PoPI Act makes it difficult for the country to maximise the services of the IoT because it stipulates that personal information should only be gathered for specific purposes. The collected information should also be stored for a restricted period. These rules have inhibited the flow of information and the maximum use of IoT in the local economy. This discourages local and foreign direct investment in the South African ICT sector. Technology experts will possibly find loopholes in the PoPI Act and still collect vast amounts of information.

Policy makers and regulators should endeavour to keep a fine balance between protecting the citizens from cybercrime, ensuring that a conducive environment is created to allow 4IR technologies to thrive  to heighten economic growth. Countries like Israel, Japan, the US, and South Korea are protecting their citizens from the excesses of technology without constraining innovation and economic development (Dagada, 2022a). This has enabled them to attract direct investments, and to promote innovation and entrepreneurship. Policy uncertainty and over-regulation are formidable deterrents to the reindustrialisation of South Africa’s economy.

[310] Analysis of PoPI Act of 2013.

[311] Interview with the CEO in one of the emerging markets digital commerce conglomerates.

### 6.4.7 Inadequacy to Address Geographical Unevenness Derails Reindustrialisation

The apartheid government was determined that Africans, coloured, Indian, and white people should live separately[312]. This led to the enaction of the Group Areas Act of 1950 which decided where various races in South Africa could live and own property. As part of this Act, black Africans were designated to live in rural areas (homelands/Bantustans) where they were given pseudo self-governance through traditional leadership and homeland administrations. Even in these Bantustans black Africans were not allowed to own land. The land they used for residential, agricultural, and other purposes was put in trusts managed by traditional leaders and homeland administrations.

Coloureds and Indians were designated to live in their own townships. The white population were allocated prime farming and urban land, whereas black people (Africans, coloureds, and Indians) lived in underdeveloped and underserviced areas. The apartheid regime did not prioritise the deployment of infrastructure such as tarred roads, running water, and electricity to areas where black people lived[313].

While black Africans were forced to relocate and live in rural areas, the urban areas started to experience severe shortages of unskilled, semi-skilled, and cheap labour[314]. To resolve this problem, townships such as Soweto, Tembisa, Langa, Umlazi, Alexandra, and others were established on the outskirts of urban areas. This enabled black workers who had the necessary permits to travel daily to urban areas where they worked as housemaids, gardeners, cheap labour in manufacturing firms, and manual labourers in various sectors. When they knocked-off from work, they would then travel back to the townships. Their major mode of transport was via trains[315]. Some fortunate male workers were allowed live in state-owned and poorly maintained hostels so that they could be nearer to their employers.

Many black Africans would leave their rural areas and go to urban areas to seek employment opportunities[316]. However, the apartheid police force had dedicated

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[312] Interview with the CEO of a liberal institute focusing on research and policy.
[313] Interview with professor of economics.
[314] Interview with the president of a trade union federation.
[315] Interview with the senior manager for passenger rail based in a state-owned transport entity
[316] Interview with the senior policy specialist based in an institute for social justice.

teams that harassed Africans to produce their permits. Those who did not have pass/reference books were not even allowed to live in townships, and police officers would move from house to house searching for 'illegal' tenants. Those who could not produce pass books were either made to pay a fine or be imprisoned for two years.

As part the 'influx control' of black people into urban areas, and to placate black Africans unrest, the apartheid government introduced industrial parks under the auspices of rural homeland economic zones. The intention for this was to attract some manufacturing firms to operate there and provide employment to black people. However, in the absence of enabling infrastructure such as reliable running water, adequate freight rail, tarred roads, and stable power supply, there was very low participation in this programme by manufacturing firms[317]. When the government stopped tax incentives and subsidies towards this program in 1996, the very few manufacturers (mostly from Asia) who operated in the rural homeland economic zones left (Fourie, 2021).

Other than the Group Areas Act of 1950, other apartheid laws were the Population Registration Act of 1950 (which classified South Africans into four race groups), and the Bantu Education Act of 1953 which provided better curriculums and funding for white schools. In 1973, the UN condemned the apartheid system as a 'crime against humanity'[318].

Apartheid officially came to an end on 27 April 1994, and this date is commemorated as Freedom Day. After noting the levels of inequality in the new rainbow nation in 1998, the Deputy President Mbeki remarked that South Africa was a 'two nations' society: 'One of these nations is white, relatively prosperous, regardless of gender or geographic dispersal. The second and larger nation is black and poor, with the worst-affected being women in the rural areas' (Fourie, 2021). Sadly, 30-years later, the effects of the Group Areas Act of 1950 remain entrenched and in some instances the situation has worsened[319].

Many rural areas remain underserviced and underdeveloped with regard to infrastructure. After 30-years of democracy, the blame for this cannot only be assigned

[317] Interview with the head of policy on global services and manufacturing research in a university.
[318] Analysis of 1973 UN resolutions.
[319] Interview with the senior policy specialist based in the institute for social justice.

to the legacy of apartheid. The three spheres of current government – national, provincial, and local administrations should shoulder most of the blame. The problem is not due to the lack of money, but rather corruption, inefficiency, poor planning, and a shortage of engineers, and project management specialists[320]. Inequality and poverty are strongly linked to poor spatial planning which in substantial ways continues to reflect the apartheid era geography. The highest poverty concentration in South Africa is in the rural areas. The poorest municipalities are also located in what were the Bantustans, while the Western Cape and Gauteng municipalities have the lowest rate of household poverty[321].

Moreover, the democratic government has allowed most of the infrastructure that was built by homelands administrations during the apartheid era to deteriorate or get totally destroyed. These include water supply infrastructure, sporting facilities, tarred roads, airports, police stations, military battalions, radio stations, and others. Many homelands' towns and municipal administration are in a poor state[322]. From an economic perspective, most manufacturing and agriculture schemes that were launched and supported by the erstwhile homeland administrations have collapsed. Their collapse was preceded by the closure of technical and agricultural colleges, and the DFI's focusing on general economic development, manufacturing and agriculture[323]. This deindustrialisation has led to massive unemployment in the rural areas[324].

While the Rand Show is a big event in South Africa, the homeland governments hosted their own shows, where local people would display their best agricultural products, art artefacts, traditional clothes, traditional music and other cultural performances. The democratic government discontinued this after taking over in 1994. While the apartheid government and Bantustan administrations tried to industrialise the rural areas, the new administrations fast-tracked deindustrialisation and there is not even a pretence of embarking on reindustrialisation programmes[325].

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[320] Interview with the CEO of a liberal institute focusing on research and policy.
[321] Analysis of 2018 World Bank report titled - 'Overcoming poverty and inequality in South Africa: An assessment of drivers, constraints and opportunities, March 2018'.
[322] Interview with the senior policy specialist based in the institute for social justice.
[323] Interview with the professor & head of development agency.
[324] Interview with the executive director based in a think tank focusing on Africa's development.
[325] Interview with the professor of focusing on global services and manufacturing research.

Passenger and freight rail networks that connect rural and urban areas are damaged, destroyed, and largely dysfunctional. The freight rail was used to transport minerals, agricultural products, and the few manufactured goods from rural areas to major urban centres. The passenger rail provided cheap transport for migrant workers and for people to travel to and from urban areas. Urban people (mostly white) used passenger rail  to travel to rural areas to view animal parks, waterfalls, potholes, and other tourism attractions. In 1994 most of those tourism attractions were taken over by provincial administrations and many of them were neglected and ruined[326]. Tourism played a large role in sustaining rural economies through creation of employment. Entrepreneurs sold art artefacts, traditional clothes, agricultural products and cooked meals around tourism areas.

Deindustrialisation and neglect of the rural areas has escalated the migration of people to urban areas to look for employment or self-employment opportunities. This has put a lot of strain on urban municipalities' infrastructure and delivery of services such as the provision of water and electricity. Migration has also led to the mushrooming of informal settlements and back-room dwellings which are not catered for in terms of urban planning and budgeting. This has contributed to the growing infrastructure backlogs in towns and cities[327].

Under the ANC's administrations of executive mayors Amos Masondo and Parks Tau, a lot of infrastructure was rolled-out in Johannesburg townships. You would hardly come across untarred roads. There have also been a lot of shopping malls and other retail businesses opened in these townships[328]. Unfortunately, these retail businesses only provide a tiny fraction of employment among millions of residents who are unemployed. In most provinces, townships remain underdeveloped and underserviced, and there are no attempts by provincial and local government administrations to industrialise the townships. Most of those who have jobs in townships commute to towns and cities daily. PRASA is now largely dysfunctional, which means that workers mostly use mini-buses and lift clubs to commute to and

[326] Interview with the Chief financial officer of a South African based-entity responsible for tourism
[327] Interview with professor of economics.
[328] Analysis of the City of Johannesburg council reports, 2000 to 2023.

from work[329]. Travelling to work has become largely unaffordable for the working class, and some people spend up to 50% of their wages on transport[330].

The problem underlying all these is government's dismal failure to eradicate the effects of the Group Areas Act of 1950 through proper spatial planning and deliberate programmes to integrate communities. You still have Umlazi being the township for the black Africans, Chatsworth for Indians, Mitchells Plain for coloureds, and Bishopscourt predominantly for whites. To its credit, the ANC has created a large pool of black African middle and upper-middle classes[331]. This has allowed inequality to grow amongst black Africans. Most upper-middle class households have moved to suburbs that were traditionally only for whites.

The geographical unevenness has grown rapidly since the dawn of democracy in 1994. Major economic hubs such as Sandton, Midrand, Menlyn, Polokwane, and many others have developed exponentially, while rural areas and townships are lagging far behind. In Johannesburg, Sandton – which is Africa's financial hub is the first world area, while its neighbour, Alexandra, resembles a third world township where most of residents live in abject poverty. Cape Town, one of the five most beautiful cities in the world is the second largest economic hub in South Africa, while its townships in the outskirts of the city are underdeveloped, and their residents live in squalor. These townships include Gugulethu, Khayalitsha, and Mitchell's Plain. In fact, these upmarket suburbs and poor neighbourhoods in Cape Town are just separated by a single road – Rondebosch and Athlone; Plumstead and Grassy Park; and Pinelands and Langa.

During the fieldwork, the researcher stumbled across the speech by executive mayor Tau titled 'The democratisation of the economy'. In this speech, Tau argued that the City of Johannesburg should deliberately introduce programmes that would enable the working class and poor to participate in the economy and benefit from its growth. Tau was arguing for inclusive economic growth which will go a long way to eradicate unemployment and reduce inequality. The researcher's view is that the best way of doing this is to reindustrialise the economy.

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329 Interview with the senior manager for passenger rail in a state-owned transport entity.
330 Interview with an economist based in an independent development economics centre.
331 Interview with the CEO of a liberal institute focusing on research and policy

In spite of their high security residential walls and 24-hours private security guards, the upper-middle class and the rich of all races remain vulnerable to crime and are targets of potential revolution by the underprivileged in South Africa. As long as there are high levels of poverty, inequality, and hopelessness – policymakers, the upper-middle class, and the rich should sleep with one eye open in their upmarket homes. The point the researcher is trying make here is that all stakeholders should play their part to reindustrialise the economy, boost productivity, propel inclusive growth, and raise the living standards of the poor and working class. Poverty and inequality will be reduced by empowering people from below.

In the absence of manufacturing firms, and owing to the few economic activities in rural areas, many migrant workers end up with two homes and two wives, one in the township and the other back at their rural villages. Thus, it becomes very difficult to financially sustain two families, and the men end up highly indebted to loan-shark creditors which explains why some workers embark on lengthy and violent strikes. Many mine workers who were involved in the Marikana fatal strike were in these circumstances – having two families and being highly indebted[332]. This claim was supported by the findings of Marikana commission[333].

This commission found that repayments and interest due to loan-sharks were deducted directly from the source (payroll) which the employer obviously allowed and enabled. Some workers would repay 50% of their net salary to loan-sharks, while others were repaying 100% per month. The loan-sharks were charging exorbitant interest and were making immense profits. The researcher's view is that the main problem was neither the loan-sharks nor poor personal financial management by mine workers – the root of the problem was migrant work system which compelled workers to have two households. Many children of migrant workers see their fathers or mothers for less than 40-days per year. This is highly improper and has a negative psychological impact on their upbringing (Magqamfana & Bazana, 2020). If rural areas could be reindustrialised, it would contribute to socio-economic stability in the country.

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[332] Interview with the senior policy specialist based in the institute of social justice.
[333] Analysis of 'Marikana commission: Report on matters of public, national and international concern arising out of the tragic incident at the Lonmin mine in Marikana in the North West Province', March 2015.

Frey (2019) has noted that failure to mitigate the socio-economic effects of geographical unevenness has yielded many social problems in some districts in the USA These social ills include massive unemployment, a drastic increase in divorces, a heightened crime rate, and a high rate of suicide. He further asserted that geographical unevenness led to Hilary Clinton's presidential elections loss in 2016. Her opponent, Donald Trump, who promised radical economic changes during the campaign, won in the districts and states where there is high geographical unevenness.

Frey had observed that three swing states which had consistently supported the Democratic party candidates since 1992 unexpectedly voted for Donald Trump, the Republican candidate. This was largely attributable to unabated inequality. Could it be that the reason for the two largest parties in South Africa, ANC and DA, shedding large electoral support between 2016 and 2021 has been due to the negative impact of geographical unevenness of voters? Could the same situation have worked in favour of the EFF who increased their electoral share between 2014 and 2021? History will tell.

It is the researcher's considered view that the high crime rate in South Africa's black townships is a consequence of geographical unevenness. Gangsterism, murder, and drug peddling in Langa, Philippi, Mitchells Plain and some poor neighbourhoods occur commonly on the Cape flats. This has made Cape Town one of the top five cities globally in terms of its crime rate (Van der Westhuizen & Gawulayo, 2021). In July 2019, President Ramaphosa deployed the army to assist SAPS to deal with gangsterism on the Cape flats, but unfortunately, this did not help. This happened after a spate of violence left 73 people dead over a weekend. The Cape flats are highly poverty stricken, but proper spatial planning, job creation and reduction of inequality will go a long way to eradicate these social ills.

### 6.4.8 International trade does not protect locally produced products in line with the WTO guidelines

One example South Africa could have implemented earlier on is the additional import tariffs to protect the economy of the poultry sector[334]. It was only after Ebrahim

[334] Interview with an executive of manufacturing association.

Patel became a minister of trade, industry and competition in 2019 that some of these import tariffs were sanctioned. The actual implementation was gazetted by government in 2020. The government increased tariffs on the import of bone-in chicken portions to 62% while tariffs on boneless portions were increased to 42%. This matter elicited divergent views during the interviews.

Other than being part of a staple food of most South Africans, poultry farming is one of the biggest agricultural subsectors in the country[335]. Chicken is a critical protein source for the poor and the working class in the country. The total amount of poultry products consumed in South Africa per year exceed 2.441 million tons. This equates to more than 31.5% of other protein products such as pork, beef, mutton, and goat combined[336]. The sub-sector has created about 150 000 direct and indirect jobs in the country and represents 10% of all agricultural sector workers. Not only does the sub-sector reduce the unemployment rate, it contributes to the betterment of the people working in the informal sector. The poultry sub-sector also has positive effects on many peripheral enterprises in the production value chain, including the feed sub-sector. Poultry maize feed constitute around 31% of the total maize consumption[337].

Many poultry farmers, broil producers and contract growers are members of the South African Poultry Association (SAPA). SAPA has been a lobbying group which represents the industry in interactions with the government, the International Trade Administration Commission of South Africa, the Association of Meat Importers and Exporters of South Africa, and other relevant stakeholders[338]. SAPA is one of the oldest poultry associations worldwide; it was formed in Kimberley in 1904. SAPA’s flagship is its offspring called the Developing Poultry Farmers Organisation (DPFO). DPFO functions as a division within SAPA and its mandate is to provide support to the emerging and small-scale poultry farmers of live birds, eggs, or broilers. Owing to our history, this assistance is commendable as it empowers historically disadvantaged business people. SAPA’s aim is to use DPFO to nurture and reel the emerging poultry farmers into the mainstream agricultural sector. If the poultry sector does not get the

[335] Interview with the senior policy specialist based in the institute for economic justice.
[336] Interview with the director based in poultry association.
[337] Ibid.
[338] Interview with an executive based in an association for meat import and export.

required protection from the government, its contribution to job creation and enterprise development will be negatively affected[339].

The biggest threat to this sector is the dumping of poultry products from US, Europe and Brazil[340]. Dumping is an unfair international trade practice by which countries sell their products in other jurisdictions below the production cost. The amount of the dumped poultry products accounts for 20% of the consumption in South Africa[341]. The dumping countries generate revenue by selling mainly white breast meat in the European market which is in high demand and dump the wings and legs portions (which are perceived as waste) to the developing countries. Moreover, poultry producers in the USA, Europe, and Brazil receive favourable government subsidies[342]. The excessive imports have been affecting the South African poultry industry negatively[343]. Many smaller producers have closed down while some of the large ones have reduced their operations. Had the government increased the anti-dumping duties way back in 2010, thousands of jobs in the poultry sub-sector would have been preserved. Interestingly, the increment of poultry imports to South Africa has also affected the pork meat industry negatively.

The then minister of trade and industry, Rob Davies, increased the import tariffs on five categories of imported frozen chickens in September 2013. This was a step in the right direction, but there was still a way for the minister to increase the tariffs within the acceptable parameters of the WTO[344]. Unfortunately, the above-mentioned tariffs did not affect the European Union (EU) owing to the prevailing trade agreements. There was a concern in the subsector that these trade agreements may even lead to a round tripping phenomenon (for example, Brazil could have exported its frozen chicken through Europe) whereby favourable tariff agreements between South Africa and EU are exploited.

Some interviewees argued that the imposition of anti-dumping tariffs has led to massive price increases by the local poultry sub-sector and this has affected mostly

339 Interview with the director based in a poultry association.
340 Interview with an executive of manufacturing association.
341 Ibid.
342 Interview with the executive director of international trade based in an Australian university.
343 Interview with the director based in poultry association.
344 Ibid.

the poor because chicken is becoming less affordable[345]. A counterargument against this assertion was that recent price increases were caused by the price of poultry feed which has been ballooning during the last few years. These price increases were worsened by the Russia-Ukraine war which broke out in 2022. Poultry feed constitute around 70% of a broiler producer's input costs. Other major poultry producers like the USA, Europe, and Brazil were also affected by the chicken feed increases.

The imposition of anti-dumping tariffs will affect the poor negatively since poultry is their most affordable protein[346]. There is some truth on this claim. When the Russia-Ukraine war drove-up prices of chicken in South Africa, Patel suspended anti-dumping import duties on chicken in August 2022[347]. This policy directive boosted chicken imports and alleviated the price increases. Having said this, it is the researcher's considered view that the local poultry sector should be protected from the dumping of products from countries that subsidise their poultry producers. These include Poland, Brazil, Ireland, Spain, and Denmark. If policymakers fail to do this, dumping will lead to the demise of the local subsector and once this happens, the prices of the imported poultry products will increase substantially and the poor will be the most affected. The researcher's point is that it is in the best interest of the poor to have the local industry protected, sustainable, and creating jobs in the sector and the supply chain.

One of the best ways of supporting the local poultry producers is to carefully increase the import duties. The USA has been subsiding its farmers since President Franklin Roosevelt introduced his economic recovery called the new deal in 1933 (Fourie, 2021). The Europeans have also been supporting their farmers financially. These subsidies enable farmers to lower prices and acquire significant market shares internationally. South Africa does not have the financial muscle to subsidise its farmers and that is why it should maximise on the WTO's provisions regarding import duties to protect local agricultural producers (Stokstad, 2020).

Farm subsidies distort prices of agricultural products, making it almost impossible for farmers from developing economies from selling their products globally at competitive prices. These subsidies have severely impoverished African farmers in

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345 Interview with an agricultural economist based in a DFI.
346 Interview with the professor focusing on services and manufacturing research.
347 Analysis of government Gazette issued by the minister of trade, industry and competition, 1 August 2022.

general and South African farmers in particular (Fourie, 2021). Discussions to eradicate farm subsidies in Europe and North America have been continuing since the 2001 Doha's round of international trade, but it does not seem that there will be any agreement anytime soon. This is why South Africa should implement reasonable anti-dumping duties without resorting to protectionism.

Having said all these, local poultry producers should do some introspection. They should particularly focus on three issues. Firstly, reducing the amount of brine solution which is injected in locally produced frozen chickens. Secondly, working towards improving hygiene to increase exportation which has been constrained due to sanitary concerns. Thirdly, working with the government to establish their cadre of health inspectors who will inspect the sanitary standards in Brazil and European countries. Fourthly, improving the quality of the product to meet the European standards. Lastly, creatively slicing and balancing their carcass with the targeted export market in mind; for example – the Europeans prefers chicken breast meat while the USA is the world's biggest market for chicken wings. An agricultural economist from a DFI supported this assertion: *"In 2022, Americans ate 1.42-billion wings during the Super Bowl game. So, well-thought chicken producers would sell their wings to the USA at a premium. But here in South Africa, a producer cuts up a whole chicken and puts it into a bag, selling all the pieces at the same price*."

### 6.4.9 Investment strike and Regulation 28 of the Pension Funds Act of 1956 (as amended) have been limiting infrastructure development

Between the dawn of the democratic system in April 1994 and the COVID-19 related lockdown restrictions in March 2020 in South Africa, the local economy failed to live up to expectations[348]. Real annual GDP has been averaging at just 2.9%, below the required 5-9% which would go a long way to reducing unemployment, poverty, and inequality effectively. The problem is even more stark when one compares the country with other emerging markets, and upper-middle income economies. In 2014, South Africa had only increased its GDP per capita by 33% while its counterparts increased theirs by an exceptional average of 115% since 1994. Like all the other economies, the country's economy was dealt a major blow by the COVID-19 outbreak and the

[348] Interview with the executive director based in a fund manager.

public violence which took place in July 2021 in the province of Gauteng and Kwazulu-Natal respectively. Due to poor public policy choices, increased political risk, and economic decline, South Africa was heading towards lower-middle income status by November 2021[349].

Putting aside the socio-economic impact of COVID-19, the general secretary of a labour union federation contended that labour laws in South Africa had been unfairly blamed for "labour market inflexibility", and the perceived negative effects on economic growth. He vehemently denied that the perceived labour market inflexibility has led to low investment levels and consequent low growth levels. This claim was supported by the general secretary of one of the biggest private sector labour unions in the country. The general secretary asserted that wage demands in South Africa were "sensitive" labour market conditions, albeit more pronounced amongst non-unionised workers. The general secretary of a socialist oriented political party declared that – contrary to what has been said by most analysts and commentators, the South African labour market is not inflexible. He asserted that the problem should be with capital allocation both in the public and private sectors. This is despite of the fact that capital aggregation in these sectors is efficient.

There have been instances wherein tax and regulatory collections by government agencies exceeded budgets since 1994. Private sector capital aggregation centres on the financial sector includes bank deposits, life and other insurance premiums, pension fund contributions, collective investment schemes, and assets with stockbrokers[350]. While commentators and analysts are quick to point fingers to the inefficiencies pertaining to the public sector capital allocation, very little is said about poor capital allocation by the private sector[351]. Government is often accused of the following - corruption in public procurement and incompetence; ballooning public sector wage bills and public debt; and overspending or inappropriate spending on capital investment. In contrary, the inefficiencies in the private sector capital allocation are largely ignored in public discourse[352]. These financial and corporate sector capital allocation inefficiencies contribute substantially to the country's poor economic

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349 Interview with the professor and director of a macro-economic institute.
350 Interview with the executive director based in a fund manager.
351 Interview with an associate professor and head of macro-finance analysis.
352 Interview with the managing director of an investment advisory firm.

performance and insufficient investment in public infrastructure development. Private sector investment spending is almost double that of the public sector in South Africa and as such, this inefficiency in capital allocation has a huge negative impact on economic growth[353].

Public policy formulators should take some blame regarding the inefficient manner on which financial sector allocates capital accrued from pension contribution investments. Regulation 28 of the Pension Funds Act of 1956 has been making it impossible for the retirement industry (institutional investors) to invest pension funds effectively in public infrastructure such as the water supply network, power plants, roads, the rail network, seaports, airports, and others. While a pension fund could invest in public infrastructure, fund managers were constrained by the investment limit. For many years in South Africa, the Act controlled pension funds' investments by stipulating maximum investable levels per asset class. The maximum level allowed in alternative investments was set at 15% and this is arguably low[354]. This is disappointing when one considers that alternative investments is the very asset class that is crucial for infrastructure development programmes. By imposing this limit, policy makers thought they were protecting pensioners from undue risk. This kind of thinking was fundamentally wrong[355]. The truth is that an equity stake in an unlisted power plant or water treatment plant could significantly be a lower risk compared to an equity stake in a listed property portfolio.

Regulation 28 was not well thought from the onset. It can be argued that it has been failing the very pensioners it was intended to protect. This regulation has also become a blunt instrument which has been preventing substantial investment in public infrastructure development[356]. Consequently, the investment priorities of the country are totally disregarded in the interest of a false sense of prudential protection[357]. There is a consensus among fund managers and policy makers that regulation 28 is one of the most critical regulatory instruments for capital allocation in South Africa's economy. That is why the national treasury initiated a consultation process in 2021 to

[353] Interview with the senior policy specialist based in social institute.
[354] Interview with the professor & head of a developmental policy analyst.
[355] Interview with the CEO based of a bank-owned asset manager.
[356] Interview with the Chief economist based in a bank-owned asset manager.
[357] Interview with the CEO based of a bank-owned asset manager.

make necessary changes that would increase the investment limit on infrastructure development[358]. On the 5th of July 2022, the national treasury published final amendments to Regulation 28 of the Pension Fund Act 1956. The maximum level allowed in alternative investments was then increased from 15% to 25% and this was an acceptable improvement[359].

The manner in which South Africa's banking sector allocates capital has not been advancing transformation and infrastructure development. Policy makers have done very little to correct this[360]. The local banking sector is one of the most concentrated internationally, with the big five banks in charge of about 90% of the market[361]. Just like in any other commercial sector, high concentration usually results in higher prices, smaller consumer surplus, and lower production output even in the absence of collusion. There are only five big retail banks in South Africa which are Standard Bank, FirstRand, Absa, Nedbank, and Capitec. These banks are hoarding savings in the country instead of deploying and allocating them appropriately to boost inclusive economic growth.

Enterprises in highly concentrated sectors often sustain huge profits for lengthy durations. This explains why in South Africa, the poor borrow small amounts of money and pay exorbitant service charges and interest rates. This happens even after adjusting to the higher default rates and cost of servicing smaller loans[362]. Due to these anomalies in the local banking sector, it is much easier to borrow money from a bank for consumption or consumption assets than to get funding to start a business. Assets such as office complex and shopping malls are oversupplied in the country and easy to secure funding of their construction, while critical assets that have high levels of shortage like hospitals, housing, and other public infrastructure are difficult to finance. Assets that create permanent jobs like hotels are extremely difficult to secure funding for[363].

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358 Interview with the CEO in a capital markets & financial services research house.
359 Analysis of amendments to Regulation 28 of the Pension Funds Act to encourage infrastructure investment funds.
360 Interview with the senior policy specialist based in a social justice institute.
361 Interview with then economist based in an independent development economics centre.
362 Interview with an associate professor and head of macro-finance analysis.
363 Interview with an economist based in an independent development economics centre.

South African investment banks are often major lenders and transactional advisors in the same deal, seemingly ignorant to the blatant conflict of interest[364]. What is even worse is that banks claim that they are unable to report racial breakdown of clients who borrow money. Considering the legacy of apartheid and the transformation agenda, it is imperative to have proper data on racial breakdown. In the absence of this crucial data, public policy priorities like education, health, housing, job creation, transformation, and deployment of public infrastructure are neglected. Instead of local banks reinvesting deposits into the economy, they build and hold significant reserves on their balance sheets, containing a huge proportion of the nation's savings[365].

Another significant hoarder of South Africa's savings and second to the banks is the real estate investment trusts (REITs) sector. Again, in this instance, just five firms control 50% of the asset value[366]. When it comes to the concentration of economic power and its negative impact, the REITs sector provides the case study for regulatory perversity[367]. While companies in other sectors in South Africa pay 28% towards income tax, and then 20% for the dividend tax – the REITs are exempted from these taxes. Their tax rate is nil. This advantage has led to oversupply of shopping malls and office blocks in the country. This also explains why the listed property sector has been the fastest growing in the JSE. In a well-regulated economy, some of the savings hoarded by REITs, and the unpaid tax would be directed to public infrastructure development[368].

It is also remarkable to note that REITs is not regulated by the Financial Services Conduct Authority regardless of the fact that they merely list property funds with boards of directors and management who then ultimately fulfil fiduciary duties over public investment capital[369]. This regulatory deficit has enabled REITs to raise funds in South Africa and thereafter invest in property holdings offshore. Surely, this is perverse arbitrage done by a sector operating in a country which has both housing and public infrastructure backlogs. On average, the local REITs have around 30% of

[364] Interview with an executive director based in a fund manager.
[365] Interview with an economist based in an independent development economics centre.
[366]Interview with the professor of development economics.
[367] Interview with an executive director based in a fund manager.
[368] Ibid.
[369] Interview with an associate professor and head of macro-finance analysis.

their investments overseas[370]. This regulatory loophole does not auger well for investment in infrastructure in South Africa.

Besides the banking and REITs sectors, the remainder of corporate South Africa are culprits in hoarding cash that could be directed to infrastructure development[371]. By 2024, cash balances being hoarded instead of being reinvested to the economy were more than R3-trillion. The question is, why does corporate South Africa hoard cash? Does it mean that there are no investment opportunities? These questions were posed by an executive director at a fund manager. Earnings of a company are constituted by equity and have high holding cost. If indeed there were no investment opportunities in South Africa, why do companies not pay higher dividends? This way, the shareholders can spend the money in the economy and the fiscus can be enriched by dividends, VAT, and other taxes. Enriched tax collection revenue would stimulate investment in infrastructure development[372].

In an economy with proper public policy and a patriotic private sector, companies would just retain adequate cash for their working capital and immediate investment requirements. Capital for long-term investment would only be raised when needed[373]. The balance of the earnings would be paid out to the shareholders as dividends. Shareholders can either spend or invest the dividends as they deem fit.

The truth is that since Zuma became the president of the republic in 2009, corporate South Africa has been embarking on an investment strike which explains why they have been hoarding cash[374]. When Ramaphosa took over presidential office in February 2018, he was received with huge enthusiasm by the public, media, and corporate South Africa. The media described this enthusiasm as ‘Ramaphoria’. Within a few years in the office, Ramaphosa proved to be a weak president and the Ramaphoria dissipated[375]. He has been more concerned about preserving the unity of the ANC at all costs. This means that he would not take disciplinary measures against his ANC comrades or remove them from the cabinet when necessary. In the process, corruption and lawlessness has increased. It is as if the country is in auto-

370 Interview with the professor of development economics.
371 Interview with an associate professor and head of macro-finance analysis.
372 Interview with the general secretary of a trade union federation.
373 Interview with the general secretary of one of the biggest trade unions in the private sector.
374 Interview with the professor of development economics.
375 Interview with the CEO of a liberal institute focusing on research and public policy

pilot. This has led corporate South Africa to continue hoarding the money instead of reinvesting it in the economy[376]. In fact, political risk and public policy uncertainty has increased under Ramaphosa's watch. Describing Ramaphosa's leadership style, a secretary general of a political party quipped, *"He is a nice guy, but presidency is not for the softies"*.

### 6.5 CONCLUDING REMARKS FOR CHAPTER 6

Ballooning of the public sector wage bill should be arrested. Since 1994, public policy has prioritised operational expenditure rather than capital projects. South Africa should therefore take the necessary public policy measures to reduce its oversized public sector wage bill, and the money saved should be directed to infrastructure development. This will boost the economy and ignite reindustrialisation. In 2018, this wage bill led to a budget deficit of R30.2-billion, and it has fuelled the government financial crisis in the short and long terms.

The then Minister of Finance, the late Tito Mboweni, did the right thing by reducing the wage bill of the public sector for the financial year 2020/2021. His aim was to slash it by R37.8-billion. In his February 2020 budget speech, Mboweni made it clear that the reduction of the above figure would not be sufficient to extract the government from its financial crisis[377]. His preference was to save R160-billion.

Mboweni's intentions were met with stiff resistance from the public sector unions such as COSATU and the Public Service Unions (Marriam, 2020). COSATU declared the move to slash the wage bill as a 'declaration of war' and threatened to pull out of the tripartite alliance if government forged ahead with the review. While the role of public servants should be appreciated, the government has invested too much in their salaries at the expense of the overall socio-economic wellbeing of the country. Many of these government workers hardly contribute 50% effort towards the responsibilities they are employed for. Instead of extracting more value for the current workforce, the government keeps on employing more people while at the same ballooning the wage bill.

[376] Ibid.
[377] Budget speech by the minister of finance, Tito Titus Mboweni, 26 February 2020.

Mboweni declared[378]: "*We have committed significant resources for compensating them every year even as we have tried  to increase their numbers in recognition of their demanding workloads. Between 2006 and 2011, we were able to add about 190 000 employees. However, at the same time government wages also increased"*. Massive employment only slowed in 2011, but the government kept on increasing the number of public servants annually. In 2020, the national budget deficit increased by 6.8% while at the same time debt increased to 65% of the GDP. There is no doubt that the unabated growing public wage sector bill was a major contributor to these increments.

After Mboweni's speech, government refused to honour the final leg of the multiyear wage agreement it entered into with the public sector unions. Unions took the matter to various courts up to the Constitutional Court. In February 2022, this court ruled in favour of the government.

The public sector is the single largest employer in South Africa with over 2.1-million personnel in national, provincial, and local spheres of government, the state-and-municipal-owned entities, public universities, and other organs of the state[379]. The wage bill for these employees is over R900-billion per annum. This explains why the civil service and its wage bill are described as bloated, unstainable, and an excessive burden on the fiscus.

The stance taken by Mboweni and the then Minister of Public Service and Administration, Senzo Mchunu to arrest the ballooning public sector bill should be highly commended. Leadership in municipalities, state-owned entities, universities, and other organs of state should do the same. Salary prudence should apply across the whole public sector, and the country should stop throwing money at public servants while neglecting other socio-economic priorities.

Public sector renumeration in South Africa, an upper-middle income country, is among the highest globally (Marriam, 2021). If the ballooning wage bill is not reigned-in, the government will not be able revitalise state-owned entities and other organs of state that are on the verge of collapse. These include municipalities, water boards,

[378] 2020 budget speech by minister of finance Tito Titus Mboweni.
[379] Statistics South Africa, 2023

Eskom, Transnet, Post Office, PRASA, Land Bank, PetroSA, and Denel. These entities are crucial for delivering socio-economic services.

Providing large salaries is also very costly for blue light motorcades, protection officers, and members of the mayoral committees in 257 municipalities and MECs in the nine provincial governments. By 2023, the cost of servicing 62 national ministers and their deputies was over R2-billion during a five-year term period. This included salaries of 624 support staff in various ministerial offices (Mokone, 2023).

The situation was exacerbated by the fact that several ministers and deputy ministers were employing more than twelve support staff members, in breach of the ministerial handbook. It is highly unacceptable that South Africa's national executive has more ministers and deputy ministers than those of the USA, Germany, China, India, Japan, Italy and other major economies. Johnson (2019) put it aptly when he declared that the ANC government cares more about maintaining bureaucratic and patriotic bourgeoise[380,381] than the working class[382]. This perpetuates inequality in the country.

When Ramaphosa became the president in 2018, he promised that he would rationalise government departments and reduce the number of ministers[383]. After the 2019 general elections, he reduced the cabinet by eight ministries[384]. However, during the cabinet reshuffle in 2023 he created two new ministries[385]. Instead of removing a poorly performing minister, Ramaphosa would rather appoint an advisor who would do the job better or another minister to do the same job.

In March 2023, he appointed a Minister of Electricity, Kgotsientsho Ramakgopa despite of the fact that Pravin Gordhan (Minister of Public Enterprises), and Gwede Mantashe (Minister of Mineral Resources and Energy) were already responsible for electricity related work. The reason why Ramaphosa did not remove those poor performers from their offices was because he is a weak and indecisive president who tries hard to please everybody. He also shied away from taking firm decisions by embarking on endless consultations, and appointing commissions, task teams, and

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380 Senior government officials.
381 Members of Cosatu affiliated unions.
382 In this instance, Johnson (2021) was referring to those who are unemployed.
383 President Ramaphosa state of the nation address, 16 February 2018.
384 Statement on the appointment of members of the national executive, 29 May 2019.
385 Statement by President Ramaphosa on the changes of the national executive, 06 March 2023.

advisory panels. In the process, the state bureaucracy ended being ballooned along with public finances.

# CHAPTER 7: PROPOSED PUBLIC POLICY INTERVENTIONS PERTAINING TO AVAILABILITY OF LABOUR AND CONCEPTUAL FRAMEWORK

## 7.1 INTRODUCTION

To appreciate the importance of having highly skilled managers, one has to look at the PSG Group. It is one of the most successful investment companies in South Africa listed on the JSE. PSG actually punches above its weight, and it can challenge some of the best companies around the world. This view is supported by Whitfield (2020) who has determined that if a person chose to invest R10 000 in 1996 in one of these companies, the investment would have grown to look like this by January 2020:

- S&P 500: 9% - making the R10 000 worth about R280 000.
- Berkshire Hathaway: 10% - giving you R370 000.
- JSE Top 40: 12% - giving you R536 000, or nearly twice what you earned on the USA market.
- Amazon: 31% - giving you an extraordinary R20-million.
- PSG Group: it grew at a compound annual growth rate of 36% - giving you a staggering R55-million.

This just shows that the PSG Group performance is highly exceptional. Something important to note is that PSG was created in 1995 after the new democratic dispensation in South Africa. It built most of its entities from ground-up (Du Toit, 2019). One of the remarkable decisions which PSG took was to invest in a new bank called Capitec. This bank was established as a microlender and started providing services on 01 March 2001. Like all the companies within the PSG Group, Capitec had a highly competent management and flourished exponentially. By 2019 the bank was getting a large chunk of its revenue from transactional banking as a substitute for unsecured loans. Moreover, it became the biggest retail bank in South Africa judging by the number of its customers – which were just over 20 million by March 2023. Its share price had moved from less than R1 to above R1600. On 4 April 2022, it climbed as high as R2 273.48 (Dagada, 2022a).

If one had invested R1000 in the Standard Bank in 2000, by May 2020 it would have grown to R5, 256. However, if one invested the same amount to Capitec, it would have exponentially grown to R649, 485 (Dagada, 2022b). This is mind blowing performance.

Apart from the PSG Group, one of the local companies with stunning performance is Alphawave, established in 1990 by Frans Meyer and a few of his fellow engineering graduates from Stellenbosch University (Whitfield, 2020). At the beginning of 2020, the Alphawave staff complement was 320 people, 120 of these were specialised engineers and scientists, the majority of whom held masters and/or doctoral degrees. Engineers in this firm are worldwide leaders in radio-wave technologies. They have developed technologies which empower sales managers to make use of cloud-based systems to remotely observe their sales representatives in the field to determine what progress they are making daily. Their technology can be applied to golf driving ranges to map each shot played to enable coaches to train their clients proficiently.

Alphawave has also mapped space, and their clients include Daimler, Nasa, AG, Boeing, and Bosch (Whitfield, 2020). Alphawave supplies these clients with algorithms for simulating software products. Its expertise on radio wave technology has also enabled it to be a service provider to prominent broadband network operators throughout Africa. One of their major accomplishments was their participation with the MeerKAT space telescope project, which is a segment of the Karoo-based Square Kilometre Array (SKA) telescope. As part of their involvement as SKA, Alphawave has created the most sensitive radio astronomy receiver globally, attributable to their simulation software algorithms and their unparalleled fundamental design skills in radio-wave technologies.

According to Whitfield (2020), Alphawave technology allows SKA to view some nine billion light years into space. Since it is fifty times more penetrating and currently surveys the sky ten thousand times faster than any other radio telescope internationally, it has the potential to stay in the leading position of space discovery for a generation.

Whitfield (2020) also observed that Alphawave's advanced skills in radio waves kept on attracting customers internationally: *"In January 2020, Skynamo, a subsidiary of Alphawave secured a US$30-million capital injection from USA software investor Five Elms to expand its technology, which helps companies manage remote sales* *forces, in the USA market. With operations in South Africa and the United Kingdom, it opened a new headquarters in Atlanta. Using the Stellenbosch brains trust, it has developed software that allows mobile sales forces to automate administrative tasks and digitise paper process, speeding up the feedback loop to executives and thus enabling them to make better, speedier decisions".*

The researcher initiated this chapter with a brief write-up about the PSG Group and Alphawave to demonstrate that local companies need skilled labour to perform excellently. While these two companies rely on local expertise, many skilled people are leaving the country. It was indicated in Chapter 5 that the reason for increasing emigration from South Africa was caused by high crime rate, increasing lawlessness, deteriorating infrastructure, poor service delivery, uncertainty regarding property rights, overregulation of private business, increasing public policy uncertainty, and rigid labour laws.

While it was initially white people who left the country, a substantial number of wealthy, entrepreneurial, and highly skilled black people have also left the country. For South Africa to sustain and create new successful enterprises like Alphawave, Capitec, and the PSG Group, the country may have to import some foreign skills. Much should be done to provide quality education to produce highly skilled professionals.

As we have deduced in Chapter 5, the availability of skilled labour is not sufficient to reindustrialise South Africa's economy. To attract foreign direct investments, end the investment strike by local investors, and create massive job numbers – the country should do away with poor formulation and implementation of public policies.

Through the literature review and the findings of the fieldwork, previous chapters have demonstrated the strategic necessity for employing public policy to enable and accelerate the reindustrialisation of the South African economy. As stated in the first chapter, it was found that no conceptual public policy framework exists to guide industrialisation. This chapter proposes a conceptual framework, and thus embodies the contribution of this study to the knowledge of development economics, and public policy.

It was articulated in the research methodology chapter that the researcher opted for the term genre of design instead of the term design type. The motive for doing this was to enable him to be an integral part of the research methods. It is for this reason that the researcher brought his own experiences into the interpretation of the findings and recommendations of this study. Because he was born in, grew up in, and lives in South Africa, he is able to comprehend and depict the context of this study. With regard to his working experience, the researcher has served in the following capacities – policymaker and lawmaker in a metropolitan municipality, policy analyst in a think-tank, entrepreneur, academic in higher education institutions, and public intellectual. These experiences have directly or indirectly influenced the recommendations, and the conceptual framework presented in this chapter.

This framework was necessitated by the literature review and findings of the fieldwork of this study which revealed that poor public policy formulation and implementation are causing deindustrialisation of South Africa's economy. This is also sabotaging government's endeavours to reindustrialise the economy. The conceptual framework provides guidance to various stakeholders, and it has already been stated that this chapter constitutes the contribution of this study to the body of development economics and public policy theories. The next section contains some recommendations.

## 7.2 POSSIBLE SOLUTIONS AND PUBLIC POLICY INTERVENTIONS

The literature review and findings of the fieldwork have revealed public policy weaknesses that are causing deindustrialisation of the economy. These weaknesses also make it very difficult for South Africa to reindustrialise its economy. After careful consideration, the researcher recommends five possible solutions and public policy interventions that could play an important role to reindustrialise the economy – they are contained in Table 7.1 below.

**Table 7.1: Possible solutions and public interventions to reindustrialise the South African economy**

| NO. | **POSSIBLE SOLUTIONS AND PUBLIC INTERVENTIONS** |
|---|---|
| **1.** | **Immigration regulations should promote reindustrialisation.**<br>• Policymakers should allow migration to serve as an invention accelerator.<br>• It should be made easy for skilled labour and entrepreneurs to enter the country.<br>• Visa related legislation should promote tourism. |
| **2.** | **Labour market should be stabilised to increase direct investment.**<br>• Undertake public policy measures that would mitigate against frequent prolonged or violent industrial actions.<br>• Undertake public policy measures that would enable substantial job creation. |

| | |
|---|---|
| | • Implement affirmative action public policy prudently. |
| **3.** | **Quality education and training should be provided to create a large pool of skilled labour.**<br>• The quality of basic education should be improved drastically.<br>• The quality of HEIs, and research and development should be improved drastically.<br>• Corporate South Africa should upscale its contribution to skills development. |
| 4. | Connect major commercial hubs with major labour market hubs. |
| 5. | Implement broad-based black economic empowerment public policy prudently. |
| 6. | South Africa should spearhead the use of technology to keep the identity records of nationals across the African states. |

These proposed solutions and public policy interventions constitute integral part of the conceptual framework which appears towards the end of this chapter. The next sections provide more details regarding the proposed solutions and interventions.

### 7.2.1 Immigration Regulation Should Promote Reindustrialisation

This section contains the following subsections – policymakers should allow migration to serve as an invention accelerator; it should be made it easy for skilled labour and entrepreneurs to enter the country, and visa related legislation should promote tourism.

#### 7.2.1.1 Policymakers should allow migration to serve as an invention accelerator

The South African government and the country's citizens should appreciate the fact that the human species is migratory in nature. During the last 70 000 years, some people wandered out of Africa and continue wandering, climbing mountains, crossing rivers, and sailing oceans until all continents were occupied by human beings. There are various reasons behind migration; these include running away from wars, oppression, hunger, and seeking greener pastures. While migrations may have originated from terrifying horrors, in the long term it had a positive impact in the betterment of humanity (Cameron, Goldin & Balarajan, 2012).

Diamandis and Kotler (2020: 237) asserted that 'migration has been an engine of social progress'. The movement of people across various cultural frontiers and races has resulted in an integrated and globalised world. As people mingle with other humans from different backgrounds, there has been some assimilation, adaption, and innovation. Migration has also led to improvements of commerce, emergence of new economic sectors, invention of technology, improvement of production methods, and development of various belief systems. This has largely been good for the advancement of humanity. Migration is not just about people moving from one place to another, but it is also about spreading ideas and is a major catalyst of innovation. It is on this premise that South Africa should embrace immigrants.

The Stanford University and now New York University economist, Petra Moser, has studied the impact of patents, migration, and the USA inventions. She has found that German Jews who fled from the Nazi regime have contributed enormously to innovation within the USA (Moser, 2013). Most of these Jews lost their jobs in April 1933, when Hitler passed the law forbidding all 'non-Aryans' from public sector employment.

As a result, more than 133 000 German Jews migrated to the USA (Moser, Voena & Waldinger, 2014). To measure the impact of immigration on innovation, Moser et al., (2014) studied the records of patents and the inventions thereof from 1920 to 1970 in various technical fields. They tracked the influence of migration by analysing the records of more than 500 000 inventions. Major findings of this study were that migration is an invention accelerator, and that in each field that the German migrants entered, approved patents and subsequent innovation increased by 70%.

A study conducted in 2012 by the Partnership for a New American Economy also revealed that three out of four patents successfully obtained by the USA top ten research universities have at least one foreign-born innovator. Researchers from the University of California found that immigrant inventors played a significant role in 'product relocation' (Diamandis & Kotler, 2020). Product relocation is the extent to which new products and services enter the market and push old ones to exit. It is a phenomenon that economist Joseph Schumpeter referred to as "creative destruction" (Heilbroner, 1999).

By analysing the product relocation rate for every American company that employed a highly skilled foreign-born professional between 2001 and 2014, Diamandis and Kotler, (2020) found strong evidence that immigrant inventors played a significant role in 'product relocation'. These companies contributed immensely to inventions which have had a large positive impact in the market and overall economic development. For example, a 10% increase in highly skilled professionals in company employment mostly translated to a 2% rise in product relocation. This was happening regardless of how much a company was spending on research and development.

What is true for migrants' impact on innovation is also true in entrepreneurship. Migration is an entrepreneurship accelerant (Moser, 2005). While Americans had complained that immigrants were taking away jobs from their citizens, evidence shows the opposite. Instead of stealing jobs, immigrants create new jobs, and local people got employed (Diamandis & Kotler, 2020). In the USA, immigrants were twice as likely as citizens to start a new business. New jobs that are created by immigrants constitute 25% of all the new jobs. Between 2006 and 2012, 33% of the American venture capital backed companies that listed on stock exchanges employed at least one foreign-born founder or their children. Forty percent of the Fortune 500 companies were started by foreign-born citizens or their children. In 2016, half of the unicorns (start-ups that are valued at more than US$1-billion) were established by immigrants, and each of them created at least 760 new jobs.

Inventions matter and are the cornerstone of reindustrialisation. However, it was mentioned in Chapter 5 that the complexity of new goods and services has declined substantially in South Africa and is attributed to a shortage of skilled labour. Allowing highly qualified foreign-born professionals to enter, live, work, and start businesses in the country will go a long way to reverse the dearth of complexity of products and deindustrialisation. South Africa needs new skills to counter existential risks that the country is confronted with. Highly skilled immigrants may make the inventions and start entrepreneurial ventures that will create new jobs to reduce unemployment and to replace jobs that are being made redundant by robots and artificial intelligence.

#### 7.2.1.2 It should be made easy for skilled laour and entrepreneurs to enter the country

It was mentioned in Chapter 5 that it is very difficult for skilled people and entrepreneurs to enter the country. This must be drastically changed. The country should make it easy for the above-mentioned people to immigrate, and should retain them. This could be done by renewing their visas quickly and without administrative impediments, offering most of them permanent resident status, removing barriers of doing business, improving safety and security, and ensuring property rights. The starting point for policymakers should be attending to migration regulations and easing rigid labour laws.

A review of Ghana and Thailand as case studies demonstrates the importance of attracting people with high technical skills in a country. In 1963, their geographic sizes and economies were the same (Bruce, 2019). Thailand mainly produced rice, while Ghana largely produced cocoa. Nowadays, Thailand's economy is ten times bigger than that of Ghana. Thailand's success should be attributed to its public policy which allowed foreign people with technical skills to enter the country and add value to its socio-economic aspect. Ghana did the opposite by largely preventing skilled labour from coming to their country. People who came to Thailand revolutionised its manufacturing sector by producing computers and motor vehicles. Other than a thriving agricultural sector, Thailand also had an industrial economy which was growing rapidly. What mattered to the Thai people was that manufactured goods were made in their country rather than who made them (Durongkaveroj, 2023).

Welcoming immigrants into South Africa could be the recipe for reindustrialisation. Foreign nationals with various critical specialisations can assist the country to broaden the complexity of its products and services. This will propel both the manufacturing and services sectors. Importing foreign skills will also close the gap left by many professionals with various rare skills who have left the country. These have sought better lives elsewhere where they would feel secure, get better government services and infrastructure, and regular provision of electricity.

Talking of electricity, one of the remedies to resolve frequent power outages and load-shedding is for Eskom to have the right skilled labour. Unfortunately, South Africa cannot provide such labour. The most serious problem is not only aging power stations and breakdowns of generating units, but rather failure of the country to produce electricity due to a lack of the required technical skills. South Africa desperately needs skills that can keep power stations running. Persons having these skills could be attracted and recruited from abroad. Failure to do this may lead to more load-shedding and the possibility of a fully-fledged power blackout.

The ANC leadership and its government functionaries are aware that the shortage of skills has reached crisis level. Foreign labourers should therefore be imported into the country despite their race, the obsession with which has sabotaged economic growth. This does not mean that policymakers should do away with affirmative action as one of the measures to redress the past injustices against black people. We should not throw the baby out with the bath water so to speak, but we should be practical when implementing affirmative action and B-BBEE. In effect, one of the best ways of empowering those who were previously or currently disadvantaged is to import skilled persons who will train them as part of their daily jobs. South Africa should open its doors to foreign entrepreneurs and urge them to employ local labour as part of training and skills development. The country should also do away with the critical skills list or at least make it much longer to attract specialised labour. Policymakers should not assume that they know most skills that investors require. People from the SADC region should be allowed to move in and out of South Africa freely.

#### 7.2.1.3 Visa related legislation should promote tourism

South Africa is losing valuable opportunities when it comes to tourism in spite of the fact that the country is surrounded by two oceans. It also has the Kruger National Park, one of the biggest game reserves in the world. It has Cape Town, one of the most beautiful cities in the world as well as the warm beaches in Durban and other exotic landmarks. The country has some UNESCO[386] world heritage sites that have a rich history like Mapungubwe, Robben Island, and the Cradle of Humankind. With the right formulation and implementation of public policy, South Africa can maximise these advantages and bring hard currencies to the country through tourism.

Prior to the outbreak of COVID-19 and subsequent lockdowns, the average number of tourists was 1.2-billion globally (Bruce, 2017). This translated to the generation of US$7.6-trillion in the world economy per year. At the same time, South Africa’s share was about 10.2-million tourists annually. For a country which was relatively less expensive, was endued with great weather, remarkable landscapes and an exceptional hospitality sector, 10.2-million tourists is very minimal. In comparison, the average number of tourists per year was 32-million in Thailand and 753-million in Spain.

These numbers include both domestic and foreign tourists. Out of the 10.2-million tourists in South Africa in a year, only 2.4-million were from abroad (Shevel, 2021). The country should therefore work hard to increase the number of foreign travellers.

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[386] United Nations Educational, Scientific and Cultural Organisation

Although domestic travel is a major factor in tourism, it never makes the sort of money that travellers from abroad bring to the big five game reserves, big five hikes in the Kalahari, and the Cape Whale Coast. The sources of this lucrative market are the USA, UK, and EU. Besides this, tourism cannot not mainly rely on our local market because it is seasonal. South Africans are not keen to pay for pricey activities like safari trips. As part of enticing them therefore, operators have to offer them more than half of what overseas visitors pay.

South Africa should do everything possible to increase the number of tourists to 30 million by 2030. For this to happen, law and order should be improved, tourists should be given royal treatment, it should be easy to acquire visiting visas, and there should be a massive improvement in transportation. Urban decay should be reversed, while parks, beaches, and other facilities are maintained and kept clean. In 2022 and 2023, people could not swim in Durban beaches because of high E. coli bacteria readings caused by massive spewing of sewage into the Indian ocean (Magubane, 2024; Govender, 2022). During the festive seasons of December 2022 and 2023, Durban lost billions of rands because many tourists shunned the city due to closure of its beaches. Local and foreign tourist visits to Durban amounted to around 7.4-million per year before the outbreak of E. coli bacteria, and their direct spend was about R19.2-billion.

The tourism sector creates and sustains hundreds of jobs per year. However, the story of the German tourist who was shot dead when his car was stopped by criminals in October 2022 in Mpumalanga while driving to the Kruger National Park made international headlines (Pheto, 2022). This kind of crime and publicity are not good for the country's tourism sector.

South Africa should make it easy for foreign tourists to come to the country to relax, do sightseeing, play, and have fun. For example, Namibians fully understand the importance of welcoming foreign visitors into their country. One Namibian leader urged his people to take care of tourists: 'Hold them in our hands, keep them safe, make them want to return' (Bruce, 2018c). The researcher has personally been to the beautiful coastal city of Swakopmund, felt safe and welcome at all times, and was not required to apply and produce a visa to enter the country.

Unlike the EU, USA, China, Russia, and Brazil - South Africa only has a small domestic market that can sustain and propel its manufacturing sector. The arrival of foreign tourists is therefore essential for driving up sales of locally manufactured products. Foreign tourists will come back to the country if a good and welcoming environment is created. They will also market South Africa through word of mouth when they return to their home countries.

The visa regime should also be overhauled drastically to attract foreign tourists to South Africa. President Ramaphosa announced the introduction of the electronic visas (e-visas) portal in 2018, but it was only launched in 2022. During the launch of the portal, only travellers from fourteen countries could make use of e-visas. The Department of Home Affairs promised to add more countries to the list, however, it took government three years to launch e-visas, and adding more countries may take longer. From the onset, the list of countries whose travellers to this country could use e-visas should have been longer. The delay to do this constitutes loss of a large opportunity.

Visitors from more than one hundred countries must obtain visas either from South Africa's diplomatic missions or via the e-visas portal. This is too many, and the visa requirement should be made applicable to fewer countries and only in exceptional cases including but not limited to terrorism. In effect, people coming from countries whose citizens must apply for a visa should get a 90-day on arrival visa to enter South Africa. Visas on arrival have enabled countries to collect large revenues from tourism in 2017, for example, New Zealand US$ 147, 69-billion, and Thailand US$ 57-billion. South Africa, with its rigid visa regime, only managed to pull US$ 9-billion (Bruce, 2018c).

The lackadaisical attitude that the South African government has towards its tourism sector is unbelievable. Even before COVID-19, the country's tourism sector was struggling. Regardless of this, tourism is the second-largest economic sector in the country. It contributes 8.6% (R425.8-billion) to South Africa's economy and provided 1.5-million direct and indirect jobs before COVID-19 (Shevel, 2021). It is an anchor to about 49 000 small businesses in the sector. Tourism also has a large impact in other sectors. For example, more than 12.5% of the cars assembled in South Africa were bought by car rental companies. Tourists boost the retail subsector sales by 8%.

South Africa should change its cavalier attitude towards its tourism sector and implement this recommendation – the income of tourism operators will be rejuvenated, and the demand will be reignited, while the capacity is strengthened. This sector was hard hit by COVID-19, and the government should help it to full recovery and far beyond.

#### 7.2.2 Labour Market Should be Stabilised to Increase Direct Investment

This section contains the following subsections - undertake public policy measures that would mitigate against frequent, prolonged, or violent industrial actions; undertake public policy measures that would enable substantial job creation; and implement affirmative action public policy prudently.

##### 7.2.2.1 Undertake public policy measures that would mitigate against frequent, prolonged or violent industrial actions

As discussed in Chapter 5, a major hindrance to the industrialisation of South Africa's economy is the occurrence of frequent and protracted labour strikes. The Constitution enshrines the right of workers to embark on industrial action. The right to strike is not just entrenched in South Africa's national legislation but is also stipulated in international law as fundamental for the protection of works interests and rights. A strike, the action of downing tools or refusing to work should be undertaken by a group of employees with the intention of achieving a common goal.

Strikes in South Africa have led to losses of production, employers' contracts, employment, the loss of potential direct investment and the deindustrialisation of the economy. Major strikes have negative socio-political effects on the social fibre of the country. Sometimes they become violent; people get injured and some die. This causes pain to families whose breadwinners are injured and who may no longer be able to work. The breadwinner may also have been killed or retrenched. The government and society should therefore provide social grants and other measures to mitigate against the resulting poverty. The infamous Marikana platinum mine strike, for example, led to 34 people being killed, 78 injured, and more than 200 being arrested. Political and violent strikes like this give the country a bad reputation (Gibson, 2012). They also deter direct investments. Therefore, government, corporate South Africa, and unions should work together to devise possible solutions to bring stability to the labour market.

Sound stakeholder relationships should be created. The "us" and "them" posture between stakeholders is one of the major causes of labour unrest in South Africa.

Corporate South Africa should create a sense of belonging in workers and communities in which various firms operate. In the absence of the sense of belonging, workers easily embark on strikes which are sometimes characterised by sabotage of operations, vandalism of infrastructure, and violence. The same applies to communities where mining takes place.

One of the ways to create a sense of belonging would be to give workers and communities some shares in the firms, where they are direct stakeholders. This does not only create harmony, but workers and communities also get empowered. Other than loyalty, this would yield efficiency, and productivity. Workers and communities would also feel obliged to protect the assets of the firms with which they are affiliated. The black African workers and their communities mostly feel historically disadvantaged, excluded, undermined, infringed, exploited, and underpaid (Murwirapachena & Sibanda, 2014). Whether causes of these feelings are real or perceived is immaterial; the truth is that empowerment schemes will go a long way to ameliorate their negative feelings.

To build sound stakeholder relationships, corporate South Africa should do its part in the creation of inclusive economic growth. The best way to build trust between government, business, labour, and communities is to do difficult things together. Each partner should be prepared to lose something so that they can all have substantial gains. A major element of these gains is the stability in labour relations. While corporate South Africa is the engine that keeps the economy going, business should appreciate that capitalism is its own worst enemy. Although the researcher is an ardent advocate of the free market economy, he has come to the realisation that the best way of protecting capitalism is to create inclusive economic development so that stakeholders do not feel left out.

Capitalism should not be Victorian, self-serving, and subversive of trust; rather, Government through NEDLAC should convince both business and labour to adopt the German model of *mitbestimmung* (co-determination) in South Africa. If there is no agreement or if one of the parties disagree, the government should impose it through legislation. The researcher believes the constitutional court will rule in favour of the policymakers if any of the parties takes the matter there. Co-determination allows labour to have representation in companies' boards of directors and other relevant governance structures (Bruce, 2017). This would compel two important pillars of the capitalist economy to work together at the highest decision-making structure and build consensus and trust where it matters.

In Germany, labour and shareholder representatives in the board take sides with and against each other. One of the fundamental requirements of serving in the board is that once you are there you do not speak solely on behalf of those you are representing, but rather you look after the best interests of the company. It is the company that binds the two parties in the board. They both have vested interests. One of the fundamental aspects of the co-determination model is that labour and shareholders get the same information at the same time. This way of democratising the economy is important in creating resilient labour relations. Consequently, a better version of capitalism will be preserved.

Legislation in South Africa does not make provision for labour to stop violent industrial action; in fact, few other countries have empowered their courts to stop violent strikes (Tenza, 2015). South Africa can do this by amending relevant labour relations law. In Australia, for example, if an employer is a potential or actual victim of a violent strike, they can approach the court to restrain the industrial action until its legality is tested by the court. The court would then either suspend or stop the strike until it is satisfied that it is not unlawful. Any industrial action which includes violence can never be lawful. Where there is significant harm to people and/or property, the labour court in South Africa should be able to terminate a protected industrial action. This should also apply where there is a potential harm, threats of violence, or intimidation.

Most importantly, the labour court should be empowered to suspend or stop **protracted industrial actions** which threaten the continued existence of the employer, causing damage to the broader economy, and having a negative impact on the welfare of the public. Parties involved in the protracted dispute may also choose to embark on a process mediated by an arbitrator who is mutually selected. If the parties are unable to agree within five business days from the date on which a party demanded mediation in writing, then the mediator will be appointed by the chairperson of the Arbitration Foundation of Southern Africa. Such interventions will be held in in accordance with the rules determined by the mediator and the timeframes agreed to by the parties and the mediator.

But still, legislation should allow the arbitration process to end protracted strikes. The unreasonableness can either be on the part of the employer, striking employees, or both parties. In Canada the process of mediating prolonged industrial action is referred to as interest arbitration (Tenza, 2021).

Even in an instance where unreasonableness does not apply, legislation should empower courts and the arbitration process to end strikes or lockouts that have taken longer than acceptable, where there is compelling public interest to act this way. This should apply where the protracted industrial action interferes with general economic sustainability, public health and/or public safety.

Empowering the labour court to take measures that are herein proposed will go a long way to stabilise the labour market. The labour court has been one of the most under-resourced courts in South Africa. It takes longer than usual for litigants to get a date for the hearing of their matter, and judgements can take up to a year before being handed down. This court should be provided with adequate resourcing, including a sufficient number of fulltime judges.

The job market in South Africa should be opened-up to create more employment. The country should reach an employment rate of 90% like most upper-middle income economies; 11-million more people should be absorbed in formal or informal employment. Other than economic stagnation, there are significant barriers to entry to the labour market which exclude millions of people from accessing employment opportunities. These barriers are the direct unintended consequences of rigid labour legislation which discriminates against those who looking for jobs, in favour of those who are already employed. Trade unions, especially those that are COSATU's affiliates are in favour of rigid labour legislation regardless of its effects on the broader economy.

#### 7.2.2.2 Undertake public policy measures that would enable substantial job creation

Other causes of high levels of unemployment in South Africa are unmarketable skills imparted by the country's failing education systems, ineffective SETAs, and no incentives for employers to create low-skills jobs. Added to this is a break-down of the relationship between productivity and renumeration (Fagbadebo & Faluyi, 2023). These factors are worsened by the labour laws that have actively created a system of insiders and outsiders. Steady wage increases demanded by trade unions both in the public and private sectors (which reflect little relation to productivity) have also enriched some of those that are already employed, to the exclusion of millions of unemployed South Africans. Graduates without work experience, youth, and unskilled jobseekers are highly affected by this system of insiders and outsiders. This worsens inequality.

It will require multi-faceted reforms of public policy to break down barriers of entry to the labour market experienced by the unemployed. The reform programme should create incentives that will encourage businesses to employ more people and ensure the provision of high-quality education and training to enable job seekers to have some elementary skills as required by their employers. This will make it easier for inexperienced graduates to get their first job, ensure an acceptable relationship between work and renumeration, and allow those who have passion and determination to reach their full potential.

South Africa should establish labour intensive zones close to seaports and airports by attracting industries that are labour-absorbing to boost employment creation in these job-rich sectors. Firms investing in these zones should be given generous tax incentives, tax holidays, and other public policy measures which will inevitably attract multinationals. For example, HP and Apple may open assembling, packaging, and distribution facilities for the southern Africa region in the proposed labour-intensive zones. The presence of these multinationals may lead to the establishment and sustenance of local businesses which may take up parcel delivery opportunities, security, staff transportation, facilities management, catering, etc. The point the researcher is advancing here is that there will be many other jobs in the value chain.

The most likely result is that companies operating in the labour-intensive zones will remain in these, even after the tax holidays have expired. Attracting job-rich sectors to the zones will require government to give generous exemptions from some provisions of South Africa’s labour laws. This may include the removal of the minimum wage; renumeration based on units produced or other productivity measures; exemption of double payment on Sundays and holidays; and reduction of paternity and maternity leave. It may also mean exemption from union membership and bargaining councils; and exemption from tedious procedures with regard to employees’ dismissals and retrenchments. Having said this, companies operating in the zones should be compelled to ensure that their treatment of labour is in line with human rights as enshrined in the Constitution.

Tax exemptions should be in place for a period of twenty years and should apply to production inputs or capital goods, income tax, freight of raw and finished products, value-added tax, and duty-free imports of production inputs and tools of production.

The Expanded public works programme (EPWP) should progressively be upscaled to employ 3-million people on a three-year contract basis by 2030. Provincial governments, and district and metropolitan municipalities should take most of the responsibility for the EPWP. The provincial and local governments may partially fund this programme through grants from the national government. A lot of grass grows along national, provincial, and municipality roads during rainy seasons; moreover, the cleaning and maintenance of parks and other recreational areas is currently very neglected. The EPWP can take care of the upkeep of these places. Those participating in the programme can also assist with traffic control, security work that does not require firearms, and emergency services. Other than providing temporary relief from unemployment, the programme should also offer training in areas such as facilities management, security, traffic control, firefighting, medical emergency services, etc. Only trainable people should be beneficiaries of EPWP.

The definition of a big employer in the Labour Relations Act of 1996 should be amended so that it applies to enterprises that employ more than 300 employees instead of the current requirement of 50 employees. This would reduce the compliance and administrative burden of SMMES and encourage them to create more jobs. The Employment Equity Act of 1998 should also be amended so that the definition of designated employer is changed to one who employs 300 or more people instead of the current requirement of 50 employees. Again, this will reduce bureaucratic burdens for SMMEs and encourage entrepreneurs to embark on new entrepreneurial ventures.

The composition of NEDLAC should be changed to include representatives of the organised community as well as NGOs. This can be done by amending the National Economic Development and Labour Council Act of 1994. Section 3(5) should be removed, while section 5(1) should be amended to read as follows: ‘The Council will (a) strive to promote the goals of economic growth, employment creation, poverty reduction, inclusion in economic decision-making, and social equity’. The extension of collective bargaining to non-parties' collective agreements should be removed. This should be done by amending the Labour Relations Act of 1996.

In a country where there is a serious shortage of skills like South Africa, legislation should be passed making it difficult for teachers to embark on frequent, prolonged, and violent strikes. In fact, teachers should not be allowed to strike during certain periods of the school calendar. This includes during examinations.

#### 7.2.2.3 Implement affirmative action public policy prudently

There is a constitutional, moral, and principled obligation for policymakers and employers to redress the past discrimination and legacy of apartheid. Stakeholders also have to correct the consequences of the ANC's poor governance since 2009. The best way to redress such injustices during the apartheid era, and the ANC's poor governance, is to provide quality education to all learners, regardless of their race and social status, and to provide jobs to most people. Education is addressed elsewhere in this chapter and thus this subsection will mainly focus on employment.

Employment opportunities should also be provided to all the people regardless of their gender, race, and social status. Jobs are the surest route of poverty eradication and the reduction of inequality. They provide a training ground and a social mobility platform which will enable individuals to move into other tiers of the economy such as entrepreneurship and business.

Besides good quality education, the first step to affirm the previously disadvantaged is to give them access to job opportunities. Government should provide a conducive environment for agriculture, manufacturing, tourism, mining, retailing and other sectors to thrive and invest in the economy so that they can provide jobs to the people. A high employment rate will provide social cohesion in the country. It will also reduce individuals' lifetime dependency on the state. Employment and entrepreneurship present platforms for black people to unleash their talents and ingenuity so that they can realise their full potential.

The second step is to affirm black people and to prioritise those who are relatively qualified among them when it comes to employment. This is in line with the constitutional provisions for corrective action and the objectives of the Employment Equity Act of 1998 which advocates for redress in the South African labour market. Section 9(2) of the Constitution mandates the removal of apartheid era discriminatory and exclusionary labour laws as a significant step but fails to provide sufficient measures to achieve equality in the labour market. The Constitution allows for the introduction of labour policy measures intentionally designed to advance persons or categories of persons disadvantaged by unfair discrimination. These public policy measures are referred to as affirmative action.

The constitutional provisions in support of affirmative action mean that identical treatment of black and white people can perpetuate inequality when it comes to job opportunities in circumstances where black people start off from a position of disadvantage. Furthermore, the Constitution recognises that the formal changes removing the apartheid era barriers that prevented the enjoyment of equal rights and opportunities do not provide black people with the experience or qualifications to compete equally and to overcome prejudice.

The researcher’s view is that affirmative action should mostly be biased towards black Africans and coloured people. These racial groups remain the most disadvantaged and constitute the greatest number of those who are poor. During the interviews, some participants mentioned that the coloured community feel largely excluded because they were “not white enough under the apartheid regime and they are not black enough under the democratic system”. This possibly explains why the Patriotic Alliance (political party) under the leadership of Gayton MacKenzie gained a lot of coloured votes during the election.

Policymakers and employers should constantly remember that non-racialism and equality are also constitutional principles. They should therefore try to keep a balance between non-racialism and redress based on historical disadvantage. Black people who get employment or promotion opportunities owing to affirmative action should be given the necessary support to boost their efficiency and productivity. This can be done through career pathing, mentoring, and training. The most important consideration to appoint an affirmative action candidate should not only be qualifications and experience, but it should rather be about showing merit.

Affirmative action should not however be used to discriminate against Indian and white people which would be illegal; thus, employers should not create absolute barriers to the employment and advancement of these racial groups. They should rather strike a balance between redressing past injustices and creating a diverse working environment and labour productivity.

In our endeavours to affirm black people, we should not neglect white people. In our attempts to give more opportunities to girls, we should not neglect boys. Stakeholders should not solve the past problems while unintentionally creating new problems. We do not have to destroy white people to affirm black people. We do not have to destroy men to empower women. We do not have to deprive suburban schools of resources to improve township and rural schools. If we do this, we will destabilise social cohesion. White people should be encouraged and allowed to take employment in the public sector and to go back to football. Failure to do this would create bitterness to those that feel excluded under the democratic system, and this may produce unintended social ills.

Affirmative action should also not be used to ridicule and patronise black managers in corporate South Africa. Redressing the past discrimination is not a laughing matter. It is also important to recognise that not all senior black managers are at the helm owing to affirmative action. Edward Kieswetter (then then Group CEO of Alexander Forbes), Mpumi Madisa (Bidvest Group CEO), Tshilidzi Marwala (the Vice-Chancellor of the University of Johannesburg), Shameel Joosub (Vodacom Group CEO), and Sim Tshabalala (Standard Bank Group CEO) could have competed with white professionals for these positions and still succeeded. This list is not exhaustive.

When Ramaphosa signed the Employment Equity Amendment Bill into law in April 2022, there was a large outcry from some companies. This included Solidarity (trade union), the South African Institute of Race Relations, the DA, some lawmakers, and some policy analysts. They argued that the Employment Equity Amendment Act of 2022 was immoral, unconstitutional, and that it would increase the administrative burden of employers. The researcher is sympathetic to policymakers regarding this matter.

This is because the racial profiles of medium sized and big companies in South Africa do not reflect the demographics of the country 30 years after attainment of the democratic dispensation. The Employment Equity Act of 1998 and moral suasion by policymakers have failed to persuade employers to increase employment and promotion of people from the designated groups. The government was left with no choice but to introduce legislation that would enforce compliance. The researcher is however not convinced that the Employment Equity Amendment Act of 2022 will deter direct investments. Investors are mostly discouraged by policy uncertainty. Although this Act has some defects that were mentioned in Chapter 5, it does not create policy uncertainty. As for the constitutionality of this Act, we should leave it to the courts of law to clarify.

While the researcher is sympathetic to the policymakers regarding this legislation, it is damning that the ANC has dismally failed to improve the quality of education over the last three decades to create a large pool of employable or trainable graduates. Employers will have to do a lot of human resources development targeted to employees from designated groups to mitigate against the poor education system.

The definition of designated employer in the Employment Equity Amendment Act of 2022 should be changed so that it only applies to companies that employ more than 300 employees. This would reduce the compliance and administrative load of SMMEs so that they can focus more on productivity, sales, and human resources development. The number of employees should however not be the only criterion to determine whether a company is a designated employer. Turnover should also be used as a threshold to determine the size of the company. A company could have 50 employees with an annual turnover of R100-billion. Surely, this company should be regarded as a designated employer, and prescripts of the Employment Equity Amendment Act of 2022 should also be applicable to it.

### 7.2.3 Quality Education and Training Should be Provided to Create a Large Pool of Skilled Labour

The coronavirus outbreak, and subsequent measures to mitigate against the rapid spread of the virus made unemployment worse (Mushoriwa & Njieassam, 2023). There is no other upper-middle income country which has a sophisticated economy like that of South Africa, but which has such a large proportion of its population without jobs for so long. In January 2020, before the COVID-19 related lockdowns, only 62% of adults were employed, a percentage that compares poorly against trends of around 90% worldwide and higher in some emerging markets (Chakona, 2023). Of the potential labour force in South Africa, 38% was unemployed, a figure that is among the highest globally. Urgent measures should be taken to prepare workers for the increasing automation, digitalisation, and mechanisation in workplaces. Among other things, this can be done by providing quality education and training.

#### 7.2.3.1 The quality of basic education should be improved drastically

Many years ago, in the 1980s, the researcher had to walk twelve kilometres barefoot to and from his primary and secondary schools without an umbrella or raincoat. He attended most of his classes under various trees due to the lack of classrooms in Limpopo, former Venda and only became aware of computers, libraries, and laboratories when he started his tertiary education. Most of the teachers who taught me at the primary and secondary education levels had a matric, with no formal teaching qualifications. Even the very few who had qualifications would mostly have attained a two-year teaching diploma from the Tshisimani Training College or Venda College of Education. You will be astonished to note that student teachers in those Bantu education colleges, were mostly trained using textbooks prescribed for the primary and secondary pupils.

Both in primary and secondary schools that the researcher attended there were no toilets, not even pit toilets, and thus the bushes surrounding the schools were highly contaminated, smelly, and unhealthy. Most of his female counterparts dropped out of the school due to the embarrassment associated with the lack of sanitary towels.

It pains the researcher to note that thirty-years after the democratic dispensation, there is little improvement in South Africa’s schools and education system, especially in rural and townships areas (Mitchell, 2023). Most schools in these areas still lack the basic infrastructure and facilities necessary for a conducive educational environment. They largely still do not have computers, laboratories, and libraries. Classrooms, sporting facilities, and toilets are dilapidated. There is very little or no renovation at all. The wooden desks are splintered, windows smashed, and there are no proper fences surrounding the schools.

It is deplorable to note that some female learners in these schools are still without proper sanitary towels, still leading to embarrassment, health risks, and dropping out from schooling (Beksinska, Nkosi, Zulu & Smit, 2021). Most teachers have inferior teaching qualifications, lack self-esteem, and are prone to strikes at any given time despite the negative impact of such industrial action on learners.

Some of the schools are situated within walking distance from shebeens and taverns (saloons) and there have been reports that some learners drink alcohol during school. Other than the fact that this disrupts learning activities, it is also a criminal offense in South Africa to sell alcohol to youngsters who are under 18-years of age.

Some schools have gangs and have become recruitment bases for criminal gangs. Reports regarding drugs, guns, and knives in certain schools have been widely published in newspapers (Kgosana, 2024; Bongweni & Tyilo, 2019). As stated in the preceding paragraph, this dire situation is largely found in schools in rural and township areas - underdeveloped neighbourhoods.

Thirty years after democracy, South Africa’s education system is still characterised by historical inequalities (Dagada, 2024a; Luvhengo, 2023; Spaull & Jansen, 2019). Due to these inequalities, rich schools in suburbs have better facilities and, as a result, attract better teachers than those in disadvantaged communities. Parents in poorer communities are removing their children from the under-developed schools and sending them to the former model C (wealthier) government and private schools (Luvhengo, 2023). Instead of the government striving to improve the schools in rural and township areas, they are clamping down on the wealthier schools by threatening to take away some of the privileges provided to the teachers and principals by the school governing bodies.

As part of improving basic and higher education, government, corporate South Africa, NGOs, labour unions, foreign donors, communities, and other stakeholders should attend to the matters reflected in the above paragraphs.

Drastic improvement of early childhood education, and primary, and secondary education is of paramount importance. For example, technical colleges should be overhauled urgently. A major factor in the reduction of poverty, mitigating inequality, and reducing the impact of automation in job losses is the provision of good quality education. This is one area in which the ANC government has failed dismally since 1994. Quality education must be provided and there is no shortcut to this. Unfortunately, the ANC has allowed the SADTU to highjack the management and governance of the schools (Spaull & Jansen, 2019). The whole of primary and secondary education has become a fiefdom of SADTU.

What seems normal for most countries with sophisticated economies is rare in South Africa. In predominantly black schools where many teachers are SADTU members, few teaching and learning activities take place, because teachers do not take their responsibilities seriously (Dagada, 2024a; Naidoo, 2019).

According to the School Monitoring Survey of 2017, on an average day, 10% of South African teachers do not go to school. It is even worse in the Eastern Cape where it was found that 6 483 teachers do not show up at their schools every day, yet they get their full salaries and fringe benefits. It is in only 20% of the functional schools in the country where all teachers regularly go to work and actually teach the students. Absenteeism is very prevalent in the other 80% of schools. Then there are teachers who go to school, mark themselves present, but never really fulfil their duties. Of course, owing to legitimate leave, illness, family responsibilities, or tragedies, some teachers would be absent from predominantly white schools. However, unlike their counterparts in black schools, there would be a substitute teacher to temporarily take over the teaching responsibilities. There is too much leave system abuse by some public servants in South Africa, and the situation has not improved since the School Monitoring Survey of 2017[387].

Unlike the legal, medical, and engineering professions, South Africa does not have a strong system that holds teachers in public schools accountable for their teaching responsibilities. What does exist is a strong union which protects teachers, and no matter how much they shun responsibilities, they are handsomely paid. This should be attributed to political expediency. The ANC is in a tripartite alliance with COSATU and the SACP (Mkokeli, 2024; McKinley, 2019). This alliance provides the ANC with election campaign funding and actual votes but this partnership is costing the country dearly.

The influence of COSATU and the SACP on public policy formulation has been enormous, and they actively protect teachers who are members of SADTU. This has led to the production of public policy which is counterproductive. Labour laws have been crafted in favour of labour and stifle the overall socio-economic development of the country. In fact, these laws protect those who already have jobs while shutting out the unemployed from entering the labour market. The worst by-product of this toxic tripartite alliance is that it has resulted in our children receiving a quality of education which is worse than that of the apartheid era.

In predominant black schools, SADTU has enormous influence over who becomes a head of department, deputy principal, and principal (Dagada, 2024a; Naidoo, 2019). The government, school governing bodies and parents are largely afraid of SADTU.

[387] Interview with the professor of education.

In the absence of the provision of quality education in most black schools, many students drop out of the education system before they reach Grade 12, but the government has failed to resolve these problems. If South Africa wants to reindustrialise its economy and drive massive inclusive economic growth, the government should devise practical interventions to improve early childhood, primary, and secondary education. They should stop pandering to SADTU and bowing down to political expediency, as has happened for the last 30-years after the attainment of the democratic dispensation – it is that simple.

The government should augment salaries of teachers that possess scarcely available expertise of subjects such as the natural sciences; engineering, graphics and design; the physical sciences; software development; and mathematics. Allowances of teachers who have scarce skills and who choose to teach in rural areas should be higher. The registration of independent schools and colleges that provide higher education should be expedited. The South African Schools Act of 1996 and other relevant pieces of legislation should be amended to address this. Among other things, authorities should be empowered to issue interim registration status.

In January 2023, the minister responsible for basic education, Angie Motshekga, announced the class of 2022 Grade 12 final results with a greater fanfare than usual. She asserted that South Africa had never had so many matric and bachelor-level passes since 1994 like those of the class of 2022. She declared: “The fact that we have broken what appeared to be a glass ceiling of around 500 000 learners proceeding to Grade 12 over the years, is a clear sign of a maturing system on the rise”[388].

Historically, about 50% of pupils drop-out of the schooling system before they reach Grade 12. It was startling to observe that there were 200 000 more candidates who sat for the 2022 matric examinations. This number is 44% higher than the pre-COVID-19 norm. Interestingly, more than 775 000 learners (65% of the 2022 Grade 12 cohort) survived all the way to Grade 12 from the initial1.18-million who started Grade 1 in 2011. This would have constituted a large achievement if assessment

[388] Keynote address by the minister of basic education, Mrs Angie Motshekga, MP, delivered during the release of 2022 national senior certificate examination results, 19 January 2023.

standards were not dropped to mitigate against the effects of COVID-19 on teaching and learning.

Contrary to the government claims that the class of 2022 matric results demonstrated the improved quality of South Africa's education, it actually indicated the opposite. The increase of 50% in the number of bachelor passes compared to 2019 was the consequence of ill-considered leniency by the Department of Basic Education for progressing weak learners. In fact, the Grade 12 class of 2022 missed two-thirds of their schooling during 2020 and 2021 due to school closures and rotational timetables introduced to cater for social distancing in classrooms (Bisseker, 2023). This assertion is supported by the report authored by some academics who were based in the Research on Socio-Economic Policy Unit of Stellenbosch University[389].

To do some justice to learners who missed so much schooling due to factors beyond their control, the department introduced more lenient promotional rules. For instance, the curriculum was shortened, and the weight of year-end examinations was dropped from counting 75% towards final marks to only 40%. The weight of term tests that are conducted at school was increased, despite the fact that this assessment is less demanding. These more lenient promotion rules led to the lowering of the quality of education in primary and secondary schools, reduction of dropout rates, reduction of the number of pupils who should repeat a grade, and artificial improvement of pass rates.

The same trend of implementing lenient promotion continued for the class of 2023 Grade 12. The overall pass rate was 82.9%. Most of the classes of 2022 and 2023 Grade 12 learners who gained admission in the HEIs may not cope with the academic rigour in universities.

The government should move swiftly to remedy the educational losses that were caused by COVID-19. The leniency that was introduced was not the best way of mitigating against the impact of COVID-19 to schooling. Lowering standards of

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[389] *Educational issues and the impact of COVID-19: what education data reveal*, February 2023. A report co-authored by Servaas van der Berg, Chris van Wyk, Rebecca Selkirk, Herman Meyer, Heleen Hofmeyr, Eldridge Moses and Joel Gondwe of Stellenbosch University.

assessment and shortening curriculum can be very devastating to the intellectual capability of learners. It can also damage the credibility of the NSC.

#### 7.2.3.2 The quality of HEI, and research and development should be improved drastically

Corporate South Africa has reduced its expenditure on research and development, but this does not bode well for endeavours to reindustrialise the country's economy[390]. The reduction of this expenditure has continued its decade-long downward trend. The decline reached 30% of the R33,5-billion spent on research and development in 2020/2021 compared with 47.1% spent on research a decade earlier[391]. This is contrary to the government's goal of the country spending 1.5% of the GDP on research and development by 2030. Gross expenditure on research and development dropped from 0.76% of the GDP in 2017/2018 to 0.61% in 2020/2021 (Kahn, 2023). Corporate South Africa's reduction of expenditure in this regard is extremely concerning because this has a direct impact on innovation, production of complex products and services, inclusive economic growth, job creation, and upward social mobility.

According to the National Advisory Council on Innovations 2023 Report, the corporate South Africa share of total researchers dropped from 15.2% in 2011/2012 to 7.3% in 2020/2021. This is one of the reasons the country's level of complexity has gone down drastically since 1994. You cannot compete in global trade without high complexity products and services.

HEIs should produce students who are trainable. There should also be emphasis on the physical sciences. For the country and corporate South Africa to embark on effective research and development, the throughput of masters and doctoral students should be increased substantially. By having many scientists active in universities, research institutes, and corporate environments, the country would inevitably create more jobs for the unemployed through innovation. Measures should be taken to recruit and retain professors and other highly experienced academics in South Africa – this

[390] Interview with a professor based in education and labour centre.
[391] National Advisory Council on Innovation Report, 2023.

includes foreign academics. The compulsory retirement age of all academics should be extended from 65 to 80 years.

According to the 2023 Science, Technology and Innovation Indicators Report, South African universities would lose about 10% of permanent academics with doctoral qualifications within the next five years owing to retirement. Measures should therefore be taken to attract young professionals, provide them with support to attain doctoral degrees, and capacitate them to intensify their research output.

South Africa should launch research focused universities. This can be done by establishing a two-tier higher education system which encompasses teaching and research universities. It is unlikely that the Durban University of Technology, Tshwane University of Technology, or Walter Sisulu University will ever be globally renowned in any ground-breaking research areas.

The following institutions should focus on postgraduate (masters and doctorates) studies and research: University of Cape Town, Stellenbosch University, University of the Witwatersrand, University of Johannesburg, Free State University, University of Cape Town, University of Pretoria, and University of Kwazulu-Natal. Due to its open distance education model, the University of South Africa should continue to serve as both a teaching and research university. The researcher is acutely aware that a proposal like this tends to yield highly charged emotional debate.

Some people argue that the previously disadvantaged universities are being relegated to second class status while the previously predominantly white universities are being accorded superior stature. This kind of reasoning is wrong in two ways. Both teaching and research are equally significant, and they feed into each other. For example, teaching universities will produce quality students who are ready to pursue postgraduate studies at the research-intensive universities. The research output in the form of publications will be used by academics in universities for teaching purposes. The teaching universities will also inject skilled human resources into the workplace, while research universities will yield research output which can be used by corporate South Africa for innovation purposes. The lecturer-students ratio in research-intensive universities should be reduced substantially so that academics in these institutions can pay more attention to research projects.

For the researcher’s second proposal to gain any traction, the promotion criteria in universities must be reviewed. Traditionally, academics have received promotion because of their research output, but this has resulted in academics mainly focusing on research output and neglecting teaching. In the proposed teaching universities, academics should be promoted according to the quality of their teaching. However, at the research universities academics should be promoted based on the quality and impact of their research output. Amongst other things, the quality of research should be appraised by its usability by industry, citations by fellow researchers, international recognition, and registered patents.

Moreover, universities should establish part-time teaching and research positions for professionals based in industry. As a result of perceived low salaries in academia, it is hard to attract highly skilled professionals to take fulltime positions within academic institutions. In effect, academics that contribute appropriate research to industry can still make some decent money through consulting. Universities should attract part-time lecturers both for teaching and research purposes.

Within five years of serving as a 25% lecturer at the Wits Business School, the researcher published two books, chapters in two books, articles in peer-reviewed accredited journals, and more than ten papers in peer-reviewed conference proceedings. His teaching rating improved substantially, and he made some money from the private sector through consulting and research grants. He had no intention of taking a 100% teaching position, but always tried to intertwine academic and corporate experiences so that they positively influenced one another. His students always gained from his hands-on industry experience. Many other executives and professionals in the private sector could do the same as part of their contribution to the creation of a skilled labour pool in South Africa, and research and development.

The government should also make it easy for highly skilled researchers to work in South Africa. If you appoint a skilled white or foreign researcher, their contribution to innovation and economic development may create at least ten new jobs, and people from the designated groups will benefit from these newly created positions.

More financial resources should be channelled into research and development. One of the reasons why Asian economies are doing well is because they have invested substantially into research and development, and Asia has essentially overtaken the USA in terms of research related investments. To see the Asian high-tech skills – crack open an Apple iPhone. Although the company selling it is American, the physical components that constitute the iPhone are produced in Asia – the screen is from Japan, the flash memory from South Korea, but it is assembled in China (Xing, 2019). The USAs' contribution to the iPhone is the architecture design and software development, but Apple uses highly qualified engineers to integrate the innovations from mostly Asian countries. Asia has employed research and technical skills to achieve their level of economic growth, particularly in the manufacturing sector (Smith, 2024; Li & Piachaud, 2019).

The government and businesses in South Africa should therefore invest heavily in research and development, and researchers in a corporate environment should also be required to have masters degrees and PhDs. For instance, most engineers in the Silicon Valley have PhD degrees (Roach, Sauermann & Skrentny, 2020; Smith, 2024). Sasol Technology in South Africa has many employees with PhDs (Mondliwa & Roberts, 2019; Dagada, 2024). Therefore, if South Africa wants to play a prominent role in manufacturing, these are some of the measures that must be taken.

#### 7.2.3.3 Corporate South Africa should upscale their contribution to skills development

In endeavouring to prepare students for jobs in a highly sophisticated economy, the country's main aim should not be to make them specialists. This will be a futile exercise, because technologies and industry trends change continuously. It would be unfair to expect HEIs to catch-up with the fast-changing practices of various commercial sectors. The main purpose of education is to teach graduates to think analytically – equipping them with skills on problem solving, collaboration, and analytics. In other words, HEIs should produce graduates who are trainable.

Corporate South Africa and some analysts have argued that HEIs are not producing graduates equipped with specific and practical industry skills. The researcher does not agree with this sentiment which emanates from a wrong set of expectations of higher education. The role of HEIs is to provide students with elementary practical exposure and broad theoretical perspectives, for example, principles of software development, financial management or civil engineering. HEIs are not there to equip students with current practical skills, but employers themselves have a responsibility to do so.

It is wrong, for example, to expect a software development graduate to possess the latest software developments skills that are used in various economic sectors and subsectors. The least a university should do is to equip their students with principles of software development and some basics of programming languages. It would be the responsibility of the prospective employer to provide recent specific practical training for their relevant employees. Corporate South Africa should also appreciate that the government has played its role by opening the doors of HEIs to all our youth through inclusive policy, subsidies, and the National Student Financial Aid Scheme.

Without pointing fingers, companies are cannibalising each other by poaching skilled labour instead of growing their own skilled employees. This has led to an artificially high cost of skilled labour, especially among black professionals. When these professionals take advantage of large salary offers some commentors accuse them of job-hopping.

Development of skilled employees can be achieved by enhancing skills and knowledge of the graduates who are unemployed. Part of this training should prepare workers for increasing automation and digitalisation of the workplaces. Whereas some of the HEIs have sought to close the gap between secondary and higher education by offering bridging programmes, corporate South Africa has largely neglected to do the same by providing necessary industry related training to new graduates.

Employers should fast track the reskilling of their labour so that they can work collaboratively with technology. In other words, technology and skilled labour will complement each other. Workers whose functions will be fully taken over by technology should be reskilled and repurposed for other jobs. Policymakers and higher education should ensure that the country is producing workers that are trainable and adaptable. Exposure to multidisciplinary education at universities and colleges would go a long way to achieve this. Workers who perform routine or repetitive jobs that can be easily automated should be retrained.

As already stated, most banks, and some retail outlets, service centres, and manufacturing firms are using artificial intelligence to digitalise their operational processes. The manufacturing sector in the future will be highly affected by robots. Machines will continue to revolutionise the way assembling of various production parts, for instance, packaging of finished goods, supply chain, logistics, and inventory are done by factories. In the midst of all these developments, human labour continues to play a meaningful role in the workplace; therefore, employers should upskill and transition workers towards enhanced digitalised workplaces. The 4IR era will increasingly become fast-paced, and workers should either speedily adapt or be left behind. This will require workers to be equipped with skills suitable for the automated working environment as firms employ advanced technologies to boost productivity and competitiveness.

### 7.2.4 Connect Major Commercial Hubs with Major Labour Market

It was mentioned in the literature review that geographical unevenness tends to manifest due to technology driven economic developments. Findings of this study also indicate that this could lead to job losses and associated social ills. The researcher's major recommendation is that South Africa should mitigate against geographical unevenness and the legacy of apartheid spatial planning by connecting major commercial hubs with major labour market hubs.

The apartheid system fragmented spatial urban planning, and technology shocks have enlarged the geographical unevenness development phenomenon (Dagada, 2021). This should not necessarily be corrected by forcing Johannesburg metropolitan area residents who live in Soweto to migrate from their township to Sandton, or their counterparts in Tembisa relocating to Midrand. Local and provincial governments should rather ensure that Soweto is interconnected to Sandton, and Tembisa to Midrand, through reliable and affordable public transportation. There should be integrated spatial development which would enable residents to continue to live in Tembisa and Soweto where housing is relatively cheap and to commute to Sandton and Midrand where there are more employment opportunities.

Midrand and Sandton are major commercial hubs, and Tembisa and Soweto can supply these hubs with labour for manufacturing plants, retail outlets, security companies, cleaning services, and other sectors. Because people mostly spend their money where they live, local township economies will be boosted. Employers will see Tembisa and Soweto as their labour markets which will create a much-needed virtuous circle.

Connecting commercial hubs and labour markets that are far from each other will be very crucial during the 4IR era. Parks Tau, the executive mayor of the City of

Johannesburg between 2011 to 2016 was working on this when he was replaced after the 2016 local government elections[392].

Around 2007, Paul Mashatile[393], the MEC of Finance in the Gauteng Provincial Government wanted to rollout a monorail project which would connect Soweto to Johannesburg's central business district (CBD)[394]. The plan was to ensure that no person traveling from Soweto to the CBD would wait for the monorail for more than 15 minutes for transport. The intention was for the monorail to ferry about 1.5-million people per day. There were to be 39 passenger stations along the rail network route. Homes would not have to be relocated to give way for the construction because the rail network would have elevated pylons which are on municipal land.

A Public-Private-Partnership model would have funded the monorail project. Unfortunately, the project was abandoned after failing to get the approval of the national government. The main reason for the cabinet's refusal to approve the project was that the Gauteng Provincial Government did not sufficiently consult other relevant stakeholders. The researcher suspects that Mashatile and his provincial colleagues stepped on the toes of some powerful people because they did not pander to the egos of these influential people. In a normal democracy, stakeholders could still have been consulted after the initial failure to obtain approval and the project could still have continued a little bit later than planned. The researcher has used the connection of Soweto and Tembisa to major commercial hubs just to make a point. This model could be used throughout South Africa.

Efficient and affordable public transport will be very effective in driving economic development and mitigating against the impact of uneven geographical development, and technology shocks. It will also reduce migration to major commercial hubs, prevent the decline of townships, and boost local economic development.

In the USA, it would normally take a passenger six hours to travel from Cleveland to Chicago (Frey, 2019). A 2019 feasibility study recommended the construction of a hyperloop which will connect the two cities. This will convert the six-hour travelling to just 28 minutes, which is reasonable to commute to work. The hyperloop will result in

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[392] City of Johannesburg end of the term (2011-2016) report, June 2016.
[393] Paul Mashatile became the deputy president of South Africa in March 2023.
[394] Gauteng Provincial Government end of the 3rd term political report, April 2009.

two markets (commercial and labour hubs) becoming one. China has also used rail infrastructure to connect major labour markets with commercial hubs. Policymakers in South Africa should revisit the monorail concept.

When president Ramaphosa, in his June 2019 state of the nation speech, advocated for investment in bullet trains (high speed rail) that will “pass through Johannesburg as they travel from [Cape Town] to Musina, and they stop in Buffalo City on their way from eThekwini back to Cape Town”, he was ridiculed by politicians from opposition parties, media, and some political analysts. Nonetheless, it was wrong to ridicule Ramaphosa. South Africa needs an efficient and sophisticated transport system which includes bullet trains. Global trends are also on the side of the president regarding this matter.

The South African mineral revolution was boosted when railway lines were constructed (Fourie, 2021). This country was one of the very first to introduce trains as a mode of transport. The construction of the first railway line in South Africa started in 1859 and was completed in 1885 – it connected Kimberly and Cape Town. The railway reduced the cost of doing business substantially. It also increased the GDP by about 25% (Herranz-Loncan & Fourie, 2018). These authors went further: ‘This, we conclude, is a very large share for a single investment and clear indicator of the transformative power of the railway’ (Fourie, 2021:111).

The Gauteng Provincial Government’s intention to expand the Gautrain infrastructure and services to Lanseria, Randburg, Soweto, and Johannesburg’s CBD, is a step in the right direction (Dagada, 2021). Measures should therefore be taken to protect, capacitate, maintain, and repair the current rail infrastructure network in South Africa. The railway system in this country is characterised by vandalism of copper cables, frustrated passengers owing to unreliable service and lengthy delays, stolen railway tracks, fatal train crashes, and burning of coaches. During the 2019 general elections campaign, a train broke down with Ramaphosa inside and he was stuck for hours. This does not happen elsewhere in the world in an upper-middle income country. Can you imagine the security implications of a head of state stuck in an immovable train for hours? What message does this send to potential foreign direct investors?

Transport infrastructure could be rolled out through public-private-partnerships to lessen pressure on the fiscus. The researcher’s view is that the best model for this would be BOT (Build, Operate, and Transfer). BOT would make it easy for private sector investors to recoup their capital investments. The balance sheet of government would also be strengthened after acquiring fixed assets.

If South Africa wants to mitigate against the effects of uneven geographical development, the legacy of apartheid spatial planning, and increasing digitalisation in workplaces, it should invest heavily in its rail transportation system to boost economic growth. While investing in affordable infrastructure, efforts to prepare the workforce for the 4IR era should be increased. This should be done by offering quality education and corporate training.

### 7.2.5 Implement Broad-Based Black Economic Empowerment Public Policy Prudently

Thirty years after the attainment of democracy, inequality of entrepreneurship is entrenched in corporate South Africa. This should be attributed to the legacy of apartheid, subtle resistance by corporate South Africa, and the ANC's mismanagement of the black empowerment programme. Those who have political connections have largely been the beneficiaries of this programme, and this is highly improper (Johnson, 2019).

B-BBEE remains an important policy intervention to address the past economic imbalances and to empower those who were previously disadvantaged. If the country fails to implement black empowerment, economic injustice will continue, and this would endanger social cohesion. Everything possible should therefore be done to ensure that ownership, management control, employment equity, skills development, preferential procurement, enterprise development, and socio-economic development are satisfactorily implemented. These are the seven pillars of B-BBEE.

During the literature review and the fieldwork, the researcher did not sense that proper implementation of B-BBEE would discourage direct investment or cause an investment strike. However, he noted that in 2016 the EU Chamber of Commerce raised some concerns with the BEE legislation and viewed it as one of the top challenges of doing business in South Africa. There have been two fundamental problems with BEE related public policy. One is that it is perceived as an instrument to enrich a few people who have proximity to some influential ANC's leaders; the other is uncertainty around the sectoral charters. Investments will not be deterred if B-BBEE is implemented with fairness, transparency, and prudence. Most importantly, there should be certainty regarding sectoral charters in general and the mining charter in particular.

While the Department of Mineral Resources and Energy may have mishandled the mining charter and unintentionally created uncertainty, the ANC's determination to transform all sectors of the economy is a fair policy directive. The mining sector constitutes a bedrock for South Africa's economy, and it made sense to use it as starting point for the transformation programme. The government introduced the mining charter for the first time in 2004 to deracialise ownership patterns in the sector and to redress past injustices and imbalances. The cooperation from the mining sector was not satisfactory and the government sought to tighten the policy by making some changes in 2010 and 2018.

The sector resisted some of the provisions that were included in the 2018 version and its association, the Minerals Council South Africa, took the Minister of Mineral Resources and Energy to court. The high court judgment came out in 2021 and declared that the mining charter was not a law and thus not binding. The researcher does not know if the minister will embark on the legislative process to address the concerns of the Minerals Council South Africa and the findings of the high court. Whatever happens, all stakeholders should ensure that there should be transformation in all economic sectors. The bottom line is that this should be done prudently, fairly, and in a transparent manner.

The thirty percentage points for equity of black ownership and targets attached to the 2018 mining charter may be somewhat high, and the government should reconsider this. Moreover, Black ownership and increased involvement in the management should not be done in way that renders the mining sector unprofitable. Policymakers and the Minerals Council South Africa should keep a reasonable balance between redressing the past discrimination and keeping the mining sector sustainable. Government should, pronounce its next move regarding the mining charter without delay, to end speculation and perpetual public policy uncertainty.

The whole debacle around the mining charter has proved that moral persuasion will not make big business transform voluntarily which is why the sectoral charters should be made laws. The government should nevertheless consult the private sector before it embarks on a legislative process to convert the mining charter into a law (an

Act). They should heed the advice of Fourie (2019:233) who wrote that: ‘Involve the private sector, but do not leave the task exclusively to it. Big business can be just as evil as big government; both will want to control what we see and hear – and shape our behaviour accordingly’.

Since moral persuasion is not convincing some big businesses to embrace B-BBEE principles, the researcher fully supports the introduction of the Conduct of Financial Institutions Bill. This will empower the Financial Sector Conduct Authority to enforce and monitor B-BBEE shareholding in the financial sector. Deliberate efforts to support and empower black entrepreneurs through public sector tenders should be encouraged. These entrepreneurs should be paid on time and government should guard against corruption.

While companies in the private sector should get BEE points for buying products and services from black entrepreneurs, they should not be compelled to buy locally manufactured goods. Localisation constitutes trade protectionism and does not necessarily equate to BEE. As an example, a young black entrepreneur who wants to venture into the business of selling shoes will probably do the design in South Africa but get them mass produced in China. This model is far more affordable than her trying to buy equipment, secure premises, employ people, and manufacture those shoes locally. So, for a start she may get them manufactured in China, and later she may amass the required capital to produce locally. Localisation can actually destroy some BEE ventures it is counterproductive and allows deindustrialisation.

As part of reindustrialising South Africa’s economy, some manufacturers will have to be invited to open manufacturing plants in South Africa. Such companies should be exempted from BEE related ownership requirements, some aspects of labour-related legislation, and a few other provisions of sectoral charters. For example, one cannot invite Elon Musk to open a gigafactory in South Africa, and then force him to provide 30% shareholding to black entrepreneurs. You should rather support him to secure a better location and give him favourable tax exemptions.

If issues expressed in Chapter 5 and 6 are sufficiently attended to, many foreign companies will voluntarily come to South Africa to operate their business despite having to set aside a certain percentage of ownership to local black entrepreneurs. Share-ownership is not a major investment impediment.

While the researcher supports black empowerment as part of redressing the past discrimination, he is totally against the provisions contained in the Competition Amendment Act of 2018. Those provisions were intended to advance black-owned small businesses, but they are essentially counterproductive and will deter foreign direct investment. This Act suggests that policymakers perceive the presence of ‘dominant firms’ as impediments to BEE. Accordingly, the Act raises concerns about the high level of economic concentration in various sectors of the economy. This perception is actually wrong – there is impressive competition in most sectors in South Africa.

Just to give few examples – in the banking sector the four dominant players are as follows: Absa, FNB, Nedbank and Standard Bank. In telecommunications there are four significant players: MTN, Telcom, Telkom, and Vodacom; and in the grocery retail market there are five large players: Makro, Shoprite, Pick ‘n Pay, Woolworths, and Spar. All the companies mentioned in three sectors aggressively compete for our precious money. There are also small players in these sectors that are running highly successful businesses; for example, Investec Bank and Capitec Bank in the banking sector, Liquid Telecoms and Rain in telecommunications, and Food Lover’s Market, and Cambridge Food in grocery retailers. This list is not exhaustive.

It is acceptable for a normal economy to have around four dominant firms in a sector (Jullien & Sand-Zantman, 2021). Theobald (2023) support this statement: *‘It is astounding how many countries settle on a banking system of four top banks. The UK, Kenya, Australia, the USA, India and Spain are among the many examples. Indeed, it is hard to think of exceptions. The global preponderance of the “big four” model suggests it is some form of stable equilibrium. More banks should make for a more competitive industry and arguably better customers’ service. Fewer banks make for economies of scale, and a generally safer sector with more diversified portfolio and capable of larger single exposures. A four-pillar system is also easier to regulate, allowing authorities to focus their attention. It seems to be the Goldilocks bank market structure – just enough competition but just enough stability’*. Although these observations focused on the banking sector, they are applicable to other economic sectors.

The Act is intended to police dominant firms against price discrimination and unfair purchasing powers. Analysis of the CPI shows that prices have risen reasonably and consistently at about 2.4% annually during the last ten years. The notion which suggests that big businesses have abused their dominance by increasing prices unfairly is totally wrong and is not backed up by evidence. Of course, there has been price collusion by some big firms and regulators have punished them. But the price discrimination mentioned in the Competition Amendment Act of 2018 has got nothing to do with price collusion.

With regard to their bulk purchasing powers, big businesses will be within their rights to use their powers to negotiate better prices. Independent liquor stores in South Africa (which are mostly owned by black entrepreneurs) have grouped themselves under various associations so that they can negotiate better prices from Distell, South African Breweries, Heineken, and other liquor wholesale suppliers – this model has been working without the interference of regulators through the Competition Amendment Act of 2018.

Theo Baloyi is the owner and CEO of Bathu Shoes (Pty) Ltd. This company sells well designed and good quality sneakers. By November 2024, it had 35 stores in various parts of South Africa. Its sneakers are very popular, and the company is growing impressively. The point the researcher is trying to make here is that black entrepreneurs can create niche and unique products and succeed in the marketplace without being baby-sitted by the regulators. Regulators do not have to create tough market conditions for the established sneakers brands such as Adidas, Nike, and Puma so that Bathu can get some market share.

It is wrong to force large companies to be less competitive to make it easy for black-owned small businesses to grow. Policymakers and regulators should not see dominant firms as enemies; this economy needs them. Each of the following companies provides thousands of jobs to South Africans – MTN, Vodacom, Telkom, Bidvest, Naspers, Vodacom, FirstRand, Sibanye-Stillwater, Tiger Brands, and Sanlam, and this list is not exhaustive. They also support many small businesses within their value chains and pay millions of rands to SARS.

It is wrong to assume that all big businesses in South Africa are solely owned by white people. More than 1.7-million black people are shareholders in listed big businesses in South Africa through the Public Investment Corporation (PIC). PIC is the fund manager for government employees' pensions. It is the biggest institutional investor in the country's listed equities and had about R2.548-trillion under management as of 31 March 2022[395]. It is in the best interests of South Africa for both small and big businesses to thrive.

Instead of government forcing white commercial farmers to give away between 25% to 75% shareholding to black people for free, government should rather support new and emerging black commercial farmers. The agricultural sector should not be destroyed due to sheer political expediency. According to Barron (2023), there are 5500 farmers on state-owned farms, but most of these are dysfunctional owing to the government's failure to support aspirant black farmers.

Government should create a conducive environment for experienced, and new and emerging black farmers to work together. Some agricultural sector associations are already doing this, and have programmes to capacitate new and emerging black farmers through training and other programmes. A parasitic relationship, where black people get freebies from white farmers is counterproductive and not sustainable. It would actually destroy farms and the whole food production value chain in South Africa.

### 7.2.6 South Africa Should Spearhead the Use of Technology to Keep the Identity Records of Nationals Across the African States

It was stated in the previous chapter that there is a high level of xenophobia in South Africa. This is bound to happen in the midst of high employment, excessive lawless, and poor public leadership (Yingi, Ncube & Benyera, 2024; Tewolde, 2020). It was ordinary South Africans who started to complain about the number of foreign nationals in the country. This led to violence against black Africans from neighbouring countries and other regions in the continent. They were blamed for offering cheap labour which took the jobs of local unskilled and semi-skilled people, taking over groceries and household stores in townships and rural areas. They were accused of selling poor quality food, illegally receiving social grants, drug peddling, human trafficking, and other serious crimes. While some of these accusations are correct, the level of crimes committed by foreign nationals would be much lower if the country had strong and reliable law and order enforcement.

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[395] Analysis of PIC's 2021/2022 annual report.

Taking over the running of many grocery shops in townships and rural areas has been done legally and the owners of the shops get monthly rental fees. It is wrong to create an impression that most foreign nationals were involved in crimes. It is also incorrect to suggest that most crimes in South Africa are committed by foreign nationals. Crime statistics that are quarterly released by the Minister of Police support this statement.

Corporate South Africa should do their part regarding law and order in the country. Businesses should not employ foreign nationals with the intention of undermining labour laws and human rights as enshrined in the Constitution. Mining companies should discharge their social and local community development obligations when their mines are still operational. Mines that have exhausted their minerals and have moved to the rehabilitation stage should be secured to prevent the extraction of the few remaining commodities by the illegal miners who are commonly known as *Zama-zamas* in South Africa. Mines' tailing dams should be maintained regularly as part of public safety and environmental care.

History is awash with situations where some struggling governments have used foreign nationals as an excuse for their failures to improve socio-economic conditions in their countries. Adolf Hitler used the Jews in Germany, Idi Amin - the Indians in Uganda, Boris Johnson – African immigrants in Britain, and Trump – the Mexicans in the USA as scapegoats for wrong things. Some ANC politicians have joined this trend since around 2020. Leading the charge against black African foreign nationals has been the minister responsible for home affairs, Aaron Motsoaledi. This culminated in the Department of Home Affairs issuing a notice to terminate Zimbabwe exemption permits by 30th June 2023, which the high court interdicted. This would have rendered thousands of Zimbabweans who work in South Africa's agriculture, hospitality, and other sectors illegal immigrants. They would then have had to leave the country or be forcefully deported.

The notion that foreign nationals were taking jobs that should have been occupied by local citizens is not entirely true and is highly debatable. During his visits to Europe, the USA, and Dubai, the researcher found that most hospitality, farming, truck driving, and other unskilled and semi-skilled manual jobs were done by workers from African countries, Mexico, Caribbean Islands, and South America. This phenomenon is also applicable in South Africa where hospitality, farming, handyman, household housekeeping, logistics, food and parcels delivery, and mining are mostly done by foreign nationals from the SADC region.

Chasing these labourers away from South Africa would cause large damage to the economy and hamper reindustrialisation efforts. For example, most restaurants would not have sufficient waiters and waitresses, the parcel and food delivery sector would have limited scooter riders, and mines would have inadequate numbers of underground drillers. The cost of doing these services would rise, operational costs would increase, and consumers would bear the brunt.

It is not in the best interests of South Africa to prevent fellow Africans from coming to the country to seek better socio-economic opportunities and refugee protection. The labour input of these fellow Africans keeps the economy going and this boosts tax revenue (Moyo, 2020; Yingi et al., 2024). This tax income is used for infrastructure development, social services, and social welfare.

Policymakers should also accept the reality that, just as Americans do not want to take up manual jobs in the hospitality sector, locals do not want to do manual jobs in South Africa. That is why mines do not even bother to offer employment as underground drillers to people in the communities where they operate. Most of these jobs are taken up by people from the Eastern Cape, Lesotho, and Mozambique (Cohen & Cobbett, 2024; Pelders & Nelson, 2019). No government can change these dynamics, although mines operating in South Africa do give local people some procurement and enterprise development opportunities.

Moreover, some of the jobs taken up by foreign African black nationals are highly technical or executive positions that require skills that are rare in the country. A few examples of these are the MTN group CEO Ralph Mupita; Vodacom South Africa CEO Sitho Mdlalose; University of Kwazulu-Natal Vice-Chancellor & Principal, Nana Poku; the University of Pretoria Vice-Chancellor & Principal, Tawana Kupe; and former Statistician-General Pali Lehohla. All of these deserve the positions they hold even though they are not South Africans.

South African professionals are largely shunning doctoral studies and academic careers  but are opting instead for private and public sector jobs and entrepreneurship due to perceived higher salaries and income(Cloete, Sheppard & Bailey, 2015; Stewart, 2024). This has resulted in most university teaching and research positions being occupied by foreign nationals. This also applies to research entities such as the

Human Sciences Research Council, the Council for Scientific & Industrial Research, the National Research Foundation, the Technology Innovation Agency, and Mintek. This list is not exhaustive but includes the most significant state-owned research entities in South Africa. Again, if professionals who occupy jobs in universities and research institutes are required to leave the country, the consequences would be dire for the provision of higher education, and research & development in South Africa. Again, the biggest loser would be South Africa.

Leaders and citizens should tread carefully and must have sober minds when it comes to the presence of foreign nationals in South Africa. History and other factors should be considered when dealing with these matters. Most black South Africans have their tribal roots in the Democratic Republic of Congo, Tanzania, Botswana, Zimbabwe, and Mozambique (Mda, 2021). Black Africans in these countries and South Africa immigrated from north Africa to southern Africa as part of the Bantu migration (Fourie, 2021). This is the biggest-known human migration which lasted for five thousand years. Black Africans who came to South Africa crossed Limpopo River for the first time around 300 in the common era (CE). They brought trading skills and technologies of agriculture and ironworking that the indigenous people, Khoisan, did not have. With these advantages, black Africans were able to either displace or absorb the Khoisan people. For example, the Xhosas moved all the way to the Eastern Cape, where they integrated with various Khoisan clans, and that is how they ended up assimilating clicks when they talk.

Some black South Africans still have relatives and families in Lesotho, Zambia, Malawi, Swaziland and others. Historically, people walked freely among various countries in the SADC region (Chikure, 2020). It was only after the legalisation of apartheid in 1948 that South Africa erected fences on the borders it shared with the neighbouring countries. These ripped tribes, clans, and families apart, and it became very difficult for friends and families to visit each other. Some people from the SADC and other countries were fortunate to be arrested alive for entering the country illegally because most people who did this were shot dead by the soldiers of the apartheid government (Besteman, 2019).

There are also sections of tribes and people from South Africa who migrated to other countries in the SADC region. For instance, some Nguni people of KwaZulu Natal (Zulus) were displaced during the *Mfecane* wars and migrated to Malawi, Zambia, Tanzania, and Zimbabwe (Eldredge, 1992). Some Ndebeles migrated to Botswana and Zimbabwe, and Xhosas to Zimbabwe. The Ndebele and Xhosa tribes are also part of the Nguni's (Fourie, 2021).

When Misizulu ka Zwelitshini was crowned on 20 August 2022 as the king of the Zulus in South Africa, some Zulu kings from other SADC countries attended the ceremony and pledged loyalty to him as their most senior traditional leader. The first pre-colonial city in southern Africa, Mapungubwe, was occupied by early iron age residents who lived there from 1000 AD to 1300 CE (Mda, 2013). Those residents were the Shonas (who now largely live in Zimbabwe), Tswanas (who now live in Botswana and South Africa), and Vendas (who now largely live in South Africa). In fact, there are far more Batswana and Basotho in South Africa than in Botswana and Lesotho respectively.

The above paragraphs demonstrate the DNA, ancestral, tribal, and language connections between black Africans in South Africa and fellow Africans in SADC and other parts of the continent (Chikure, 2020). Why then is there hostility towards black African nationals among South African black Africans? The researcher already stated that this is caused by poor leadership, weak economic growth, and lawlessness in South Africa. He fully agrees with the leader of the EFF, Julius Malema, when he asserts that black Africans hate themselves. This behaviour is very psychological. Black Africans who are xenophobic towards fellow Africans suffer from an inferiority complex – they perceive fellow Africans as inferior, and Asian, Arabs, Indians, and white people as superior. This explains why xenophobic related violence is exclusively directed towards black African foreign nationals (Tewolde, 2020).

During the xenophobic and genocidal campaign against Jews by Hitler, Jews were identified by the shape of their noses (Finkelstein, 2000). It is very possible however that some of the people who were not Jews were also subjected to the persecution. The persecution of the Jews or persons of other nationalities in Germany was indefensible. In South Africa, foreign black Africans whose skin complexion is very dark are mostly the ones who are subjected to xenophobia (Yingi et al., 2024). Some South African citizens become victims of this form of identification, nevertheless, persecution against black foreign nationals or persons of other nationalities in South Africa is unjustifiable and a crime against humanity.

One of the reasons given to justify the aggression against foreign nationals is that they lack legal documentation (Yingi et al., 2024; Moyo, 2020). These groups of people are commonly referred to as illegal immigrants. The truth is that those who are xenophobic are not interested whether these migrants are documented or not. Besides, if being documented is the main issue – why is the Minister of Home Affairs intending to terminate the stay of Zimbabweans with exemption permits who are living in South Africa?

There is nonetheless a genuine point raised by those who are concerned about the presence of undocumented foreign nationals in South Africa. This is because it is difficult to trace, arrest, and subject them to the justice system in South Africa if they commit crimes (Gordon, 2020; Yingi et al., 2024). This can be resolved by having an integrated national identity system among African states. This database should be powered by blockchain technology.

Blockchain technology was made famous by cryptocurrencies such as Bitcoin and Ethereum (Dagada, 2022a). It is essentially an enabling technology which can perform significant functions such as record keeping outside of the financial services sector (Diamandis & Kotler, 2020; Sutradhar, Karforma, Bose, Roy, Djebali & Bhattacharyya, 2024). South Africa should therefore advocate for the creation of a central database powered by blockchain to keep the records of citizens, residents, and work and study passport holders who live in each African country. This would enable each state to allocate a digital identity which would follow them around the continent.

Blockchain identity could also serve as a voter registration database in each country. Once these identities were established, the reputation score of each African could be attached to their digital profile. This score would control access to a foreign country within the continent.

Other than validating identity, blockchain can also authenticate personal and state assets (Dagada, 2022b). For example, there could be a land database enabled by blockchain which would allow authorities and other stakeholders to go back over each transaction pertaining to a particular piece of land. Title deeds, and sales histories could be traced to an original owner. This would be essential for law and order, trading, and movement of people within the continent.

Some South Africans blame the increasing immigration of undocumented foreign nationals to porous borders, and there is some truth in this. Since the new democratic dispensation in 1994, border fences which separated South Africa and its neighbours have largely collapsed. The South African National Defence Force is no longer patrolling the borders, which is understandable because the country is no longer at war against freedom fighters who had bases in some neighbouring countries. Financial resources of South Africa have been redirected to other pressing social and infrastructure needs.

Tragically, black South Africans are behaving xenophobically against foreign nationals because of the way they were treated by their oppressors during the apartheid era. In effect, there should be free movement of people among African countries. This would boost tourism, trade, free movement of goods, reindustrialisation, and social cohesion. Those whose records indicate that they have been successfully prosecuted for serious crimes should be denied free movement between the countries.

Other than assisting South Africa to be liberated, other African countries provide a large market for South Africa products and services (Grosse, Wocke & Mthombeni, 2022; Moyo, 2024). South African companies such as the Standard Bank, MTN, Shoprite, Absa Bank, Hollard, Multichoice, PEP Retail Stores, SAB Miller, Impala Platinum Holdings, Sanlam, and many others have large footprints in the continent. If South Africans continue to be xenophobic, the presence of these companies in other African countries will be threatened. Leaders in various social, economic, and political spheres should play a role to eradicate xenophobia in the continent. It can be done.

## 7.3 CONCEPTUAL FRAMEWORK FOR EMPLOYING PUBLIC POLICY TO REINDUSTRIALISE THE SOUTH AFRICAN ECONOMY

This framework is the intellectual property of the researcher. It synthesises theory, extensive fieldwork, practice and cognitive perspectives gained over years of study and practical work experience in academia, entrepreneurship, and the public and private sectors. The conceptual framework is largely anchored on the findings of this study which reveal that government and other stakeholders should implement five possible solutions and public policy interventions to unleash inclusive growth. As articulated in the first chapter, it was found that no conceptual framework exists to guide stakeholders in South Africa on how to reindustrialise the country's economy. See more details on Table 7.2.

**Table 7.2: Conceptual framework for employing public policy to reindustrialise the South African economy**

| No. | Categories containing policy weaknesses | Proposed policy interventions | Role-players |
|---|---|---|---|
| 1. | Migration regulations deter reindustrialisation | • Immigration regulations should promote reindustrialisation.<br>• It should be made easy for foreign skilled labour to enter South Africa's labour market.<br>• It should be made easy for foreign skilled labour to renew their work visas and to live in South Africa.<br>• Tourists should easily enter the country. | • Government |
| 2. | Rigid labour laws deter reindustrialisation | • Minimum wage regime should be revoked.<br>• Collective bargaining should be revoked.<br>• Labour market should be stabilised to increase direct investment. | • Government |
| 3. | Shortage of skilled labour thwarts reindustrialisation. | • Quality education and training should be provided to create a large pool of skilled labour.<br>• Research and development should be improved drastically.<br>• Corporate South Africa should upscale their contribution to skills development. | • Government<br>• HEI<br>• Corporate South Africa |
| 4. | Poorly conceived public policy leads to deindustrialisation. | • Initiatives and taxes related to carbon, health promotional levy, expat, and national health insurance should be revoked.<br>• Localisation should be revoked.<br>• Infrastructure, law and order, and the processing of prospecting and mining rights should be | • Government<br>• PPPs |

| | | | |
|---|---|---|---|
| | | improved drastically to attract mining investments.<br>• Uncertainty should be removed regarding the mining charter.<br>• Uncertainty related to expropriation without compensation should be removed to attract agricultural investments.<br>• Intellectual property of producers should be protected.<br>• Excessive crime and lawlessness should be eradicated.<br>• Major commercial hubs and major labour market hubs should be connected to mitigate against apartheid spatial planning and geographical unevenness. | |
| 5. | Lack of infrastructure deters foreign direct investment. | • Domestic infrastructure should be repaired, maintained, and improved.<br>• Intra-African infrastructure should be deployed.<br>• Illicit financial outflows should be curbed.<br>• Arrest the ballooning public sector wage bill.<br>• Arrest the ballooning sovereign debt.<br>• Put more emphasis on clean energy sourses instead of renewable energy technologies.<br>• Employ technology to booast food production.<br>• Government should substantially improve the way it responds to crises. | • Government.<br>• Regional organisation, e.g. SADC & AU<br>• DFIs<br>• PPPs<br>• Farmers |

Although the conceptual framework has been written for the attention of various stakeholders, government should take effective leadership over its implementation. Consultations are very important to bring various role players on board and to gain their input, but consultations should not be endless.

The conceptual framework brings two disciplines that are distinct into a single body of knowledge. This conceptual framework will be useful to policymakers, lawmakers, corporate South Africa, unionists, communities, policy analysts, and academics.

## 7.4 CONCLUDING REMARKS FOR CHAPTER 7

Appropriate public policy measures should be undertaken to end investment strikes in various sectors of the South African economy. The mining sector has been hit very hard by centralised collective bargaining, and its production output of gold has declined drastically. As mentioned in Chapter 6, South Africa is still endowed with enormous mineral reserves, including gold, beneath its soil, but rigid labour related laws and policy uncertainty have put off investments of direct capital into the country's mining sector.

For some time, the South African mining sector has faced catastrophe and massive shrinkage due to the negative impact of labour laws and other ill-considered pieces of legislation. This sector has been troubled for some time and has been a target of prolonged and violent strikes in the country. An irony is that the biggest lobby for centralised collective bargaining came from the mining sector. According to the Minerals Council of South Africa, full employment in the mining sector dropped by around 150 000 between 1994 and 2018. In 1994, there were about 600 000 mineworkers, but this number had declined to 453 543 by mid-2018. There have been other retrenchments in the sector subsequently.

When the researcher was conducting fieldwork for this study in October 2023, Sibanye-Stillwater announced that it would retrench more than 4000 employees. By the end of February 2024, it had already retrenched over 2000 workers, and other mining houses were getting ready to make retrenchments. Another matter of major concern has been the disappearance of iconic mining companies from the local economy. AngloGold Ashanti sold its few remaining mining assets, and Lonmin was merged with Sibanye-Stillwater.

Mining companies are also very sensitive about policy dynamics. This is because mining investments are very long term, and the lifespan of a mine could be between 25 to 80 years. If the government announces a public policy which creates uncertainty in the sector, new direct investments dry up immediately while existing producers consider whether to leave or expand mechanisation of their operations. Mining firms in South Africa have become more and more creative about managing risk, especially when it comes labour unrest and prolonged strikes. For instance, after the 2014 strike lasted 152-days, the mines lost 400 000oz of platinum production, and the three biggest producers lost around R24.1-billion. Mining companies subsequently sold their labour-intensive operations and focused on highly mechanised operations (Baskaran, 2023).

The shrinkage and subsequent retrenchments in the South African mining sector is disastrous in the sense that when one mineworker loses his job, about ten dependents are affected. Companies downstream are also affected by the declining mining sector; they are either closing shop or retrenching some of their employees. Contractors and support services firms are the most affected. Ironically, the very trade unions that lobbied hard for the counterproductive labour regime are also losing members due to job losses in the sector. How can the ANC do this to members of its alliance partners, Cosatu? It boggles the mind.

The bigger unions get 1% membership fees from their members' wages. This explains why they previously advocated for centralised collective bargaining and why they fight hard for higher wages. The higher the salary increase, the bigger the trade union's membership fees. But still, this is short-sighted and a self-inflicted wound because the higher the labour costs, the greater the chance of the mining firm collapsing, leaving the country, retrenching, or resorting to mechanisation and automation of its operations.

Dwindling trade union membership would force long-established mining trade unions to organise in other sectors. This would lead to rivalries among traditional unions in such sectors, and peace among organised labour would be negatively affected nationally. Another unintended consequence for this phenomenon may be the disintegration of centralised bargaining through the Minerals Council's coordination. The demise of trade unions is not the major concern for the researcher, but rather the devastating economic impact of labour related public policies on jobs.

Before the coronavirus outbreak, mining contributed roughly seven percent of South African jobs.

Other than providing thousands of jobs, the mining sector makes a major contribution to the national fiscus through various taxes – including personal tax, company tax, VAT, dividend tax, mining royalty, and carbon tax. The reduction of these contributions to the fiscus would make it difficult for the government to deliver on infrastructure and social services.

The closure of mines due to public policy oversights would also lead to mushrooming of ghost towns. South Africa still has abundant minerals, and they can contribute immensely to the upliftment of the socio-economic wellbeing of its citizens if the decline of the mining sector is reversed through proper public policy. Labour laws should be amended and where necessary be repealed. Unfortunately, before this happens, the mining sector will continue to bleed jobs. There should be policy certainty regarding mining.

Pronouncements by the ANC and EFF leaders regarding land repossession without compensation have also caused uncertainty in the agriculture sector and have worsened the investment strike by the private sector. This sector has also been badly affected by the minimum wage regime. Between 2001 and 2012, agriculture lost 5.1% of jobs due to the implementation of the minimum wage (Bhorat, Kanbur & Stanwix, 2014). Since then, the sector has continued to shed jobs (Fourie, 2021; Sihlobo 2023). This is a big blow to job creation because agriculture has been absorbing low-skilled labour.

Many farmers have resorted to an investment strike while others have employed mechanisation and automation to replace human labour (Dagada, 2024). Though the minimum wage was a product of good intentions to ensure that the poorest workers get living wages, it resulted in a situation where unskilled workers who were willing to receive lower wages were no longer legally allowed to do so. As a result, this has increased inequality between those who have jobs (and are well educated), and those without jobs.

The building and construction sector has been one of the big employers in South Africa. Analysis of Stats SA's Quarterly Employment Survey released in June 2019 indicated that this sector employed roughly 518 000 people. Its contribution to the GDP was four percent. However, due to rigid labour laws, the investment strike, and declining public sector spending on physical infrastructure since 2010, the building and construction sector has weakened. This has led to massive job losses in the sector, for example, the largest construction company in South Africa, Group Five delisted from the JSE in 2019, filed for bankruptcy protection, and closed.

Apart from Group Five, some other iconic building and construction companies also experienced trouble. For example, Basil Read has struggled to exit business recue since June 2018; Esor was fortunate not to be liquidated after surviving business recue; and Aveng was in the intensive care unit for most of 2018/2019. By February 2020, the 125-year-old firm had its life support turned off [396]. At this stage, the damage was massive. The share price had tanked from R71 to R0.02, and its market capitalisation had contracted from R50-billion to R387-million. Although Aveng is headquartered in Johannesburg and listed in JSE, its South African operations have reduced substantially. Staffanutti Stocks filed for business recue in 2019 and by mid-2020 its liabilities had exceeded its assets. Investors favourite, WBHO, was doing well.

South Africa's policymakers do not recognise the fact that local companies are facing stiff competition in the global markets and that is why they must be competitive, nevertheless, rigid labour laws make it difficult for them. To improve their productivity, competitiveness, and efficiency, local firms cut jobs (Chatterjee, Czajka & Gethin, 2022; Dagada, 2024). More efficiency is achieved by higher labour productivity and higher wages for those workers who remain employed. This leads to a growing gap and inequality between those who are employed and unemployed.

The existing rigid labour laws have become a major barrier to reindustrialisation and the creation of new jobs. Labour public policy should create a balance between the protection of employees' rights and the need to enable overall economy to grow and making it easier for businesses to create new jobs. If this balance is not attained, then the labour policy will protect those who are already employed at the expense of the unemployed, rapid inclusive growth, direct foreign investment, and reindustrialisation of the economy. The biggest problem facing South Africa today is that millions of people are unemployed, partially due to rigid labour policy, mining

[396] Interview with the CEO of corporate and investment bank.

charter uncertainty, and ambiguity regarding expropriation of land without compensation.

Causes of investment strikes are migration regulations, a shortage of skilled labour, inadequate infrastructure, excessive crime and lawlessness, regulatory overreach as espoused in the Competition Amendment Act of 2018, localisation, public policy, and poorly formulated foreign policy. Policymakers should address these issues as a matter of urgency. Let me emphasise that prudent implementation of black economic empowerment policy interventions such as B-BBEE, sectoral charters, and affirmative action will neither deter foreign direct investment nor cause investment strikes.

This chapter has presented five possible solutions and public policy interventions, as well as a conceptual framework for employing public policy to reindustrialise the South African economy. It serves as the researcher's contribution to this study and to theories of development economics and public policy. The next chapter provides an overview, conclusions, limitations, and recommendations for the study.

# CHAPTER 8: OVERVIEW, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

## 8.1 OVERVIEW OF THE STUDY

This chapter summarises the study, draws conclusions, and offers recommendations to stakeholders. This study has achieved the objectives that were listed in Chapter 1 as follows:

i. The literature review was undertaken to determine the following: the evolution of economic development; the theoretical bases of deindustrialisation; deindustrialisation in global markets; causes of deindustrialisation; the trajectory of South Africa's economic policy; and the socio-economic consequences of deindustrialisation.
ii. Fieldwork was conducted to determine factors that influence the deindustrialisation and/or reindustrialisation of the South African economy.
iii. Many documents were collected and analysed from various entities. These included policy positions, legislation input, and proposals on public policy measures that can be undertaken to reindustrialise the economy.
iv. Finally, the conceptual public policy framework for reindustrialising the South African economy was formulated and presented in Chapter 7.

As previously articulated, South Africa has never been a fully industrialised economy but has always been dependent on the primary forms of production such as mining and agriculture. However, during World War II, the country's manufacturing sector grew tremendously because North America and Europe were deeply involved in the war. During this period, most skilled labour and capital moved to South Africa. Manufacturing firms produced goods for domestic market and exports. However, the booming industrialisation of the economy came to an end after the Sharpeville massacre on 21 March 1960. The international community imposed economic sanctions on South Africa due to its apartheid system, which led to massive skilled labour and capital flight.

The South African economy has been deindustrialising since the 1960s, but this process escalated after the attainment of democracy in 1994. The ANC government stopped subsidising manufacturing firms in Bantustan areas. Amidst all of this, South

Africa's economy has yielded a very thriving services sector, boosted by ICT, financial services, consulting, digital business, and retailing. Tourism has also shown impressive potential. Unfortunately, the mining and agriculture sectors have substantially declined due to significant public policy uncertainty. Public policy flipflopping has largely deterred foreign direct investment, and fostered investment strikes by local investors.

To propel inclusive economic growth and reindustrialise the economy, the ANC government implemented several public policies as follows: the RDP, GEAR, ASGISA, NGP. IPAP, and NDP. While GEAR and IPAP attained some of their objectives, the other macroeconomic policies failed dismally.

The purpose of this study has been to investigate factors influencing the deindustrialisation of the South African economy. The fieldwork of this study employed four qualitative data collection methods – 58 individual interviews, one focus group interview, observations, and document collection. The collected data were analysed using various qualitative methods which identified several categories and sub-categories which answered the research question and sub-questions.

This study found that there are several factors which have hampered the reindustrialisation of the economy in South Africa. These are migration regulations; rigid laws; a shortage of skilled labour; some tax instruments discourage direct investment and reindustrialisation. Finally, poorly conceived public policy leads to deindustrialisation.

## 8.2 SUMMARY OF CONTRIBUTIONS

This study has produced theoretical, methodological, and practical contributions. Details of these contributions are contained in the following subsections.

### 8.2.1 Theoretical Contributions

This research project has generated theory in several ways. This is very important for future work in the fields of development economics, and public policy.

Firstly, the literature study in Chapters 1, 2, and 3 has provided a historical, global, and local broader picture of the deindustrialisation of the economy. The literature review also has created a typology for interlinking development economics and public policy formulation and implementation. This typology can henceforth be used by scholars, policymakers, lawmakers, technocrats in government, unionists, directors, and executives in corporate South Africa. An in-depth search of electronic databases and e-journal portals found no results relating to such a typology. One may safely conclude therefore that no such typology at present exists that has mapped, matched, and linked development economics and public policy within both the global and local contexts.

Secondly, the findings of this study, as contained in Chapters 5 and 6, extended development economics and public policy theories in several ways. This may lay a foundation regarding work being done towards industrialisation and reindustrialisation of economies in pre-emerging, emerging, and developed economies. The theory generated may enable countries to improve the way they formulate and implement public policies, especially ones focusing on macroeconomics. This theory can also go a long way to mitigate premature deindustrialisation and guide African countries on how they should establish international relations with China, Russia, and the Global North.

The theory generated in Chapters 5 and 6 revealed the importance of the following issues. Migration regulations should promote reindustrialisation, labour laws should be flexible to boost reindustrialisation, and the country should attract and produce a large pool of skilled labour. Adequate infrastructure will lead to substantial foreign direct investment which, together with properly conceived public policy will lead to inclusive economic growth and upward mobility. Finally, public foreign policy is an important tool that can be employed to encourage reindustrialisation.

### 8.2.2 Methodological Contributions

This study has made a methodological contribution in the form of a conceptual framework to reindustrialise South Africa's economy. The literature review and the findings of this study demonstrated the governance and strategic necessities for the employment of properly formulated and implemented public policies to boost the reindustrialisation of the economy. However, the abovementioned conceptual framework did not exist prior to this research project and therefore is a direct result of this study. The significance of the proposed conceptual framework can be seen in its role of guiding various stakeholders in South Africa as to the measures that can be taken to reindustrialise the economy, stimulate economic growth, and substantially reduce poverty and inequality.

The proposed conceptual framework integrates development economics and public policy into a single body of knowledge. In in its entirety, the framework is a methodological contribution which demonstrates how public policy can be employed to reindustrialise the economy. The conceptual framework is implementable in the South African context, and most of its aspects can be transferable to other countries that are grappling with the reindustrialisation of their economies.

This thesis has achieved something not previously undertaken by integrating two traditionally distinct fields, development economics and public policy into a single macroeconomic methodological approach. The conceptual framework embodies the main contribution of this study to knowledge creation.

### 8.2.3 Practical Contributions

The conceptual framework can provide practical guidance to various stakeholders as follows:

**Practical guidance to government (policymakers, lawmakers, and technocrats):** Immigration should promote reindustrialisation. It should be made easy for foreign skilled labour to enter South Africa's labour market, to renew their work visas and to live in South Africa, and tourists should easily enter the country. The minimum wage regime and collective bargaining should be revoked. The labour market should be stabilised to increase direct investment, and the ballooning public sector wage bill and sovereign debt should be arrested. Initiatives and taxes related to carbon, health promotion levy, expat, and national health insurance should be revoked, together with localisation.

Uncertainty should be removed regarding the mining charter, and infrastructure, law and order, and the processing of prospecting and mining rights should be improved drastically to attract mining investments. Ambiguity related to the expropriation of land without compensation should be removed to attract agricultural investments, and the intellectual property rights of producers should be protected. Foreign missions should be staffed by highly skilled professionals who can gather intelligence and attract direct foreign investments. Foreign policy should be able to handle international tensions, and more emphasis should be given to regionalisation than globalisation; moreover, South Africa should stop being hostile to some of its major trading partners. South Africa should spearhead the use of technology to keep the identity records of nationals and residents across African states. Necessary measures should be undertaken to substantially improve the way the government responds to crises.

**Practical guidance to public-private-partnerships:** Quality education and training should be provided to create a large pool of skilled labour, and research and development should be improved drastically. Corporate South Africa should upscale their contribution to skills development. Excessive crime and lawlessness should be eradicated and illicit financial outflows should be curbed. Major commercial hubs should be connected to mitigate the apartheid system's legacy of spatial planning and geographical unevenness.

## 8.3 RECOMMENDATIONS FOR FUTURE RESEARCH

Two ideas have emerged for future studies. Firstly, there should be distinct and standalone in-depth studies which qualitatively and quantitively focus on the impact of the following factors on the reindustrialisation of the South African economy. They should consider migration regulations, rigid laws, shortages of skilled labour, inadequate infrastructure, poorly conceived public policy and poorly formulated and implemented international relations. These proposed in-depth distinct studies will build and extend on the work covered on this thesis.

Secondly, in instances where some aspects of the proposed conceptual framework are implemented, longitudinal studies should be undertaken to provide insights into the effectiveness of the measures applied to reindustrialise the economy. These studies should employ both qualitative and quantitative research methodologies.

## 8.4 LIMITATIONS OF THE STUDY

Findings of the study were vulnerable to subjectivity, since qualitative data collection methods were used. Furthermore, ideological beliefs of the interviewees could have influenced their responses to questions. For example, a union leader would never agree that South Africa's labour-related laws contribute to deindustrialisation. On the other hand, a CEO of an investment bank would not agree that the way the private sector, banks, and REITs allocate capital fails to promote the overall wellbeing of the country.

In hindsight, this study should have adopted a mixed research methodology to accommodate both qualitative and quantitative data collection and analysis methods. Quantitative data collection and analysis methods would have employed statistical instruments which would objectively tested the effects of public policies on the deindustrialisation and/or reindustrialisation of South Africa's economy. Having said this, the researcher is satisfied that the diversity of research participants went a long way to mitigate against the subjectivity of the findings of the study. Interviewees who were both on the left (state intervention advocates) and right (free market economy advocates) ideologically contributed to the discourse of this study. Some of the participants were highly regarded scholars, economists, and investment analysts whose views were influenced by research, statistics, audited financial statements, and annual reports instead of their personal ideologies.

The researcher's ideological beliefs could have influenced the conclusions of the study and his own contribution to the study which is contained in Chapter 7. He is a liberal and free market economy fundamentalist. His beliefs are somewhat mitigated by the fact that his own contribution and the conceptual framework that he has devised were products of the literature review and fieldwork. But still, the researcher's ideology and experiences dominate the conclusions and the conceptual framework. Some readers may view this as a limitation of this study.

At the beginning of this study, the intention was to conduct five focus group interviews, but this was not achieved. Instead, only one focus group session was conducted. Attempts to piggy-back workshops, conferences and seminars were not successful because organisers could not accommodate requests due to various reasons. Twenty-five participants who attended the above-mentioned focus group session were predominantly from the financial services sector. A diverse group which encompasses practitioners and professionals from various sectors would have strengthened the discourse during the session. The fact that only one focus group interview was held disadvantaged the depth and richness of the study.

Lastly, policymakers and lawmakers were not interviewed during the fieldwork. This omission was not intentional. The political party of the deputy secretary general who participated in this study is not represented in any legislature. Nevertheless, the limitation is mitigated by the fact that views of policymakers and lawmakers from different political parties were contained in the public policies, statements, and other documents that were collected and analysed.

## 8.5 CONCLUSION OF THE STUDY

It has already been mentioned that this study revealed five major findings as follows: that migration regulation deters reindustrialisation; that rigid laws deter reindustrialisation; that a shortage of skilled labour thwarts reindustrialisation; that some tax instruments discourage direct investment and reindustrialisation; and that poorly conceived public policy leads to deindustrialisation. These findings are contained in Chapter 5 and 6.

Chapter 7 provided five potential solutions to the above-mentioned factors that were found to deter the reindustrialisation of the South African economy as follows: that immigration regulations should promote reindustrialisation; that the labour market should be stabilised to increase direct investment; that quality education and training should be provided to create a large pool of skilled labour; that major commercial hubs with major labour market hubs should be connected; that broad-based black economic empowerment public policy should be prudently implemented; and that South Africa should spearhead the use of technology to keep the identity records of nationals across the African states.

It was stated in Chapter 7 that, for the proposed conceptual framework to be successfully implemented, various stakeholders will have to work together. These include the government, HEI, and corporate South Africa. A lot of emphasis was put on PPPs and BOT models.

## 8.6 FINAL WORD

During the fieldwork of this study and the writing-up of this thesis, it was mentioned that South Africa has had five presidents since the attainment of democracy in 1994. Under Nelson Mandela's presidency, GEAR produced some visible results. Mandela was able to stabilise the economy of the country which was collapsing during the final years of the apartheid system. He also reintegrated South Africa with the international community and global trade after many years of isolation and economic sanctions (Calland & Sithole, 2022).

Mbeki's administration substantially reduced unemployment, significantly increased the pace of economic growth, the sovereign debt was drastically reduced, and there were some impressive budget surpluses (Butler, 2019). Motlanthe governed for less than a year.

Under Zuma's presidency, the economic growth was radically slowed, national debt increased massively, unemployment rapidly increased, budget deficits became a norm, the level of corruption greatly increased, and the country was captured by some corrupt elements (Calland & Sithole, 2022; Holden, 2023).

Cyril Ramaphosa launched his own plan in November 2017 during his campaign for the ANC presidency and promised that it would propel economic growth. He named this proposed plan – 'the new deal for jobs, growth and transformation' (Johnson, 2019). He indicated that this policy would be a product of a shared commitment by various stakeholders. The plan would also draw heavily on the NDP. Ramaphosa set the target of 3% economic growth by the end of 2018, which would increase to 5% by 2023. The plan was to create at least one million jobs in five years. He reasoned that manufacturing would be a catalyst of this job creation. Ramaphosa further envisaged that his 'new deal' would create another one million jobs in the agriculture sector by 2030 Butler (2019).

In a speech delivered on September 2017, Ramaphosa said that there had to be 'far more effective exploitation of our natural resources' (Johnson, 2019). He promised to revitalise the mining sector and to increase its investment from 20% to 30% of the GDP. An improved Eskom would enable the manufacturing sector to lower its production costs. There would be R1.5-trillion spending on public physical infrastructure. A multi-billion-rand fund would be established to assist SMMEs.

Ramaphosa indicated that the standard of education would improve under his leadership. The economy would reflect the demographics of the country and its sovereignty (Butler, 2019). Later on he explained that his administration would avoid a situation where the country would need financial bailout from the Bretton Woods institutions – the World Bank and IMF.

Ramaphosa successfully became the ANC president in December 2017, and the President of the Republic in February 2018. All his promises failed to manifest, in fact the economy grew by less than 1% or even negatively (Johnson, 2019). Investment strikes in the agriculture and mining sectors increased. These sectors did not yield new jobs as envisaged by Ramaphosa's campaign plan. The quality of education did not improve, and the government approached both the IMF and the World Bank for financial assistance.

Eskom and Transnet increasingly became dysfunctional under Ramaphosa's administration. Electricity was not just scarce but was also very expensive. Unemployment increased; the currency shed its value; infrastructure was crumbling and continuously vandalised; rampant crime increased; and South African bonds were downgraded to junk status by the three prominent international credit rating agencies (Blackman; 2023).

South Africa has also been grey listed by the Financial Action Task Force (FATF) since 24 February 2023. The FATF's grey listing has affected the country's reputation, resulting in less appetite for foreign direct investment (Mukherjee, 2023). This was confirmed by the SARB's Risk and Vulnerability Matrix in May 2023.

Ramaphosa has therefore proved to be a weak president who has governed through commissions, task teams, advisory committees, and other unnecessary structures (Johnson, 2019; Calland & Sithole, 2022; Parker, 2023). Due to its worsening socio-economic status, South Africa needs a president who could take on the unions, the left-leaning radical faction within the ANC, and those who are corrupt. Unfortunately, Ramaphosa has largely been indecisive which has heightened policy uncertainty in the country. Even before the outbreak of COVID-19 in South Africa, he failed to take necessary steps that would unleash inclusive economic growth (Bruce, 2023).

Ramaphosa's leadership weakness was also articulated by those who worked with him outside of the ANC. Ndonda Madalane has expressed how Ramaphosa's indecisiveness frustrated those that worked closely to him when he was still in the private sector. His passion to seek consensus at all costs sometimes prevented him from taking the unequivocal business decisions that enterprise required (Butler, 2019). Madalane was the founding CEO of Ramaphosa's investment equity firm, Shanduka Group. Ramaphosa served as executive chairman of this firm.

Madalane described Ramaphosa's superficially consensual approach as follows: *'I came from an investment banking background. I was used to clearly articulated positions from my head of division. The person running the division must make a call – it has to be clear who has taken a decision, and why it has been taken… But Cyril* *prefers discussion to decision, and he just refuses to take a clear decision himself'* (Butler, 2019:393).

Former black conscious activist and the University of Cape Town Vice-Chancellor, Dr. Mamphela Ramphele, once insinuated that Ramaphosa's politeness and shyness of confrontation could have something to do with his partial upbringing in Limpopo (Butler, 2007). The researcher does not know if this assertion is correct or not, but one would expect that Ramaphosa would be resolute and unwavering since he is at the helm of the highest office in the land. Once you try to please everyone as a leader, you end up alienating everybody and that is what exactly has happened to Ramaphosa (Calland & Sithole, 2022).

By February 2023, Ramaphosa had served for five years as the president of the country. His election as the president five years earlier had brought a lot of confidence to the business community. CEOs and directors of companies were very glad to have him as the head of state. But by April 2023, the tide started to turn against him. Some business leaders and media would meet to discuss his poor leadership and the fact that the country was heading towards a failed state (Goko, Cele & Changole, 2023). The CEOs and chairpersons of listed companies in Johannesburg Stock Exchange started to publicly raise their concerns. These include Fani Titi of Investment Group, Ralph Mupita of MTN Group, Magda Wierzycka of Sygnia, and Daniel Mminele of Nedbank. Business leaders were concerned about Ramaphosa's squandered goodwill, and mistaken foreign policy decisions regarding the Russia-Ukraine war.

Some of the concerns raised by business leadership include the fact that foreign investors were dumping South African government bonds. In March 2018, non-residents held 43% of these bonds, but by the end of April 2023, they were only holding 26%. These numbers were confirmed by the National Treasury data (Goko et al., 2023). In June 2023, the South African Reserve Bank raised concerned about the rapid dwindling ownership of government bonds by foreigners (Khumalo, 2023). Unfortunately, South Africans may not be able to close the gap created by foreigners' dumping of the local bonds and this may lead to a financial cliff.

The government borrowing costs also increased to 12.8% in May 2023, compared to 9.05% when Ramaphosa became the president in February 2018 (Goko et al., 2023). The government borrows around R2-billion daily. During his period as the president, the rand has lost 39% of its value, and it has become one of the worst performing currencies among the emerging markets. The CEO of one Investment Group summed-up the sentiment of most stakeholders in the country when he declared: ‘South Africa doesn’t require rocket scientists. We require leaders to make simple decisions about moving things forward’ (Ibid). From the economy to lawlessness, President Ramaphosa’s legacy will be one of misdeeds and missteps. This kind of dithering does not bode well for the rapid creation of inclusive economic growth.

Formulation of well thought out public policies would not necessarily lead to the reindustrialisation of the economy. South Africa also needs strong political leadership in general and a resolute head of state in particular who will ensure that properly formulated public policies and the conceptual framework that has been proposed in this study are implemented. Law and order must also be restored, and all factors that impede both local and foreign direct investments into South Africa should be eradicated.

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**Rabelani Dagada** is a PhD student at the Wits School of Governance. He is an entrepreneur and teaches ICT and digital transformation leadership at the Graduate School of Business Leadership, University of South Africa.

**Dr. Frank Lekaba** is the Senior Lecturer at the Wits School of Governance, University of the Witwatersrand, Johannesburg.

## Appendix A: Semi-Structured Interview Questions

1. What are the public policy issues which led to the deindustrialisation of the South African manufacturing sector?
2. What are the public policy issues which have derailing the reindustrialisation of the South African manufacturing sector?
3. Which aspects of legislation have affected the reindustrialisation endeavours?
4. What can South Africa learn from other countries regarding deindustrialisation and reindustrialisation of the economy?
5. What are the public policy measures that can be taken to reindustrialise the economy?

**Appendix B: An example of permission letter to conduct individual interviews**

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

University of the Witwatersrand,
Wits School of Governance
Tel: +27 11 717-3520

Mr. Sam Mokgotsane
General Manager
Lanseria International Airport
Airport Road
Lanseria, 1748

15 September 2023

Dear Mr. Mokgotsane,

**RE: PERMISSION TO CONDUCT RESEARCH AT THE LANSERIA INTERNATIONAL AIRPORT – INDIVIDUAL INTERVIEWS**

My name is Rabelani Dagada. I am studying for a PhD in the Wits School of Governance at the University of the Witwatersrand, Johannesburg. I am seeking permission to do individual research interviews at the Lanseria International Airport. My supervisor is Dr. John Khumalo.

I am conducting research on the reindustrialisation of the South African economy. The title of the study is: *Reindustrialisation of the South African Economy*. As part of this study, I need to investigate the impact of infrastructure to the local manufacturing sector and that is why I would like to get some information from the airline sector in general and your airport in particular. The research will entail collecting data from managers responsible for cargo transportation. This data will among others be collected through individual research interviews. These interviews will be tape-recorded with the permission of each individual interviewee.

If you grant me the requested permission, I will invite some relevant individuals from your organisation to participate in this study, especially those who are responsible for cargo transportation. If they agree, they will be asked to be interviewed. Each interview will take place for 40 to 60 minutes either in your premises or through online platform such as Zoom and MS Teams – this will depend on the preference of each research participant.

In spite of your permission, participation from the participants will be voluntary and participants will be free to opt-out anytime with no consequences for refusal to participate. I will inform participants of ethical considerations before initiating the research interview. They will be asked to give their written consent before the research begins. Their responses will be treated confidentially, and identities (their names and the name of the organisation) will be anonymous unless otherwise expressly indicated. Individual privacy will be maintained in all published and written data resulting from the study.

The research study will be written up as a PhD thesis. The approved thesis will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

The research participants will not be advantaged or disadvantaged in any way. They will be reassured that they can withdraw their permission at any time during this project without any penalty. There are no foreseeable risks in participating in this study. The participants will not be paid for their contribution. All research data will be preserved in a password protected computer and locked physical facility, and will be preserved for future secondary analysis. I therefore request permission in writing to conduct individual research interviews at your organisation.

Please let me know if you require any further information. I look forward to your response as soon as is convenient. If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

[Not signed, sent electronically]

………………………………………

Rabelani Dagada (Mr)

Student No.: 0213087M

Wits Email: 0213087m@students.wits.ac.za

Tel: +27 73 2140 174

**Details of my Supervisor:**

Name: Dr. John Khumalo

Email: John.Khumalo@wits.ac.za

Tel: +27 11 717 3493

**Appendix C: An example of permission letter to ask organisation to allow some employees to participate in group interviews**

University of the Witwatersrand,

Wits School of Governance

Tel: +27 11 717-3520

Mr. Sam Mokgotsane

General Manager

Lanseria International Airport

Airport Road

Lanseria, 1748

15 September 2023

Dear Mr. Mokgotsane,

**RE: PERMISSION TO CONDUCT RESEARCH AT THE LANSERIA INTERNATIONAL AIRPORT – Group INTERVIEWS**

My name is Rabelani Dagada. I am studying for a PhD in the Wits School of Governance at the University of the Witwatersrand, Johannesburg. I am seeking permission to ask some relevant individuals in Lanseria International Airport to participate in focus group interview with research participants from other organisations. My supervisor is Dr. John Khumalo.

I am conducting research on the reindustrialisation of the South African economy. The title of the study is: *Reindustrialisation of the South African Economy*. As part of this study, I need to investigate the impact of infrastructure to the local manufacturing sector and that is why I would like to get some information from the airline sector in general and your airport in particular. The research will entail collecting data from managers responsible for cargo transportation. This will among others be collected through focus group research interviews. These interviews will be tape-recorded with the permission of each participant.

If you grant me the requested permission, I will invite some relevant individuals from your organisation to participate in this study, especially those who are responsible for cargo transportation. If they agree, they will be asked to participate in focus group interviews. Each focus group interview will take place for 100 to 120 minutes via Microsoft Teams.

In spite of your permission, participation from the participants will be voluntary and participants will be free to opt-out anytime with no consequences for refusal to participate. I will inform participants of ethical considerations before initiating each focus group interview. They will be asked to give their written consent before the research begins. Their responses will be treated confidentially, and identities (their names and the name of the organisation) will be anonymous. Focus group participants' privacy will be maintained in all published and written data resulting from the study.

The research study will be written up as a PhD thesis. The approved thesis will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

The research participants will not be advantaged or disadvantaged in any way. They will be reassured that they can withdraw their permission at any time during this project without any penalty. There are no foreseeable risks in participating in this study. The participants will not be paid for their contribution. All research data will be preserved in a password protected computer and locked physical facility, and will be preserved for future secondary analysis. I therefore request permission in writing to ask relevant individuals in your airport to participate in focus group interviews. Each person will participate only in one focus group interview which will not exceed 120 minutes.

Please let me know if you require any further information. I look forward to your response as soon as is convenient. If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

[Not signed, sent electronically]

………………………………………

Rabelani Dagada (Mr)

Student No.: 0213087M

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**Details of my Supervisor:**

Name: Dr. John Khumalo

Email: John.Khumalo@wits.ac.za

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**Appendix D: An example of permission letter to conduct observation research activities from organisations**

University of the Witwatersrand,

Wits School of Governance

Tel: +27 11 717-3520

Mr. Sam Mokgotsane

General Manager

Lanseria International Airport

Airport Road

Lanseria, 1748

25 May 2023

Dear Mr. Mokgotsane,

**RE: PERMISSION TO CONDUCT OBSERVATION RESEARCH ACTIVITIES AT THE LANSERIA INTERNATIONAL AIRPORT**

My name is Rabelani Dagada. I am studying for a PhD in the Wits School of Governance at the University of the Witwatersrand, Johannesburg. I am seeking permission to do individual research interviews at the Lanseria International Airport. My supervisor is Dr. John Khumalo.

I am conducting research on the reindustrialisation of the South African economy. The title of the study is: *Reindustrialisation of the South African Economy*. As part of this study, I need to investigate the impact of infrastructure to the local manufacturing sector and that is why I would like to get some information from the airline sector in general and your airport in particular.

The research will among others entail collecting data from your airport through observation research activities. Observation will include me watching the logistics aspect of your operations and the quality of the infrastructure. During the observations, I will be taking notes. Participation of your airport in the observation research activities will be voluntary and your company will be free to opt-out anytime with no consequences for refusal to participate. The name of your airport will be anonymous unless otherwise expressly indicated.

The research study will be written up as a PhD thesis. The approved thesis will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you. Your company will not be advantaged or disadvantaged in anyway by allowing the researcher to conduct observation research activities in the airport. All research data will be preserved in a password protected computer and locked physical facility, and will be preserved for future secondary analysis. I therefore request permission in writing to conduct observation research activities.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

[Not signed, sent electronically]

………………………………………

Rabelani Dagada (Mr)

Student No.: 0213087M

Wits Email: 0213087m@students.wits.ac.za

Tel: +27 73 2140 174

**Details of my Supervisor:**

Name: Dr. John Khumalo

Email: John.Khumalo@wits.ac.za

Tel: +27 11 717 3493

**Appendix E: An example of permission letter to collect documents from organisations**

University of the Witwatersrand,

Wits School of Governance

Tel: +27 11 717-3520

Mr. Sam Mokgotsane

General Manager

Lanseria International Airport

Airport Road

Lanseria, 1748

25 May 2023

Dear Mr. Mokgotsane,

**RE: PERMISSION TO CONDUCT RESEARCH AT THE LANSERIA INTERNATIONAL AIRPORT – DOCUMENTS COLLECTION**

My name is Rabelani Dagada. I am studying for a PhD in the Wits School of Governance at the University of the Witwatersrand, Johannesburg. I am seeking permission to do individual research interviews at the Lanseria International Airport. My supervisor is Dr. John Khumalo.

I am conducting research on the reindustrialisation of the South African economy. The title of the study is: *Reindustrialisation of the South African Economy*. As part of this study, I need to investigate the impact of infrastructure to the local manufacturing sector and that is why I would like to get some information from the airline sector in general and your airport in particular. It is this premise that I hereby request that you provide me with documents containing infrastructure development plans, cargo logistics strategies, public policy positions, input submission to legislative process, annual reports, and other documents related to the reindustrialisation of the South African economy.

Participation of your airport in the documents collection aspect of this study will be voluntary and your company will be free to opt-out anytime with no consequences for refusal to participate. The name of your airport will be anonymous unless otherwise expressly indicated. The research study will be written up as a PhD thesis. The approved thesis will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you. Your company will not be advantaged or disadvantaged in in any way by providing the requested documents. All research data will be preserved in a password protected computer and locked physical facility, and will be preserved for future secondary analysis.

Please let me know if you require any further information. I look forward to your response as soon as is convenient. If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

[Not signed, sent electronically]

…………………………………………

Rabelani Dagada (Mr)

Student No.: 0213087M

Wits Email: 0213087m@students.wits.ac.za

Tel: +27 73 2140 174

**Details of my Supervisor:**

Name: Dr. John Khumalo

Email: John.Khumalo@wits.ac.za

Tel: +27 11 717 3493

**Appendix F: Participant sheet for individual semi-structured interviews**

University of the Witwatersrand,

Wits School of Governance

Tel: +27 11 717-3520

Dear (Mr, Mrs, Miss, Ms, Dr, Prof) ________________________

My name is Rabelani Dagada. I am studying for a PhD in the Wits School of Governance at the University of the Witwatersrand, Johannesburg. My supervisor is Dr. John Khumalo. I am conducting a research study about the reindustrialisation of the economy. The study title is: *Reindustrialisation of the South African Economy*.

I am inviting you to take part in an individual interview. If you decide to take part, your participation in this research study will last about one hour. Depending on your preference, the interview will either take place in your offices or through an online meeting platform, Zoom or MS Teams.

With your permission, I would like to audio record the interview. This data will be stored in password protected computer and locked physical facility for future secondary analysis. Only permitted researchers will have access to the data.

During the research activity, I will ask some personal information about you, including your job title, academic qualifications, and experience. The interview will be confidential and anonymous. When I share the results of the research study, I will not include your name or anything that could identify you. With your permission, other researchers may use the data collected from this study, but your name and any personal information will not be used or passed on.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study. You will not incur any travelling costs pertaining to your participation in this study. The risks for this research study are no more than what happens in everyday life. This research study will be written up as a PhD thesis. The thesis will be available on the university library website. If you would like to receive a summary of this thesis, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

[Not signed, sent electronically]

……………………………………

Rabelani Dagada (Mr)

Student No.: 0213087M

Wits Email: 0213087m@students.wits.ac.za

Tel: +27 73 2140 174

**Details of my Supervisor:**

Name: Dr. John Khumalo

Email: John.Khumalo@wits.ac.za

Tel: +27 11 717 3493

**Appendix G: Participant sheet for focus group semi-structured interviews**


University of the Witwatersrand,

Wits School of Governance

Tel: +27 11 717-3520


Dear (Mr, Mrs, Miss, Ms, Dr, Prof) ________________________

My name is Rabelani Dagada. I am studying for a PhD in the Wits School of Governance at the University of the Witwatersrand, Johannesburg. My supervisor is Dr. John Khumalo. I am conducting a research study about the reindustrialisation of the economy. The study title is: *Reindustrialisation of the South African Economy*.

I am inviting you to take part in a focus group interview. If you decide to take part, your participation in this research study will last about one hour. The focus group will take place via MS Teams. With the permission of the focus group participants, I will audio record the interview. This data will be stored in password protected computer and locked physical facility for future secondary analysis. Only permitted researchers will have access to the data.

The focus group interview will be confidential and anonymous. When I share the results of the research study, I will not include the names of participants or anything that could identify them. With the permission of each participant, other researchers may use the data collected from this study, but your names and any personal information will not be used or passed on.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study. The risks for this research study are no more than what happens in everyday life. This research study will be written up as a PhD thesis. The thesis will be available on the university library website. If you would like to receive a summary of this thesis, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

[Not signed, sent electronically]

……………………………………….

Rabelani Dagada (Mr)

Student No.: 0213087M

Wits Email: 0213087m@students.wits.ac.za

Tel: +27 73 2140 174

**Details of my Supervisor:**

Name: Dr. John Khumalo

Email: John.Khumalo@wits.ac.za

Tel: +27 11 717 3493

## Appendix H: Consent form for semi-structured individual interviews

Title of project: Reindustrialisation of the South African Economy

Name of researcher: Rabelani Dagada (Mr)

I, …………………………………….., agree to participate in this research project.

I agree to the following:

(Please circle the relevant options below)

| | | |
|---|---|---|
| The research study was explained to me. I understand what this study is about. | YES | NO |
| I understand that I can volunteer to take part in the study | YES | NO |
| I agree that the interview may be audio recorded | YES | NO |
| I agree that direct quotations from my interview may be used by the researcher in their PhD thesis | YES | NO |
| I agree that my participation will remain anonymous (my name or other identifying data will not be used by the researcher in their PhD thesis) | YES | NO |
| I agree that other researchers may use the information I provide in my interview (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on | YES | NO |

…………………………………… (signature)
…………………………………… (name of participant)
…………………………………… (date)

…………………………………… (signature)
…………………………………… (name of researcher/person seeking consent)
…………………………………… (date)

## Appendix I: Consent form for semi-structured focus group interviews

Title of project: Reindustrialisation of the South African Economy

Name of researcher: Rabelani Dagada (Mr)

I, …………………………………….., agree to participate in this research project.

I agree to the following:

(Please circle the relevant options below)

| | | |
|---|---|---|
| The research study was explained to me. I understand what this study is about. | YES | NO |
| I understand that I can volunteer to take part in the study | YES | NO |
| I agree that the focus group interview may be audio recorded | YES | NO |
| I agree that direct quotations from the focus group interview may be used by the researcher in their PhD Thesis | YES | NO |
| I agree that my participation will remain anonymous (my name or other identifying data will not be used by the researcher in their PhD thesis) | YES | NO |
| I agree that other researchers may use the information I provide in the focus group interview (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on | YES | NO |

……………………………………. (signature)
……………………………………. (name of participant)
……………………………………. (date)

……………………………………. (signature)
……………………………………. (name of researcher/person seeking consent)
……………………………………. (date)