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# Assessing State Capacity in South African Industrial Policy Design and Implementation in a Changing Global Landscape

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# Assessing State Capacity in South African Industrial Policy Design and Implementation in a Changing Global Landscape




By

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Submitted in partial fulfilment of the requirements for the degree Master of Commerce in Economics In the Faculty of Commerce, Law and Management at the University of the Witwatersrand, Johannesburg

November 2022

**DECLARATION**

I declare that the work submitted is my own unaided work. This research work has not been submitted anywhere else for any degree, and all sources have been acknowledged.

Name:

Signature:

Date:

**ABSTRACT**

South Africa has sought to transform and reindustrialise its economy. Through its industrial policy, it has intervened in several manufacturing sub-sectors. Despite the numerous state interventions, the South African manufacturing sector continues to deteriorate. The shorting comings of industrial policy have raised fresh questions of whether the Department of Trade Industry and Competition (DTIC) and the state, including its private sector partners, have sufficient capacity to design and implement appropriate industrial policy. This paper aims to assess state capacity in South African industrial policy design and implementation. In so doing, it analyses developmental economic literature, including the Weberian state, the developmental state, the human capacity theory and the bureaucratic rationale theory. The evidence for this research was collected through interviews with key stakeholders in the industrial policy, including thought leaders, policy researchers, policymakers, and academics. The paper finds that to achieve successful policy intervention; the country needs to develop supportive institutions and systems in industrial policy across government departments and different spheres of government. It further argues that the state outsourcing policy research capacity, if used correctly, can be developmental; however, the incorrect usage of outsourced capacity is detrimental to state capacity.

**Key words**: State capacity, Capacity building, Development, Industrial Policy, State Intervention

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**ACRONYMS AND ABBREVIATIONS**

| | |
|---|---|
| AfCFTA: | Africa Continental Free Trade Area |
| ASGISA: | Accelerated and Shared Growth Initiative of South Africa |
| APORDE: | African Programme of Rethinking Development Economics |
| CCRED: | Centre of Competition Regulation and Economic Development |
| CSID: | The Corporate Strategy and Industrial Development |
| EPB: | Economic Planning Board |
| EPU: | Economic Planning Unit |
| FDI: | Foreign Direct Investment |
| GEAR: | Growth, Employment and Redistribution |
| IDTT: | Industrial Development Think Tank |
| IDRC: | International Development Research Centre |
| IPAP: | Industrial Policy Action Plan |
| ITDC: | International Trade Administration Commission |
| MITI: | Ministry of International Trade and Industry |
| NDP: | National Development Plan |
| NGP: | New growth Path |
| NIPF: | National Industrial Policy Framework |
| NEGT: | New Endogenous Growth Theory |
| OEM: | Original Equipment manufacturers |
| RDP: | Reconstruction and Development Plan |
| SIP: | Strategic Industrial Project |
| TIPS: | Trade and Industrial Policy Strategies |
| UJ: | The University of Johannesburg |

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## Chapter One

### Background and Research Question

Industrial Policy has, in recent years, been thrust back into the public discourse after its brief ideological defeat by the neoliberal-driven Washington Consensus (Zalk, 2014). The global resurgence of industrial policy comes on the back of industrial renaissance in the west (European Commission, 2014; Wink et al., 2016). For these countries, the Global Financial Crisis of 2008 called to attention the over-reliance on a few service-based sectors, such as finance and real estate, for growth and development (Fine and Mohammed, 2022; Wade, 2012). The global economic meltdown exposed the weaknesses of the orthodox policy framework and spurred the shift to industrial policy and industrial activities (Wink et al., 2016). The shift to the industrial policy was further propelled by the ever-changing global economic landscape, such as the exit of Britain from the EU, the establishment of the African Continental Free Trade Area (AfCFTA), the fourth industrial revolution and the rapid technological and digital advancements. The face of the global economy continues to be changed by the increased pressure placed on governments and large corporations to take climate change and its consequences more seriously. There has been a world-wide call from environmental researchers and activists for the 'greening' of the manufacturing sector and for governments to shift away from the use of fossil fuels to generate electricity.

The outbreak of the Covid-19 pandemic disrupted global supply chains, and states and business organisations have since had to consider the drawbacks of a global economic structure that is so interconnected and interdependent. When global trade is disrupted by inoperative trade routes and closed borders, countries find themselves without access to staple imports leaving millions of people in poverty. In the South African context, which has been experiencing poor economic growth since the market crash of 2008, the shutting down of the global economy had far-reaching consequences for the country's economy. The unemployment rate in the country is at an all-time high, and the number of people living beneath the poverty line has increased, creating a vicious cycle of socioeconomic turmoil. It has become imperative for South Africa to evaluate the role of industrial policy in its growth and development strategies.

### What is Industrial Policy?

Various definitions of Industrial policy can be found in the literature. According to Gray (2013), Industrial policy is any government policy aimed at developing a specific sector (or

sub-sector) in an economy. In this way, industrial policy can be seen as any government policy that affects industrial performance (Chang, 1998). This description of industrial policy also speaks to government interventions in other non-industrial sectors of the economy that may directly or indirectly be beneficial to industrial development. In recent times industrial policy has increasingly focused less on the manufacturing sector and has extended to include some aspects of the services sector as the sectorial divisions between agriculture, manufacturing and services have increasingly blurred. Thus, some definitions of industrial policy capture the overarching goal to increase economic productivity or the ability to produce increasingly complex and high-value products throughout sectors of the economy, including in the services and agricultural sectors.

Nonetheless, what many definitions of industrial policy often do not capture is the purpose of sector development and how it is to be achieved. Industrial policy can be seen as a tool to develop industrial capacity (i.e. improving efficiencies within the economic sector, which may or may not consider the impact of employment on industrial development). It may serve as a driver of industrial development and employment. The intended outcomes of industrial policy determine how and where industrial policy is practised. However, this paper is not concerned with a particular stance on the outcome of industrial policy. Regardless of the intended outcome of industrial policy, the question remains: whether South Africa has the capacity to implement industrial policies. The intended outcome bears no meaningful consequence to the discussion and themes explored.

However, for the sake of grounding its argument on a conceptual understanding of industrial policy, this paper adopts the traditional view of industrial policy that considers interventions aimed at developing industrial capacity in a country with the aim of creating economic growth and employment. The paper does, however, acknowledge that a clearly defined but adequately flexible and widely agreed upon definition is critical for the sake of commonality in policy discourse and practice; thus, "industrial policy should be inductively defined by how it is understood in a situation by those implementing, assessing, or seeking to contest and shift, policy" (Fine and Mohammed,2022: 10).

In order to understand the current South African industrial policy and the trajectory thereof, it is vital to contextualise it within the country's immediate post-apartheid macroeconomic policies. The Macroeconomic policy is the course of action on which a country's economy is

navigated. Although focused on managing unemployment, production levels, controlling inflation, determining the levels of expenditure and income, and economic growth, the macroeconomic policy also addresses fiscal and monetary issues and thereby severely influences industrial development.

In the first macroeconomic policy adopted by the democratic South African government, the Reconstruction and Development Plan (RDP), not enough attention was given to the structure of the economy. The inadequate attention given to economic structural transformation vindicates the lack of industrial policy considerations in the economic plan (Fotoyi *et al*., 2016). The main aim of the RDP was to redress past injustices. The policy framework of the RDP was expected to stimulate investment in the industrial sector through direct foreign investments. However, the expected outcome of increased investment was not realised; instead, investments in the sector declined, and the country continued to de-industrialize[1] as the share of manufacturing in GDP and the labour force continued to fall (Zalk, 2021). Two years after its adoption, the RDP was replaced by the Growth, Employment and Redistribution policy (GEAR). GEAR encompassed elements of industrial policy, together with issues of trade, small enterprise development, and fiscal and monetary policy issues (Fotoyi *et al*., 2016). The aim of this economic plan was to grow and develop the economy through the promotion of production capacity and increased competition.

In the time of the RDP and GEAR, there was no official overarching industrial policy, and public policies generally leaned heavily on the Washington Consensus. Thus, industrial interventions aligned with the prevailing orthodox economic ideology of the time. Meaning elements of industrial policy in both the RDP and GEAR were of a horizontal industrial policy regime which targeted many industries and promoted market liberalisation (Andreoni and Tregenna, 2020; Molekwa *et al*., 2021)

In spite of industrial policy's attempts to enhance manufacturing, the process of de-industrialization, which began between the late 1970s and the early 1980s, had continued with little signs of being reversed. Since then, diversified manufacturing and downstream sectors have been on the decline. The commodity boom in the early 2000s resulted in the increased pace at which the industrial sector was deteriorating. Policy incentives often favour

[1] The share of manufacturing to GDP had fallen from 21% in 1995 to 18% in 2015, while the share of finance rose from 12% to 18% in the same period (Fotoyi *et al*., 2016)

capital-intensive sectors and upstream industries, especially the automotive, resources and mineral-based sectors and the clothing and textile industries, often to the detriment of other sectors. These industries benefited from incentives such as the 37E Incentive (the accelerated depreciation allowance) and the Strategic Industrial Project (SIP) programme. The support given to the upstream industries was justified by referencing the 'trickle down' economic model that sees profits reach smaller businesses and economies.

**The evolution of Industrial Policy in South Africa**

The crafting of economic policy in the early years of democratic South Africa took place in the context of the global hegemony of the neoliberal framework, which on the global front continued to solidify as liberalisation, globalisation, macroeconomic stability, and market-related reforms dominated the policy regimes. The Neoliberal Economic framework, as prescribed by the Washington Consensus (Fine and Mohammed, 2022), deepened in South African economic policies, specifically after the fall of socialism in the Eastern European countries and the collapse of the Soviet Union in the late 1980s and early 1990s (Davies, 2022). The balance of power shifted towards the Bretton Woods Institution for neoliberal policy-driven economic policy deregulation, privatisation, and market-led reforms (Fine and Mohammed, 2022). Within the context of globalisation and under the orthodox and hegemonic economic system, industrial policy focused on strengthening competition and enhancing internationalisation by promoting good governance, a flexible labour market, and anti-corruption campaigns. In addition, competition and internationalisation, the flow of knowledge, capital, skills, and technology across national borders was driven by foreign direct investment (FDI), which sought to provide numerous opportunities for the host country (Stojčić and Aralica, 2018) and came with its own set of challenges.

The policy paradigm shift in the South African context began in 2007 with significant industrial policy design and implementation transformations. Towards 2007, it became increasingly evident that industrial diversification was needed to drive growth and employment. To this end, the government created and adopted a new macroeconomic plan in the form of the Accelerated and Shared Growth Initiative of South Africa (ASGI-SA), the New Growth Plan (NGP) and the National Development Plan (NDP). In relation to industrial policy, the National Industrial Policy Framework (NIPF) and the Industrial Policy Action Plan (IPAP) both having been introduced in 2007 and 2008, respectively. This was the dominant industrial development strategy intended to align and coordinate industrial

interventions. In addition, the IPAPs targeted sub-sectors with the aim of diversifying the domestic economy by promoting downstream employment-creating industries.

As a response to the need to give an inclusive and integrated plan to improve industrialisation (Vilakazi and Bosiu 2021), the IPAP focused on "[firstly] building a stronger alignment between macro and industrial policies. [Secondly] industrial financing channelled to real economy sectors. [Thirdly] leveraging public and private procurement to raise domestic production and employment in a range of sectors. [Fourthly] developmental trade policies which deploy trade measures such as tariff setting and enforcement and standards in a selective and strategic manner; and lastly competition and regulation policies that lower costs for productive investments" (DTI - 2020/21).

Before 2007, South Africa's then plethora of state agencies tasked with forming industrial policies was unable to achieve sustainable policy goals (Hausmann, Rodrik & Sabel, 2008). The industrial policy did not allow for an adequate flow of information between the relevant stakeholders because policy instruments were not appropriately targeted, and control mechanisms were not in place (Nkunzi, 2014). In addition, the coordination between agencies tended to be disorganised due to institutional responsibility overlap and, in some instances, the undermining of one policy by another.

Although significant progress in industrial policy has since been made, many challenges remain. Interference with industrial policy-making and implementation includes poor communication and uncertainty around departmental government roles and functions. In addition, the necessary skills and experience support needed to develop and overcome this policy hindrance have been found wanting. As a result, transformation and development in manufacturing remain slow, and the country keeps falling short of keeping pace with the requirements of a constantly changing economic environment and the industrial policy thereof.

The concern is not the policy itself but rather the capability to design, successfully monitor, implement and evaluate policy (Mazzucato, Qobo and Kattel, 2021) which in turn affects the output and outcomes of such a policy (Andrews, Pritchett, and Woolcock, 2013). This then raises the question of whether the state has adequate capacity to see through industrial policy goals, particularly in the changing economic landscape. In order to adapt to the changes in the

global economic landscape and the increasing and simultaneously evolving needs of the country.

A crucial aspect of industrial policy in South Africa is the capacity to apply policy tools to achieve industrial development. Capacity is the ability of societies, organisations and individuals to undertake functions, solve problems and achieve their goals sustainably (Saasa, 2007). It dominantly speaks to procedural improvements, institutional strengthening and professional enhancement. State capacity, on the other hand, is the broad set of skills, resources and capabilities that enable the state to accomplish its strategic goals or to undertake public policy functions involving policy design and realisation (Mazzucato, Qobo, & Kattel, 2021 & Xun, Howlett & Ramesh 2018). This understanding of state capacity comprises the state's dominant culture, institutions and quality of those institutions, the character and strength of the mechanism that coordinates policy across the state, and the strategic capabilities and technical skills to implement dynamic policies successfully. Coordination is considered to be critical for successful implementation, especially since industrial policy covers many facets of the economy (Trade & Industrial Policy Strategies, 2016). Some of the important dimensions of policy implementation include the overall implementing capacity of the state bureaucracy, checks and balances, evidence-based policymaking, quality of service provision and policy coordination.

**Research Question**

In assessing the country's manufacturing sector performance, since the implementation of the National Industrial Policy Framework (NIPF) and the Industrial Policy Action Plans (IPAP) in 2007 and 2008, respectively, Kaplan (2019) finds that the South African manufacturing sector's output remains lower than that of the 2008 output levels. This was an obvious failure to stimulate manufacturing and an indication of industrial policy shortfall, especially when compared to the 50% increase in manufacturing output across comparable emerging markets. The goals of the abovementioned policies were to increase the share of manufacturing in the Gross Domestic Product (GDP) and the total labour force. However, this is far from being realised. The manufacturing sector has consistently performed lower than other sectors of the economy.

Andreoni and Tregenna (2020) argue that lack of coordination is a major weakness in South Africa's industrial policy and is partially a result of the highly divided political economy of

the country. The lack of coordination leads to ineffective policy formation and implementation. The question here is whether the South African state has the capacity and political will to see through industrial policy successfully. This includes the design, monitoring, implementation and evaluation of industrial policy. All of this is meant to achieve meaningful industrial development in the context of a transforming and unstable economic environment. The question remains whether the necessary support needed to increase capacity is available or not. The paper thus makes an assessment of whether the South African state has the capacity to invest in industrial policy. It hypothesises that although capacity exists within the state, which is increased because of the support from private sector partners, capacity is seen to be more in some industrial policies, but efforts to make implementations are lacking. In addition, these industrial policies are fragmented and specific to certain sectors of the economy.

**Objectives**

The objective of the research is to provide a critical assessment of capacity and capacity *building* in the design, evaluation and implementation of industrial policy in South Africa. In so doing, the study will assess the overall national industrial policy capacity, the capacity within DTIC and the capacity within the private sector in the country. This includes assessing the contestation of power that feeds into policy capacity in the state as well as the coordination of industrial policy intra-government and inter-government departments.

**Research Methodology and Design**

The research will apply qualitative methods to study, make meaning of and analyse data. It combines a literature study with primary data collected by way of interviews. The literature study critically assesses and evaluates literature to arrive at a methodology that relates the existing literature to new ideas. In engaging the literature review, this paper surveys various academic journal articles, research reports from think tanks, industry associations and official government publications. News reports herein are also considered legitimate sources of knowledge, as seen in the table below.

Table 1.1: Government Publications

| Report Title | Key department | Type of report | Date of publication |
|---|---|---|---|
| Reconstruction and development government's | Department of Finance (now National Treasury) | White paper | 2011 |

| | | | |
|---|---|---|---|
| strategy for fundamental transformation | | | |
| National Industrial Policy Framework | The Department of Trade and Industry | The national Industrial policy framework | 2008 |
| The Auto Green Paper | The Department of Trade, Industry and Competition | Green paper on the Automotive Industry | 2021 |
| South African National Treasury Appropriation Bill | National Treasury | Appropriation Bill | 2007 - 2019 |
| Geared for Growth South Africa's automotive industry masterplan to 2035 | The Department of Trade, Industry and Competition | Automotive Masterplan | 2021 |
| Growth, Employment and Redistribution | Department of Finance (now National Treasury) | A Macroeconomic Strategy | |

Source: Author

The primary data was collected by way of interviews with key figures instrumental in the design and implementation of industrial policy or the capacity building thereof. One-on-one interviews were conducted by means of a video call, and the interview was semi-structured. This line of questioning does not follow a rigid set of questions. Rather the semi-structured interview approach incorporates a few headings or standard open-ended questions to allow for flexibility. Each interview seeks to uncover or explore issues from different perspectives; as such, the interviews vary in lines of questioning and emphasize different questions. Structured question schedules are often ineffective in providing answers to questions of 'how' and 'why'. This paper adopts a semi-structured interview approach, allowing for a robust engagement on issues whilst at the same time remaining flexible in the line of questioning, especially where there are unforeseen responses or new information discovered during the interview (Woodhouse et al., 1998). The semi structure interview method and the

analytical rigour applied to this method differentiate the semi-structured interview from general journalistic work. Nonetheless, in addressing questions of 'why' and 'how', the semi-structured interviews allow for the development of theories or hypotheses around the nature of relationships and decision-making (Woodhouse *et al*., 1998). Data collection using this methodology is able to unearth information that would otherwise be unavailable from any other source. Information such as the perceptions of key stakeholders in their role as contributors to the formation, evaluation or implementation of the industrial policy process. "These perceptions or experiences 'may' manifest in particular patterns of decision-making" (Woodhouse *et al.*, 1998: 161).

The selection of interviewees followed purposive sampling – which does not follow a representative or random sample as would usually be the case with quantitative research. Instead, the participants are sampled based on their relevance to the aims of the research (woodhouse *et al.*, 1998). The interviewees were first identified after completing an investigation on some of the key thought leaders in the South African industrial policy discourse. Thereafter, participants were recommended during interviews in the process of snowballing. All of the participants are experts at the forefront of industrial policy in the country, many of whom have in some way participated in capacity building within the field. The interviewees are key figures in the South African industrial policy structures, whether through their longstanding background in policy-making, academic contributions to policy discourse, or their position in key policy-forming institutions. The participants have technical insights into the policymaking environment as well as insights into the political settlements affecting the process. Ultimately, these stakeholders have intimate knowledge of how state agencies operate.

The data collected, including that from publications and interviews, provided the foundation underpinning discussions on the theoretical framework and literature review in capacity building in industrial policy design and implementation. The interview questions are grounded in the theoretical construct of sociological, economic and political literature, as shown in Table 1.2. The interviews were held with the following parties:

- Senior research personnel of the Department of Trade, Industry and Competition
- DTIC research partners (current and former, such as Trade and Industrial Policy Strategies, amongst others).
- Scholars and thought leaders in industrial policy

- Academia-based research institutions

Table 1.2: List of Interviewees

| **Interviewee** | **Reference code** | **Organisation** | **Date** | **Theme** |
|---|---|---|---|---|
| | IV 1 | Scuola universitaria professionale della Svizzera italiana | 13 February 2022 | Policy outsourcing |
| | IV 2 | Trade & industrial Policy Strategies | 13 January 2022 | Outsourcing industrial policymaking |
| | IV 3 | Trade & Industrial Policy Strategy | 17th December 2021 | The challenges of industrial policy and capacity building |
| | IV 4 | The Department of Trade, Industrial and Competition | 7th December 2021 | Industrial policy capacity of the DTIC and challenges faced by the DTIC |
| | IV 5 | The University of Cape Town | 11th of January 2022 | The history of industrial policy and the interaction between government and the private sector |
| | IV 6 | The University of Johannesburg, Centre for Competition Regulation and | 19th January 2022 | Capacity building and challenges thereof |

| | | | | |
|---|---|---|---|---|
| | | Economic Development | | |
| | IV7 | United Nations Industrial Development Organization (UNIDO) | 14th of January 2022 | Multilateral bodies and their impact on domestic policies |
| | IV 8 | The Department of Trade, Industrial and Competition | 11th of January 2022 | Capacity in the DTIC |
| | IV9 | National Assembly | 2nd December 2021 | The history of industrial policy and challenges of industrial policy in South Africa |

Source: Author

**Limitations**

This research was conducted in the context of the COVID-19 pandemic. Conducting this type of research during the period introduced additional challenges to the research process. The limitations on physical movement, social distancing measures, and increased workload in responding to the crisis might have affected the recruitment of participants and the overall research process. These factors may have impacted the quality and quantity of data collected, mainly because the identified participants are in some way involved in formulating or implementing industrial policy response measures; their willingness to participate was dependent on their availability. In addition, the access and availability of interview participants were made worse by the time and resource constraints, affecting the depth of data collection and the number of experts interviewed.

Furthermore, the study's findings heavily relied on the expertise and perspectives of the interviewed experts. The selection of experts for interviews might have been influenced by factors such as availability, accessibility, or personal biases, potentially limiting the representativeness of the sample. Additionally, snowballing approach for participant recruitment might introduce bias and limit the diversity of perspectives.

While qualitative research may provide rich insights as well as uncover new understanding and knowledge, it is argued to often suffer from subjectivity. The interpretations and conclusions drawn from document analysis and expert interviews may, in some instances, be influenced by the researcher's biases and interpretations. However, concise efforts have been made to mitigate bias, but it is crucial to acknowledge the potential impact of subjectivity on the research findings. By recognizing and addressing these caveats, the researcher has ensured transparency, upheld the study's integrity, and encouraged readers to evaluate the research findings in light of these limitations critically.

**Outline of the proposed research report**

The sections of the study will be structured as follows: chapter two discusses the research methodology and design. Chapter three discusses the theoretical framework, which explores theories of the developmental state, Weberian bureaucracy and embedded autonomy. The literature review is in chapter four, and here the study delves into the concept of state capacity, including the theoretical frameworks of capacity building and how they apply to the DTIC and industrial policy, as well as the intersections of the state within the South African bureaucracy and state capacity. Chapter five analyses the data and results from the interviews with key stakeholders in the development of state capacity. This chapter deliberates on the impact of the contestation of intellectual ideas and political ideologies in the current state economic policy centre. While Chapter Four applies the theories above to state capacity-building processes. In the final chapter, the study provides recommendations to improve building capacity in industrial policy. Finally, the study concludes in chapter six.

## Chapter Two

## Review of the Literature on the Developmental State, State Capacity, Human Capital and the Bureaucratic rationale

### Introduction

State capacity building and industrial policy are interrelated concepts that play a crucial role in shaping a nation's economic development. State capacity building is fundamental to the successful implementation of industrial policies (Andrews, Pritchett and Woolcock, 2017). State capacity building in industrial policy can promote sustainable development by integrating resilient strategies into policy design and implementation. A capable state possesses the necessary institutional frameworks, skilled workforce, and administrative systems to design, implement, and monitor industrial policies effectively (Uyarra *et al*., 2020, Mazzucato, Qobo, and Kattel, 2022). The state's ability to coordinate various stakeholders, attract investments, regulate markets, and provide targeted support to industries relies on its capacity to execute policies efficiently. Therefore, state capacity building plays a pivotal role in the successful implementation of industrial policies and the achievement of sustainable and inclusive economic development. The connections between state capacity, industrial policy, public rationale, Weberian bureaucracy, and state capacity building underscore the need for a comprehensive and integrated approach to policy formulation and implementation. By investing in institutional frameworks, human resources, and specialized expertise, governments can strengthen their capacity to design and execute industrial policies that effectively support targeted industries, foster inclusive development, and contribute to sustainable economic growth ((Uyarra *et al*., 2020, Andrews Pritchett and Woolcock, 2017, and Whitfield *et al.*, 2015). Therefore this chapter will analyse and discuss the aforementioned interrelated themes establishing the leading discourse in industrial policy and state capacity building.

This chapter comprises two parts; the first part explores these key conceptual frameworks that describe the type of bureaucracies and state formation that involves state-facilitated growth. The Developmental State and the Weberian Bureaucracies are, in principle, based on the expansion of human capital into the state. Because of this, the section also discusses the bureaucratic rationale as well as the human capital theory of the New Endogenous Growth Theory.

The second part of this chapter delves into some of the key experiences of the South African bureaucracy, tying it to the theoretical concepts explored in the former section. This part aims to draw out the different themes that describe the South African bureaucracy, including the distribution of power within and between state agencies.

**Part 1: The conceptual framework**

The selected theories form the relevant theoretical lens through which the findings of this study will be grounded. They are the prevalent theories in contemporary discourse on state-led development driven by capable bureaucracies. These theories involve strengthening human capital and capacity in the public sector to encourage sound bureaucracies and sustainable state-led growth. These theories also relate the different points of strengthened human capital to development as well as strengthened human capital in public agencies to development. This, in turn, relates to building capacity in the state in order to perform certain functions, and in the case of this paper, industrial policy making and implementation. In this way, these conceptual frameworks form the basis of the analysis of capacity-building in the design and implementation of industrial policy in the DTIC and the state at large. Much focus has been paid to the developmental state and its underlying theories, including that of human capital as well as state capacity.

Subsequent sections are structured as follows, and the first section details the concepts and attributes of the developmental state, the types of developmental states as well as a concise case study of the developmental states in East Asian countries. However, this is done after locating the developmental state in the evolution of the Weberian bureaucracy's developmental state/bureaucracy literature. The second section discusses theories of human capital and state capacity, while the third and final section provides an overview of state capacity and capacity-building framework.

**Developmental State**

The term “developmental state” can be traced back to Chalmers Johnson (1982), where he describes Japan’s exceptional economic success post-World War Two. Johnson produced a new concept that questioned the role of the state in development. Since the success of Japan and other East Asian countries, the idea of a developmental state has been at the forefront of development literature. The unprecedented success of the East Asian countries challenged the

leading narrative around market-driven growth, and in turn, these countries saw improvements in education, healthcare and the standard of living. And so, the initial conceptualisation of the developmental state was modelled on the successful industrialisation of East Asian countries and their economic growth spurts and advanced social development, resulting from bureaucratic involvement in industrial policy-making and implementation (Chang, 2010).

The developmental state signalled a shift in how the role of the state is perceived in development. Evans and Rauch (1999: 748) state that "explaining why some state bureaucracies are more effective than others seems, at least, to be taking precedence over simply condemning excesses of state intervention". When juxtaposed with the binary market-rationale of the neoliberal hegemony of the time and the state-dominated systems of socialist thinking, the developmental state lies somewhere in between. This ground-breaking work, as suggested by Johnson (1982), “conjoins private ownership with the state guidance” (Shumuye, 2017:27). The concept lies between a liberal open economy of capitalism and the central planning model often seen in socialist countries. The basis for Johnson’s (1982) argument was that the markets do not operate in isolation; instead, they are co-created with the state.

What is more, Johnson argues that bringing about a developmental state was not a result of economic policy instead, developmental states were brought about by the ability to mobilise around economic development within capitalism. This then meant that the developmental state comes ahead of developmental policies, making it a means and not the end in itself, and as such, it can be seen as a point in time during the adaptation of a modern state (Evans, 1995). In this section, the paper analyses the relationship of Weberian Bureaucracy to the developmental state and the characteristics of the developmental state.

**Weberian Bureaucracy**

Max Weber claimed, over a century ago, that bureaucracies could be capacitated in such a way as to facilitate economic growth and development. The modern convention has placed bureaucratic effectiveness at the forefront of economic development discussions, together with human capital and the developmental state, as these themes are strongly interwoven (Evan and Rauch, 1999). It used to be that theorists and practitioners were more concerned with whether or not state intervention was the fitting developmental route but with the rise of

the developmental state, the role of bureaucracies in the facilitation of economic growth, providing bureaucracies critical influence in facilitating economic growth (Mkandawire, 2001). Weber believed that "the fundamental value of bureaucracy is one of the institutional foundations of capitalist growth" (Evans and Rauch, 1999; 749); that is to say, economic growth relies heavily on effective bureaucratic governance. This was later known as the Weberian Bureaucracy.

The Weberian Bureaucracy, though not explicitly defined by Weber himself, is defined by Evans (1995) as "corporate cohesion and the insulation of the bureaucracy from special interests, the concentration of expertise in the bureaucracy through meritocratic recruitment, and the provision of long-term career rewards as well as a distinctive and rewarding status to officials" (Evans 1995, 2009; Evans & Rauch 1999) amongst other rule-based bureaucracy. Evan's definition of the Weberian Bureaucracy expands on Weber's thinking around the concepts. Evan incorporates two key concepts into Weber's postulations of public agencies and public agency structures and how they make use of their distinctive decision-making process and operations. The first is the insulation of the bureaucracy from self-interests which introduces aspects of embedded autonomy to the idea of capable bureaucracies. While the second, corporate coherency, alludes to the incorporation of bureaucratic rationale. While these key concepts are not explicitly mentioned, they are part and parcel of the developmental state fabric.

The Weberian Bureaucracy, characterized by the use of a hierarchy of authority, salaried or rewarding and predictable career trajectory, meritocracy in the employment of public servants, as well as written rules, is believed to support economic growth (Saginova, 2017 (Cornell, Knutsen and Teorell, 2020). These elements' systematisations contribute to the Weberian bureaucracy's overall effectiveness and capability. They aim to provide structure, expertise, fairness, and professionalism within bureaucratic institutions, facilitating efficient decision-making and implementation of policies (Andrews, Pritchett and Woolcock, 2017). For instance, the Weberian bureaucracy emphasizes a clear hierarchical structure, ensuring that decisions are made and implemented systematically and organised. Authority flows from higher to lower levels, providing a clear chain of command. And that there is a clear line of accountability. Meritocratic recruitment ensures that competent and skilled individuals are appointed to bureaucratic positions, increasing the overall capability and expertise of the bureaucracy. To support meritocratic recruitment, public agencies are required to offer

salaried careers and distinctive and rewarding statuses which provide stability, financial security, and predictability for bureaucrats, reducing the potential for corruption and enhancing their commitment to public service (Saginova, 2017, Uyarra *et al*., 2020). It also fosters a sense of professional identity and encourages bureaucrats to take ownership of their work, leading to increased dedication and performance. While written rules, accompanied by the enforcement of such rules, ensures that the key elements of a Weberian bureaucracy and other policies are standardized within bureaucracies. These rules should outline bureaucrats' rights and obligations to ensure consistency, transparency, and fairness in decision-making processes. Written rules also enable continuity and reduce reliance on individual discretion (Cornell, Knutsen and Teorell, 2020). In this way, a Weberian Bureaucracy becomes more effective at supporting growth in a capitalist state (Kaplan, 1995).

The type of bureaucracy described by Weber and Evans is a bureaucracy characterised by high levels of capability and the concentration of high-capacity professionals and expertise. By practising meritocratic recruitment processes and providing long-term career rewards, together with the other elements of a Weberian bureaucracy, state agencies can attract and retain skilled professionals with the necessary expertise to perform their roles effectively (Cornell, Knutsen and Teorell, 2020). Moreover, this kind of structure enables bureaucrats to take the initiative, innovate and facilitate innovation while also being able to implement their policies successfully. Thus, The Weberian Bureaucracy provides a framework for building capable bureaucracies and, ultimately, a capable state that can support economic growth.

These assertions by Weber may perhaps seem self-evident now. Still, when they were made during the Smithian era (when the role of government was limited to the provision and protection of property rights), they were radical and went against the convention of the time. The ideological hegemony of the classical and later neoclassical synthesis fiercely rejected these ideas arguing that the state is an enemy of progress and needed to have its involvement in the market economy kept to a minimum regardless of its configuration. Their rejection of an interventionist state was complemented by scores of case studies on rent-seeking and the state's predatory practices (Mkandawire, 2001). Additional studies were conducted by the likes of Polanyi (1944) and later Mauro (1995), and it is here where Weber's ideas found their voice in modern developmental discourse. The empirical study by Evans (1999) and Evans, P. (2009) found the Weberian state to be associated with higher growth rates. In the study, Evans emphasised the meritocratic recruitment and predictable career ladder aspects of

the Weberian Bureaucracy to determine whether the Weberian bureaucracy had an impact on economic growth. Evans (1999) argues that the analysis of bureaucracies ought to look for more than individual capacity expansion and just career development of the Weberian bureaucracy.

However, in the same way, that the Weberian bureaucracy, particularly its emphasis on hierarchy, rules and procedures, is seen to provide structure to affect effective bureaucracies, it can be argued to lead to excessive red tape, slow decision-making processes, and making process less flexible (Cornell, Knutsen and Teorell, 2020. Moreover, the bureaucratic structures may hinder innovation, responsiveness, and adaptation to changing circumstances, potentially impeding economic growth. Nevertheless, the Weberian bureaucracy provides a guide on the area of focus of bureaucratic improvement as well as a foundation on which to build sound bureaucracies. The somewhat oversimplification of bureaucracy may be necessary to begin the resolution of the complexities of the bureaucracy.

The Weberian Bureaucracy serves as the point of departure for building capable bureaucracies and, ultimately, a capable state. The Weberian Bureaucracy is a precursor to the developmental state, which requires effective internal structure, embedded autonomy, and supportive resource allocation. The strengthening of internal bureaucratic structures and the human capital in public agencies contribute to forming the Weberian Bureaucracy (Cornell, Knutsen and Teorell, 2020). Subsequently, the culmination of effective bureaucracies results in a capable state that is able to foster an environment conducive to economic development and growth. In this way, the developmental state is built on Weberian bureaucracies. What has now become apparent is the strengthening of human capital in addition to an unyielding drive to meet developmental outcomes in public agencies, which fundamentally gives rise to the Weberian Bureaucracy (Evans and Rauch, 1999).

**Characteristics and Features of a Developmental State**

The Keynesian revolution of the post-Second World War era provided justification for world governments to intervene in markets. The Keynesian policy paradigm gave policymakers the power to intervene in areas where they deemed markets to lack. However, East Asian countries such as Japan, South Korea, Taiwan, and Singapore had, by the mid-1980s, taken this rationale a step further by not only intervening where they deemed markets to fail but also playing an active role in coordinating and encouraging industrialisation as well as

stimulating economic growth (Chang, 1998; and Weiss, 2000). Thus, making the model a remarkable alternative to the African developmental model. The developmental state theory became the key counterargument to the claims of neoliberal theorists. Central to the debate was Amsden (1989) and Wade (1990), whose analysis of the developmental state of Taiwan and South Korea fundamentally influenced the discourse in development economics.

According to Johnson (1982), the developmental state is a state that commands the trajectory of economic development through direct intervention as opposed to waiting for the market to fail before intervening and allocating economic resources (Shumuye, 2017). In addition, the concept describes interconnected political, bureaucratic and monetary influences that structure a capitalist society (Woo-Cummings, 1999).

However, the conceptualisation of the developmental state has formed the foundation on which many scholars have interpreted the concept and developed their variations of the model. These include scholars such as Evans, 1995; Chang, 1999; Mkandawire, 2001; Kang, 2002; Chibber, 2002; 2004; Khan, 2004; and Kohli, 2004, all of whom define the developmental state in different ways. Since the 1980s, the concept has evolved beyond state-led industrialisation. The theoretical framework and empirical work have since transformed into frameworks whose relevance transcends the East- Asian experience (Evans and Heller, 2015). These variations are representative of the different political philosophies embraced by different countries. Thereby acknowledging alternative ideologies relevant to the success of many other countries such as Taiwan and South Korea, Thailand, Singapore, Malaysia, Hong Kong, Indonesia and, in recent times, China, Mauritius and Botswana. The groups of countries mentioned here are of different state organisations and political philosophies, illustrating the different evolutionary paths, contexts and variety of the developmental state framework.

Attempts to draw out commonalities of developmental states cannot be taken to mean that there is a unanimous description and understanding of developmental states. Von Holdt and Murphy (2007) argue that in all the variations of the developmental state, there is an incoherent understanding of the developmental state. What is evident and remains a common thread is the role of effective state bureaucracies and an unwavering political commitment to grow and develop the economy (Evan and Rauch, 1999; Mkandawire, 2001; Shumuye,

2017). Despite Von Holdt and Murphy's claims, there are other distinctive features that can be drawn out of the various types of developmental states.

According to Johnson (1982), these commonalities are firstly the presence of an elite state bureaucracy as characterised by the Weberian Bureaucracy. Secondly, the political institutions that allow bureaucracy adequate space to independently undertake initiatives and operate effectively. Thirdly the adoption of market-like techniques to state interventions. Fourthly a central planning commission or structure is responsible for policy and policy coordination, as was the case with the Ministry of International Trade and Industry (MITI) in Japan, the Economic Development Board (EDB) in Singapore; the Economic Planning Board (EPB) in South Korea and the Economic Planning Unit (EPU) in Malaysia. Fifthly, the embedded autonomy of the state bureaucracy and the planning commission from the capitalist and other interest groups. Lastly, the adopted policies favour a swift expansion of human capital. While the presence of these attributes is, in most instances, accompanied by efficient resource mobilisation and equitable distribution; the reduction of inequalities through the provision of basic public goods; trade and industrial policies aligned to macroeconomic policy; a cordial and productive relationship between the state and business; and finally export-oriented strategies and targeted industrial policy (Evans, 2010). However, the presence of these attributes does not guarantee a developmental state, particularly for late industrialisers.

As previously mentioned, the developmental state interlinks political, bureaucratic and economic resources to life in a capitalist society. However, the developmental state can also be described through the lens of bureaucracy. The developmental state, according to Von Holdt and Murphy (2007), is made up of coherent state bureaucracies capable of quality service delivery. Where the function of a state to provide basic services is paramount, and the relationship between the state and society is dynamic and continues to evolve (Evans & Heller, 2015; Chang, 2010). In order to accomplish this coherent state bureaucracy capable of service delivery, the state ought to have competencies in key areas, that is, capabilities, embeddedness, capacity and effectiveness. This perception of the developmental state is grounded on the premise of the effectiveness of state agencies, underscored by capable public servants and supportive institutions. Von Holdt and Murphy (2007) introduced a new argument by emphasising the role of the state in designing and implementing industrialisation strategies. The state has the capacity to gather scarce resources and target them towards a few

selected industrial interventions. These opposing views illustrate that industrial development is a negotiation of power between the political and economic interests of the stakeholders.

For the context of this paper, it is necessary to adopt a hybrid understanding of the developmental state grounded in Von Holdt and Murphy (2007) and Evans and Heller (2015), wherein the developmental state is epitomised by the culmination of bureaucratic efficiency and effectiveness as well as state-led industrial development (Mkandawire, 2001). Therefore, a more fitting characterisation of the developmental state is a state that is concerned with creating a type of state characterised by public value, innovative institutions, and a catalyst to growth by acting as an investor of first resort and crowding in private sector investment (Chang, 2010), where human capital is implicitly embedded in the public value offering of the state.

While development theorists acknowledge the important role governments ought to play in promoting development, it often overlooks the need for embedded autonomy and capacity issues. For instance, the definition of the developmental state prescribed by Von Holdt (1989) suggests a level of proximity to industrial elites. This prompts Evans and Heller (2015) to argue that the state's close tie to industry and industrial elites, as was the case in the Korean and Taiwanese developmental routes, is no longer sufficient to induce industrial development. Instead, the proximity to industrial elites could be counterproductive. In discharging its strategic mandate for growth and development, the state may lack the independent thinking to achieve the set goals or effectively intervene. For the state to achieve, a developmental state is to attain autonomy from political elites, businesses and other entities seeking to use the state for their self-enrichment. Even so, Evan's embedded autonomy countered the reliance on the state to stimulate growth or efficiently allocate resources unilaterally. Although the state plays the lead role in development, under this framework, it is seen to co-create markets, allocate resources, and engage in partnership with the private sector and other stakeholders without losing its leadership integrity. Contribution by critical stakeholders, under this circumstance, is permitted and considered, but the state remains firm in its lead. Making the Weberian bureaucracy inadequate for the analysis of any bureaucracy.

**Human Capital Theory vs Human Capabilities Approach**

The notion of human capital-driven growth and development is well summarised by the New Endogenous Growth Theory (NEGT) (Sen, 1999) and has become a widely accepted

development framework. Though the theory is steeped in neoliberal framing, which is based on unrealistic assumptions of rational behaviour (Chibber, 2002), it provides some explanation for how human capital impacts development. The NEGT postulates firstly that technological advancement is a result of economic activity and not an exogenous factor, as had been indicated by earlier growth models. This postulation significantly affects the growth theory and how it differs from previous growth theories. Secondly, the role of human capital in long-term growth has increasing returns to scale and is the source of innovation. Thereby explaining how technology is endogenous to the model. Finally, human capital is the ability to create new ideas and methods of activity. This allows for the production of new scientific insight that then leads to research that refines the innovation, followed by the development of practical application of the innovation and, ultimately, the diffusion of the innovation into other areas.

Development theory is in consensus on the greater impact of human capital on development as compared to, say, capital accumulation. For this reason, the integration of human capital-building initiatives for growth and development is a radical concept. It has shifted attention away from the drive to accumulate capital to a more human capital-centric development route. Human capital has been seen to yield increasing returns instead of the diminishing return of physical capital of the Solow growth model. In some variations of the NEGT model, capital is a combination of physical capital (resulting from investment) and human capital. But the increased return of the human capital theoretical framework is fundamental to the NEGT (Cortright, 2001). These findings are supported by Sen (1999), who argued that human capabilities are the main driving force to achieving growth and are an important means of development. Unlike other factors of production, such as labour and capital, which all have a diminishing rate of return, the increase thereof is unsustainable in the long-term growth instrument of an economy. Human capital creates the opportunity for unlimited economic growth. Simply because it can be used and reused in perpetuity at no marginal cost (Cortright, 2001). The increasing return of knowledge allows a state with high human capital to continuously grow and develop. Development under this framework is a process of creative destruction, with the evolution of ideas, technologies and even competitive firms.

Empirical studies on the effect of human capital on growth and development are numerous. And the depth of evidence supporting human capital-centric development is large. For instance, in their analysis of this relationship, Boozer et al. (2003, 25) find that human

development results from economic growth instead of input to economic growth. An outcome that is supportive of the traditional view of development. However, Hanushek and Woessmann (2008, 2009) find that the relationship between human development and human capacity induces economic growth, as Sen (1999) described in the New Growth Theory. A similar conclusion was drawn by Barro (1997) in a study of the same relationship. They argue that human capital strongly supports development, where cognitive abilities express human development instead of years of education.

The traditional wisdom on growth was that it is a result of the accumulation of capital and the cause of improved health, general well-being and education (Evans and Heller, 2015). However, the radial conceptualisation of human capital has transformed the thinking around capital accumulation and its role in development. The NEGT highlights the importance of developing human capital in state and private firms. The increasing return associated with Knowledge, according to the NEGT, has numerous implications for economic development policy (Cortright, 2001). The implication of the framework in relation to the state is that it increases the efficiency and effectiveness of the state in achieving its goal. Consequently, Cortright (2001) argues that policymakers should pay attention to incentives that support knowledge creation and develop human capital.

Amsden (1989) and Wade (1990) argue that the relationship between state and private structures undermines a country's ability to create a globally competitive industrial sector. They argue that human capital is an invaluable asset and the greatest contributor to economic development and the developmental state (Sen, 1999). According to Sen, increasing human capabilities is the aim of the developmental state. This human capital needs to produce results and increase human capabilities through the formation of effective organisations and the political implications and organisational configuration. These frameworks are more concerned with creating a type of state characterised by public value, innovative institutions, and a catalyst to growth by acting as an investor of first resort and crowding in private sector investment.

**State capacity and capacity building**

State capacity-building has, in recent years, been a topical issue in development literature and policy discourse. Its increased recognition emanates from the need for developing states to overcome their poor governance and frail state capacity. As such, significant effort has gone

into attempts to understand and cultivate state capacity to improve governance and strengthen capacity. However, attempts by many developing countries to implement state-building programs have often proven difficult and have seldom accomplished developmental aspirations (Potter and Brough, 2004). In the case of industrial policy, this has resulted in failure to accomplish industrial development outcomes or even failure to (re)industrialise. The resulting failure of state-building programmes has led to the need to interrogate prevailing thinking around state capacity building, state capability and the nexus between the two concepts. Consequently, capacity building has assumed a central role in issues of building capable states. Therefore, the section seeks to highlight the gaps in the literature by discussing the capacity pyramid – a capacity-building framework; providing a systematic appraisal of bureaucracies; the political settlements in industrial policy; and stylized facts of selected sectors that have shown relative strength in industrial policy.

**Capacity building pyramid**

In the past, debates around state development often neglected state capacity and capacity building Hameiri (2009). Given time, the term "capacity-building" has been used as a common prescriptive response to developmental issues. So much so that the phrase had become a generic response to a wide range of issues (Schacter 2000). The term itself has been used so loosely that it has been rendered useless from an analytical or practical perspective (Honadle, 1981). The meaning of capacity building has been one many have grappled with defining. While many often rely on "intuition" for its meaning, capacity building is frequently used to imply that there is either a lack of know-how that may be resolved by training. This thinking is a misconception in a large body of literature; it equates capacity building to training (Honadle, 1981). The concept has been wrongfully made synonymous with training (Potter and Brought, 2004; Schacter, 2000). The lack of a broad consensus regarding the definition of capacity building has been a major challenge to a common understanding of the term and the implementation of capacity-building initiatives (Bossuyt, 1994), leading to wasted effort and resources.

The UNISDR (2009) defines state capacity as the "capabilities of the state to establish and achieve social and economic goals, through knowledge, skills systems and institutions" Simply put, for the state to know how to do things and have the capabilities to do things, that is, to have capabilities to achieve its directives (Dosi, Faillo and Marengo, 2008). Flowing from this definition, state capacity-building is thus the process of developing the capabilities

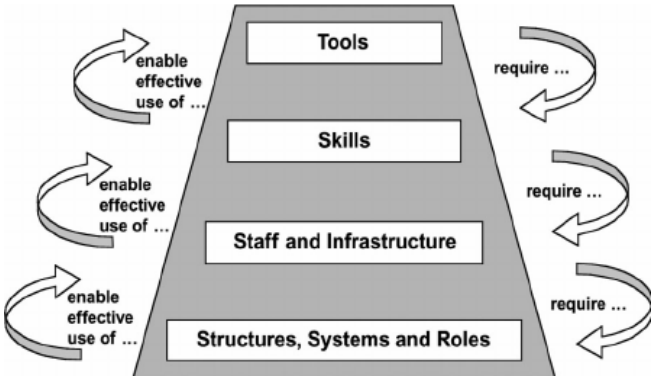
to achieve directives. The capabilities referred to herein relates to the ability to perform and develop key attribute in generating output, particularly in providing and developing services or products. Where there is the right type of capabilities, organisations and states have the potential to connect, on the one hand, skills and opportunities to economic effects on the other. In this fashion, organisations and states have the power to continuously shape their bureaucratic development, trend patterns in their industrial sectors, and even the country's economic growth (Dosi, Faillo and Marengo, 2008). However, the idea of state capacity is not adequately defined to allow for its measurement, making it difficult to control. Macro-foundation does not provide a theoretical framework for determining state capacity. In their view, Pielemeier and Salinas-Goytia (1999) argue that capacity building is characterised by the ‘’creation or strengthening of capacity for programme execution independent of the permanence of an institution’’. Potter and Brought (2004) take it a step further by incorporating technological, social, and personality changes into the definition. In their perspective, capacity building enables the independent execution of programmes in the face of changing personalities, social structures, resource crises and technologies. That is to say; it enables the development of sustainable and robust systems (Potter and Brought, 2004). Paul (1995) adopts a technological approach to his understanding of capacity building. Paul (1995) defines capacity building as the formation and improvement of a stock of desired qualities and features referred to as capabilities that, over time, could be continually drawn upon. The focus herein is on enhancing the stock instead of managing its availability (Potter and Brought, 2004). The common thread in these definitions is that learning and investment in knowledge are but just a part of the capacity building process and not the process in and of itself. Henceforth, this paper adopts the definition as prescribed by UNISDR (2009) and Paul (1995), who incorporates the role of capabilities in capacity building, a prominent concept in this paper.

Defining the concept of capacity building is the first step in developing mechanisms in which it can be applied and assessed. When thought of within the broader development context, capacity building can be seen as a “system of capacity” that involves the systematic building of capacity. This system entails the Capacity Pyramid (shown in Figure 1), the Capacity Pyramid as a prism (shown in Figure 2) and other similar frameworks[2] where a hierarchy of needs is recognised and a unique strategic response to each need. In these frameworks, the

[2] The European Commission in their studies of the public healthcare sectors also used the two by two matrix and the fishbone models used by Paul (1995).

effectiveness of a particular capacity rests on the development of other capacities and their effectiveness. Through the system capacity approach, one is able to identify effective and sub-optimal capacity-building procedures. Using various case studies in public healthcare in India, Ojha and Das (1999) and Mosse and Cassels (1996) describes how "organizational arrangements systematically undermine individuals' attempts to make effective decisions, provide quality services or perform their work properly" (Potter and Brought, 2004; 339).

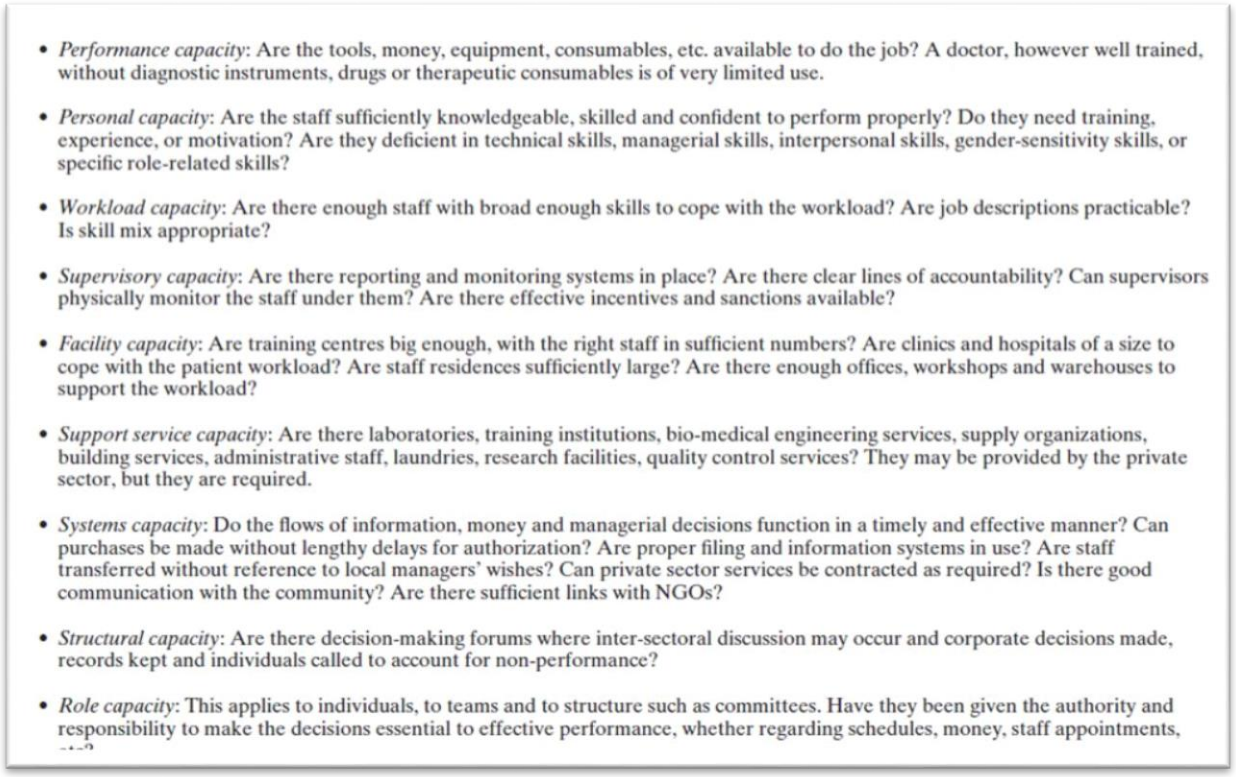
Figure 1. Capacity Pyramid




Source: Potter and Brought (2004).

Under this capacity-building framework, it does not matter how capable individuals might be, how much resource support they enjoy, or how much training they receive. But, on the other hand, if the organisational arrangement is inhabiting, the entire system is rendered ineffective and incapable. As such, a systematic approach to building capacity is required. The capacity pyramid is one such method that uses a nexus of interrelated capacities to develop capacity as a whole. The Capacity Pyramid contains a combined nine distinguished but interconnected capacities, including performance, personal workload, supervisory facility, support service, systems structural and role capacities as outlined in table 2.1.

Table 2.1. The Nine component elements of systemic capacity building



- *Performance capacity*: Are the tools, money, equipment, consumables, etc. available to do the job? A doctor, however well trained, without diagnostic instruments, drugs or therapeutic consumables is of very limited use.
- *Personal capacity*: Are the staff sufficiently knowledgeable, skilled and confident to perform properly? Do they need training, experience, or motivation? Are they deficient in technical skills, managerial skills, interpersonal skills, gender-sensitivity skills, or specific role-related skills?
- *Workload capacity*: Are there enough staff with broad enough skills to cope with the workload? Are job descriptions practicable? Is skill mix appropriate?
- *Supervisory capacity*: Are there reporting and monitoring systems in place? Are there clear lines of accountability? Can supervisors physically monitor the staff under them? Are there effective incentives and sanctions available?
- *Facility capacity*: Are training centres big enough, with the right staff in sufficient numbers? Are clinics and hospitals of a size to cope with the patient workload? Are staff residences sufficiently large? Are there enough offices, workshops and warehouses to support the workload?
- *Support service capacity*: Are there laboratories, training institutions, bio-medical engineering services, supply organizations, building services, administrative staff, laundries, research facilities, quality control services? They may be provided by the private sector, but they are required.
- *Systems capacity*: Do the flows of information, money and managerial decisions function in a timely and effective manner? Can purchases be made without lengthy delays for authorization? Are proper filing and information systems in use? Are staff transferred without reference to local managers' wishes? Can private sector services be contracted as required? Is there good communication with the community? Are there sufficient links with NGOs?
- *Structural capacity*: Are there decision-making forums where inter-sectoral discussion may occur and corporate decisions made, records kept and individuals called to account for non-performance?
- *Role capacity*: This applies to individuals, to teams and to structure such as committees. Have they been given the authority and responsibility to make the decisions essential to effective performance, whether regarding schedules, money, staff appointments,

Source: Potter and Brought, 2004.

The framework prescribes a systematic application of the Capacity Pyramid and satisfying the capacity shortfalls at a particular level of the pyramid before progressing to the next level. For instance, although personal and organisational capacities are closely related concepts and often co-exist, the recruitment of high capacity does not guarantee strengthened institutional capacity. And therefore, this framework shows that recruiting individuals of high capacity into a weak institution does not necessarily translate into improved organisational capacity. Making training of staff a futile exercise when faced with environmental restrictions. Therefore, throwing resources at training courses may only create opportunities for corruption and create the impression that the state or organisation is undergoing capacity building while, in actual fact, it may only be undermining true capacity-building processes (Andrews, Pritchett, and Woolcock, 2013). The need for resilient structural, systematic, and role capacity is at the foundation for capacity. Enveloped in the staff and infrastructure capacity are the workload, supervisory, facilities, and support service capacity. The staff and infrastructure segment form the secondary base whose effectiveness enables the skills segment and requires a solid foundation in the structural, systematic and role segments. The

subsequent segment in the framework is the skills segment which speaks to personal capacity. At the pinnacle of the model lies the tools segments.

## Part II

## The South African bureaucracy case study

Literature on the state of African bureaucracy, according to Von Holdt and Murphy (2007), is divergent; on one side, there is an across-the-board generalisation of African bureaucracies and on the other, a more nuanced approach that at least attempts to identify the relatively effective states. At the same time, Brunette (2013) sees literature categorised into three groups. In the first group, the literature is devoid of critical engagement with one another. Wherein the literature pays no attention to the interrelation between academic and practitioners' experiences (Brunette, 2013). The second group may include the interrelations and the relevant debates but neglects the impact of history in their analysis. Finally, the last group simply sidelines the impact of historical ideas in shaping the debates on state capacity.

While this paper acknowledges that there is a portion of literature that describes the state of African bureaucracies in a positive light (see Mkandawire, 2001 and Chang, 2010), its focus is on the challenges that plague and constrain the bureaucratic and state capabilities (see Chabal and Daloz 1999). Therefore, the paper looks into the part of the literature that concerns itself with the failing bureaucracies and states in the African continent. This, of course, takes into account some of the glimmering bureaucratic beckons as well as the linkage of historical context to theoretical and practical observations. The aim herein is to provide an analysis of the factors that constrain development in the African and South African states by providing an overview based on Von Holdt and Murphy (2007) and Brunette (2013). This paper captures the historical basis for current state bureaucracies, which shape the capacity discourse while also engaging the academic and professional experience of a public servant. The analysis of this section is founded on the sociological analysis of Von Holdt and Murphy (2007) and Brunette (2013)

Von Holdt and Murphy (2007) describe the post-apartheid South African bureaucracy using six key characteristics. After a critical assessment of state and provincial hospitals, Von Holdt identifies attributes that, in many ways, can be extended to the functions of the South African state and bureaucracies in general. These key attributes are class formation, ambivalence

towards skill, the importance of 'face', hierarchy, ambivalence towards authority, and budgetary rituals. Furthermore, Von Holdt's analysis is a generalised high-level overview of key capacity inhabitants within the South African bureaucracies, while Brunette (2013) captures key inhabitants in a nuanced manner. Brunette (2013) eloquently pieces together fragmented literature taking a somewhat different perspective from Von Holdt and Murphy (2007). Brunette's description can be seen as a way of expanding on the key challenges to the South African state's capacity. It is more focused on specific practices as opposed to identifying overarching themes.

The analysis herein details the state of the South African bureaucracies as it was in the period after democratisation. Making the findings, though relevant, are not an updated depiction of the current state of South African bureaucracies. It does, nonetheless, provide a historical basis from which to build an understanding of current state capacity. In the first approach, *Von Holdt and* Murphy (2007) describe the constraint to the South African state and bureaucracy, as previously mentioned, into six stratifies; however, this paper condenses these strata into four key elements.

Firstly, class formation, particularly black class formation, has been imperative to the policy formation process for nationalist thinkers. The creation of a black middle class in order to redress the injustices of the past has required the state to use resources to this end. The use of policy levers, such as affirmative action, has been seen as a strategic tool to empower the historically disadvantaged and lessen white dominance in the economy and the state. This meant that in the early stages of the Black Economic Empowerment – BEE, procedures guiding promotions had little to do with job performance. The process of class formation has been a key feature of bureaucratic functioning.

Secondly was the ambivalence towards skill; the state apparatus in democratic South Africa has been inherited from apartheid South Africa, which leaned on the dominance of white people, Afrikanerdom specifically (Cameron, 2009). As well as the systematic oppression of black people. Apartheid policies prevented black people from gaining modern knowledge and skills systems which, in the case of the homelands, permeated through the operations of bureaucracies. The impact of which has been a sort of ambivalence towards skills and knowledge in democratic South Africa, particularly towards those with high skills gained as a result of apartheid policies. In democratic South Africa is thus conflicted over the meaning of

skill, what type of knowledge is deemed appropriate, and how it relates to race (Makgetla 2007). Consequently, this leads to devaluing some skill sets and knowledge systems, ultimately eroding competencies within the bureaucracies. Disregarding meritocracy opposes the development of the Weberian bureaucracy. It is thus common for even senior bureaucrats to be underqualified or lack the necessary experience to run their department, reinforcing the ineffectiveness of bureaucracies. As with class formation, this attitude towards skills is rooted in nationalism. Much of the dysfunction and poor management in state bureaucracies is argued to be owing to a lack of skills and expertise in the democratic South African bureaucracies (Cameron, 2009).

The adoration for leadership was the third element. While it is important for reputation and authority to be observed, South African bureaucracies hold it in great esteem and have been particularly heightened in the post-Apartheid government. The old apartheid bureaucracies were marked by authoritarian order, and this authoritarianism was entangled with racial discrimination. As a result, there is a culture of excessive admiration towards authority, both administrative and political leadership (Maphunye 2005). This culture also extended through to middle and upper management of bureaucracies. However, it does not always undermine the effectiveness of management and may typically be a required ritual for effective bureaucracy. In instances where it detracted from the objective of the bureaucracies, such as the case in South Africa, it prevents service delivery and undermines attempts to achieve Weberian bureaucracy status. Wenzel, 2007; Butler, 2011; Friedman, 2011 also presents a case of the breakdown in state functions, arguing from the perspective of cadre deployment and loyalty to certain political or administrative leaders.

Lastly, a strict hierarchy in the state and bureaucracies has been detrimental to the development of the state. Von Holdt and Murphy (2007) prescribed rules and strict adherence to those rules as a mechanism to build internal cohesion and enhance organisational and state capacity, as described above. This also applies to the adherence to strict organisational hierarchy, an intrinsic part of a Weberian bureaucracy as well as a key feature in the Apartheid and post-Apartheid South Africa. This attribute may be developmental, but in the instance where it is not associated with meritocracy and is intertwined with elements of class formation, ambivalence towards skills and the adoration of leaders, it becomes an authoritarian hierarchy that hinders development. Such was the case in Apartheid South Africa, and such is the case in contemporary South Africa. The authoritarian hierarchy is

among the deeply embedded legacies of Apartheid in modern-day South African bureaucracies (Butler, 2011; Makgetla, 2007). It is an ongoing pattern that has become extremely difficult to disentangle from the organisational culture in state bureaucracies. In this context, senior officials promoted beyond their competency levels become unsure of their skills, job performance and even the purpose of the jobs, consequently, fear that their authority may be seen to be undeserved, leading to the suppression of problems and the avoidance of challenges. Such bureaucrats make it difficult for subordinates to raise issues relating to the shortfall for the department, as this may be seen to be a reflection of their incompetency. The authoritarian hierarchy ensures that any poor performance or institutional failures are kept hidden at all costs.

The Second approach to state bureaucracy analysis is a nuanced observation of specific practices instead of identifying general terms that overarches these practices. Brunette's description can be seen as a way of expanding on the key challenges to the South African state's capacity, for instance, instead of referring to the adoration of leadership. In so doing, several key practices are identified; however, this paper briefly discusses nine key practices.

Firstly, the issue of cadre deployment has long been used for the ruling party to advance their manifesto; however, in South Africa, it has come to be seen as a detrimental factor in the relationship between the state and the governing party. In the instance of the ANC and their use of cadre deployment, the factionalism within the governing party tends to extend to the state, breaking down administrative activities. This is generally typified during elections, particularly at the provincial and local government levels, where the state undergoes substantial staff turnaround as political appointees are rotated. According to Brunette (2013), the career trajectory of state officials is sharped by political affiliations as opposed to meritocracy. This undermines not only effective career development but the effectiveness of the state in providing service, as well as the ability to hold public servants accountable. Cadre deployment has distorted the accountability structure in the state. It created dual accountability in which officials are accountable to the administrative authority and, at the same time to their political authority. This nexus creates a breakdown in the disciplinary constructs and the decision-making processes of the state. In instances where the political authority towers over the administrative authority, employees may be defiant of their administrative superiors. It is not unusual for an administrative authority to opt out of imposing disciplinary actions. Cameron (2009) argues that for this reason, it has become

difficult to hold cadres accountable. Related to this issue of accountability are the single-party dominance and the inability to draw in communities to facilitate service delivery (Wenzel 2007: 58; Butler 2011; Friedman 2011).

Secondly, the tension between political and administrative authorities is linked to the cadre deployment and the line of accountability (Maphunye, 2005). The political-administrative struggle has contributed to the inconsistency in the delegation of power and the responsibility towards the administrative and the political authorities. It creates an environment in which public servants lack clarity or purposefully undermine the line of accountability. As a result, there is a general lack of accountability and the necessary oversight to ensure a capable state.

Thirdly, the revolving door between state bureaucracies and the private sector has become a common feature in the working of state bureaucracies. Skilled public servants are seen to leave their jobs only to join private sector firms working in close relation to the state agencies or contracted by the very bureaucracy they had just left to on a series of short to medium-term contracts in which they earn significantly more than they would have in fulfilling the same role within the bureaucracy. Not only does this practice erode capabilities, but it also undermines the career path development of committed civil servants (Ibid 930).

Fourthly, the skills flow of public servants from state entities to the private sector, particularly private advisory firms. The mass exodus of skilled personnel and capacities from the state has, on the one hand, justified the implementation of the New Public Management (NPM) framework. The NPM framework is an approach to public administration that emphasizes the use of private sector management techniques and principles to improve the efficiency and effectiveness of bureaucracy (Cavalcante, 2019). In South Africa, the implementation of NPM came after the recognition to build a capable state that could effectively address the socio-economic challenges faced by the country (Mazzucato, Qobo, and Kattel, 2022). The NPM was a significant part of broader public sector reforms aimed at improving governance and service delivery. The framework argues for the outsourcing of capacities where the state lack capacity. Because the state lacks extensive capacity, the state has had to rely on consultants to discharge its mandate. The NPM, on the other hand, is argued to shift capacity away from the state into the private sector instead of building critical capacities in the state. The concern regarding the use of consultants to build state capacity is that some of whom, many do not have knowledge and understanding of the operational

environment of the state or its agencies, including its informal structures, to develop solutions. Often leading to the development of inappropriate systems. What is even more concerning is the use of consultants, by third parties, in influencing public policies and furthering the interest of their private sector clients. A circumstance in which government-contracted consultants act as lobby groups on behalf of their private clients.

The state has often missed the opportunity to build capabilities by retaining vital institutional memories. It has been unable to sustain the performance of routine tasks owing to either a lack of staff or a lack of staff possessing the necessary skills and experience. This has resulted in the fifth issue, further deteriorated by unnecessarily complex systems and procedures; the recruitment of public servants into the various levels of the organisation instead of developing talent from the bottom up; the low staff retention (for various reasons mentioned above); the lack of common training in analytical techniques and normative frameworks. Consequently, generating low compliance with policies, even in departments devoid of corruption. Perhaps a more notable contributor to the loss of institutional memory is the low staff retention rates. Even if there was adequate training and development of staff, the high staff turnover would mean that once public servants are developed, they would simply leave the organisation, along with their expertise. Unless the retention of capable public servants is resolved, the public servants will continue to suffer from a lack of clarity on the functionality of their jobs (Atkinson 2007).

The structure of government, as contained in the South African Constitution, is the sixth issue, as this is argued to be ineffective and undermining efforts to coordinate government initiatives and, in many instances, causing unwarranted financial burdens on the state. The South African government consist of three separate spheres that overlap in some instances. These are the national, provincial and local governments, where each sphere has political and administrative components whose roles and responsibilities are enshrined in the country's constitution. The provincial structure has been argued to be uncertain about its powers and function, particularly where it overlaps with the national government, while the municipalities captured by local governments are often argued to be unnecessary and wasteful. The manner in which the government is structured inhibits the effective functioning of government.

Seventh is the issue of policy coordination. The South African state is infamous for its failure to coordinate, within departments, amongst departments and other government agencies and between the different spheres of government. This issue is well-spoken and extensively captured in literature. The "lack of clear assignment of responsibilities regarding who mediates disputes and who facilitates coordination" (NPC 2011: 365), as well as the allocation of power and clear communication lines, have meant that policy formation does not incorporate the operational environment of each sphere of government. In turn, the provincial and local governments have suffered from underfunded mandates, while the government, in general, has failed to integrate services or duplicate functions, all the while failing to realise the benefits of a positive-sum collaboration. Furthermore, the many independent government agencies increase the difficulty of coordinating cross-cutting policy initiatives (Kraak, 2011; Brunette, 2013). Thus, policies arising from the different agencies often confirm the separatist nature of state agencies. They further show poor communication and understanding of each other's operational practices. As a result, the state suffers from the misalignment between the administration's policy demands and the availability of resources to implement policies.

The national treasury's imposition of fiscal austerities has, in effect, constrained the functioning of the state, which is the eighth matter. Austerities measure starves the state and crowd out the state's developmental objectives. Brunette further argues that cost-cutting initiatives have often led to the loss of critical capacities. The implementation of cost-cutting initiatives crowds out critical capacities and makes little provision for capacity building. The self-imposed fiscal austerities have been burdensome on the state's skills and capacity. This has exacerbated the suboptimal allocation of funds to the public administration.

Lastly, South Africa's rampant inequality is evident in its provision of service. This unequal provision of service is part and parcel of the environmental legacies of apartheid. The separate development agenda of apartheid South Africa saw the state fragmented across racial lines, favouring the white population in regard to service delivery, among many other factors. The separated own-affairs departments and Bantustans draw from a shallow pool of talent. Which meant those regions were poorly resourced and serviced. A similar trend is perpetuated in democratic South Africa and is reinforced by grant allocation based on the infrastructural need of the municipality. As a result, the municipalities in the poorer regions (often in the former Bantustan) are, in many instances, structurally bankrupt and

understaffed, coupled with poor training and development (Makgetla 2007). In this way, to some degree, the geographical inequality of apartheid continues in the modern South African state.

As mentioned above, some of the constraints of the South African state, such as the adherence to strict organisational hierarchy,, may be an intrinsic part of a Weberian bureaucracy and thus developmental. However, in the instance where it is not associated with meritocracy and is intertwined with elements of ambivalence towards skills and the over-esteem of leaders, it becomes an authoritarian hierarchy that hinders development. In the attempt to rid itself of white dominance and institutionally embedded racism, the state had eroded its capabilities. In the process of cleansing itself, the state has overlooked the tension within the nationalist project's attempt at constructing a modern state and the drive to self-determine and assert sovereignty (Von Holdt and Murphy, 2007). The target for a modern state largely subscribed to Western developmental ways and means. Which goes against attempts to assert an autonomous identity. Entailed in the former is the effectiveness of the state and development, while the latter is concerned with the dismantling of apartheid systems that were deep-rooted in the functioning of state bureaucracies while promoting the interests of a growing black elite.

**The political settlement of industrial policy**

Whether a country realizes industrial development primarily depends on the distribution and configuration of power (both in form and informal structures) of different interest groups, to be precise, the political settlement within a society. In the case of industrial development or industrial policy, it is whether the ruling coalitions in the country's political settlement support a particular policy design and implementation. The political settlement of industrial policy is an aspect of industrial development that is often left out of discussions of why policy fails. The political settlement describes how societies work as well as how entities within a society shape economic outcomes subject to the distribution of power within the economic ecosystem. The concept maps groups of power in a particular society and relates it to the capacity to engage and survive the conflict. In other words, "the ability to inflict cost and absorb cost inflicted by an opponent." (Mondliwa and Roberts, 2021:135) These groups of relative power form the mechanism through which economic benefits are distributed within a society; through this mechanism, political settlements ensure that the distribution of

rents and resources is in line with the distribution of power. Wherein the largest share of rents and resources are distributed to the group with the most power.

Political settlement can be understood as the compromise arrived at by powerful groups in a society. The compromises reached by groups in a particular society underpin the institutional arrangements and the effectiveness or enforceability of policies (Mondliwa and Roberts, 2021). The framing of political settlement, particularly in policy design and implementation, allows for the assessment of the workings of different regimes and shows how the distribution of power within an ecosystem influences institutional dispensation and the resulting economic output. The political settlement underlining South Africa's industrial development manifests in the struggle for value capture amongst the key interest groups that engage in contestation for power, resources, rent and the influence of policy design and implementation. These groups consist of large businesses that were benefactors of apartheid-era support; the previously disenfranchised black capitalists; industry associations, trade unions, government, and even government departments. To understand economic and social policy discourse, it becomes important to investigate the political settlement of industrial policy between big business and the state across state agencies and different spheres of government (Pearson, Pillay and Chipkin, 2016, Von Holdt, 2010a). The interplay between these agents is dynamic and fluid. Wherein no one group has had absolute power, and power has shifted amongst coalitions in the interest groups over time. In addition, the relative efficiencies in managing rents and resources have varied depending on the controlling coalition.

# Chapter Four

## Results and Data Analysis

### Training and capacity

It is often argued that the failure of the state to industrialise is due to weak capacity amongst bureaucrats and state institutions. In the South African context, these failures are also ascribed to some of the attributes discussed in the previous section. This argument is often made, even in the case of the DTIC and industrial development-related state agencies, without being tested, yet it has had traction in capacity discourse. While this may generally

be true for many state bureaucracies, it has not been tested for the DTIC. Instead, the DTIC has recruited and trained personnel with high capacity, shown by academic qualifications and expertise in the relevant field, to strategic positions in the organisation (*IV 3; IV 8*, interviews). Industrial development is a key tool in which South Africa aims to create employment, reduce inequality, and drive economic growth. It has thus become critical for the South African state to develop capacity in industrial capacity. This has subsequently led to the creation of initiatives or organisations shown in Table 3.1 for states to build capacity in industrial policy.

Table 3.1: Key Capacity-building Initiative and Organisations

| **Capacity building initiative and organisation** | **Description or initiative/ organisation** |
|---|---|
| **Trade and Industrial Policy Strategies (TIPS)** | The Trade and Industrial Policy Strategies (TIPS) is a not-for-profit economic development think tank that was founded in 1996 and funded by International Development Research Centre (IDRC) to support the DTI, in particular, in policy development. TIPS has since moved to work with other international donors, private sector entities and development agencies. It has been the leader in Industrial policy matters in South Africa and provides capacity-building in industrial policy through its training and workshops and its support of other government agencies (i.e. The National School of Governance). In recent times it has become the custodian of the African Programme of Rethinking Development Economics (APORDE) programme, another capacity-building initiative that will be discussed below. It also provides indirectly through policy research for the DTIC and other entities, as well as through internships aimed at training graduates. |
| **African Programme of Rethinking Development Economics (APORDE) programme** | Inspired by Cambridge University's Advanced Programme of Rethinking Economics, the African Programme of Rethinking Development Economics (APORDE) was created in 2007. The program is a two-week course on industrial policy, financialisation, rural poverty and other development issues. |

| | |
|---|---|
| | Participants of the programme benefit from workshop seminars provided by local and international thought leaders in industrial development. The programme generally targets members of the DTI, trade unions and federations, policymakers, researchers, as well as civil society and scholars. The programme introduces major concepts of industrial development such as state building, innovation, developmental state theory and progressive industrial policy to participants and in so doing; it embeds new ideas in the minds of key stakeholders and begins to challenge the reproduction of mainstream knowledge. |
| **The Corporate Strategy and Industrial Development (CSID)** | (CSID) was a research organisation based at the University of the Witswatersrand (Wits) in Johannesburg. The CSID had worked to support the DTI in its development of the NIPF and IPAPs as well as provide research and research capacity to the DTI, particularly those related to industrial policy, macroeconomic industrial issues, as well as corporate restructuring. In its more direct state capacity-building programmes, The CSID then developed pluralistic economics curricula at honours and masters levels called Development Theory and Policy, which would then develop a new class of heterodox trained economics students from which the DTI could recruit. The curriculum was a departure from the traditional mainstream economics that is offered by many economics departments in South African universities. It offered a fresh heterodox and pluralistic take on economics teaching. In addition, the CSID provided a diploma course with The Wits school of Policy and Development Management (now the Wits School of governance). Unfortunately, the programme collapsed due to the unclear roles of the CSID and the funding responsibilities of the DTI. However, the economics programme coming from it survived and continued to develop heterodox thinkers. |
| **The University of** | Developed in 2017 by UJ and the DTI to develop capacity in |

| | |
|---|---|
| **Johannesburg's (UJ) Industrial Development Think Tank (IDTT) and Centre of Competition Regulation and Economic Development (CCRED)** | industrial development and competition regulation. Similar to CSID, the IDTT and CCRED provide research capacity to the DTI and develop a wide range of academic courses in industrial policy and competition regulation. These included discussion forums, workshops, short courses and more rigorous postgraduate courses. Most of these are underlying a pluralist approach that incorporated macroeconomics theory into industrial policy, a concept not often explored in economic curricula. In addition, it provided research capacity and capacity building |

Source: Author based on interviews

While a large share of researchers are economics graduates, a smaller share of the staff have a post-graduate degree in economics. Most are trained in neoclassical economics doctrine, and their training in industrial policy tends to be focused on the firm level (*IV 9*, interview). The teaching of industrial policy is divorced from macroeconomic theory. And while in practice, industrial policy fades away when taking a macroeconomic overview. This type of training is primarily founded in flat [neoliberal] industrial policy. The narrow focus on neoclassical economics training has historically limited the capabilities of researchers to develop creative solutions to industrial policy (*IV 9*, interview).

**Institutional capacity**

The DTIC sector desks, for instance, are predominately led by highly qualified managers who are regularly engaged in training and development (*IV 8*, interview). But their training is outwardly not fundamentally improving the performance of the sectorial desks. The issue herein is that these divisions are seemly unclear on the role and mandate of their divisions. Consequently, there exists a gap between what individuals perceive as the intended outcome of their role within the system. Thus, The challenge lies not in the individual capabilities but in the institutional dynamics that influence organisational capacity (*IV 3*, interview). In the case of the sector desk, the apparent lack of clear purpose leads to confused roles. The sector desk suffers from a clear purpose from which stakeholders can derive their mandate. These situations highlight how individuals of high capacity operating in a weak institution do not necessarily translate into improved organisational capacity (*IV 3*, interview). Instead, it may

only weaken the perceived capacity of the individual. This challenge continues to persist regardless of the Industrial Policy regime in place. Therefore, the transition from the IPAP to sector masterplans, which were intended to fundamentally restructure the domestic economy, may consequently result in the continuation of the same sectorial strategic practices (*IV 3*, interview). The sectorial strategies, as crafted in the IPAP, merely continued into the new sectorial masterplan regime, and consequently, the master plans could potentially be reduced to an IPAP framework with slight modification on the fringes. The IPAPs are seen to not create industries but rather attempt to remove bottlenecks or put off the collapse of the existing industrial base.

Furthermore, the organisational structure of the DTIC may not support the individual capacity to effectively do industrial policy (*IV 2, IV 3, IV 1, IV 6,* & *IV 8*, interviews). For instance, the Deputy Director Generals (DDGs) of each department have absolute power and control of every aspect of their area of work. Resulting in a silos approach to policy formation and implementation, wherein each department developed policies that do not take into full consideration the specifications of the other. Despite the sitting of the executive board of the DTIC (which consists of the DG and the DDGs) that is intended to harmonise functions of the different divisions. This, in turn, causes poor coordination of policy design and implementation within the department. Furthermore, the intradepartmental coordination of work functions has been a challenge for the DTIC (*IV 8*, interview). Even though each DDG operates on the same broad macroeconomic charge rather than just a microeconomic framework, the different possible methodology creates incoherency in policy formation, causing the formulation of mismatched policies (*IV 2, IV 3*, interviews).

Furthermore, Ministers and DGs are treated first among equals *(IV 3*, interview). The internal coordination of the DTIC has been a persisting challenge, so much so that the DTIC has, in recent times, endeavoured to overcome the silos' approach by introducing cross-cutting measures to guide each internal division. This approach to integrating departments is set to succeed in practices set by NIPF in which the industrial policy division coordinates the work of each division of the DTIC in its overarching plan.

The flaw in institutional capacity is further worsened by the lack of continuity of programmes[3] *IV 1, IV 6,* interviews). The development of capacity building in industrial policy strongly relies on the relationships between individual technocrats in state agencies and academia or private research institutions. When key technocrats move from one department to another, the existing capacity-building systems or initiatives collapse, and priorities, as well as resources, shift or cease to exist. This movement of technocrats is particularly clear during periods of elections or changes in political authority. The lack of continuity due to frequent change in office bearers or weak leadership in state bureaucracies do not allow senior bureaucrats adequate time to institutionalise practises or solidify changes in their departments. Even after their departure from state departments, senior bureaucrats' short live tenure does not allow capacity-building processes to persist (*IV 1, IV 9*, interviews). Nevertheless, the lack of continuity cripples the ability to institutionalize capacity-building processes or the building of sufficient institutional memory.

**Policy Research and the role of the private sector researchers**

At the end of apartheid, there was a move by the old independent critical thinkers - who, during apartheid, tried to make sense of the peculiar political, social and economic trajectory of South Africa - to being on the payroll (in one way or another) of the government (*IV 1*, interview). These thinkers shifted from trying to fully understand and articulate the challenge faced by the country and its people to trying to provide ready-made solutions at a price (*IV 1*, interview). Some of these thinkers not only believed in the idea that government did not need the white apartheid-era bureaucrats, they believed that government could simply adopt policies, from the West, together with key performance indicators, as a solution to the country's problems (*IV 9*, interview). This phenomenon presented itself in a wide range of issues, including economic and social policies (*IV 9*, interview). The problem with this shift is that the complexity of development, in many instances, requires a comprehensive understanding of developmental issues, and one ought not to be bound by attempts to provide solutions. Thus, the drive for these thinkers to also provide solutions brings about some impoverishment in the understanding of developmental issues. In addition, these thinker-turned-consultants' general tendency is to treat the commissioner of research (the DTIC) as a client and provide research that aligns with the clients' narrative or objectives. In so doing, the researchers are able to solicit more research projects from their client, the DTIC. Whereas

[3] Whether it is capacity building programmes or industrial development initiative

honest reporting, which highlights the internal shortfalls of the client, may not encourage an enduring working relationship for the research consultant. Therefore, the research consultant may be encouraged to provide the client with less than accurate analysis, seemingly steeped in global common sense (*IV 1*, interview).

**Throwing the baby away with the bathwater**

The disdain for the old apartheid state and how it operated to the exclusion of the majority and the use of violence is undeniably warranted. However, the approach by the ANC-led government to throw them away with the bath water is debatable (*IV 1*, interview). Although the apartheid state had limited capacity and capabilities, the then-new government largely discarded the capacity. By dismissing the old apartheid bureaucrats and replacing them with new (unexperienced) bureaucrats (*IV 3*, interview) along with the introduction of the New Public Management (NPM), the institutional memories of government departments as well as the modest capabilities that existed at the time were weakened (*IV 1* interview). Capacity building requires time and institutional memory. Thus, the loss of institutional memory and capability in state bureaucracies represented the loss of opportunity to develop capabilities.

The introduction of the NPM, driven by the old independent thinkers during apartheid, called for the drawing-in of expertise from wherever it existed, whether from within the government or externally. This resulted in a move of capacity (in the form of technocrats) that existed internally to set independent consultancies (*IV 1*, interview). The experienced policymakers viewed external contracts as more lucrative. The tendency to systematically search outside the state for capacity has led to a further hollowing of the state's capacity. By making the state leaner, reorganising work and drawing on private sector expertise, the NPM has driven critical capacity to move out of state institutions. These critical capacities could have been further developed; instead, the NPM has diverted attention away from building capacity (*IV 1*, *IV 9*, interviews).

**Outsourcing capabilities**

While commissioning policy research can be seen as 'outsourcing' or 'privatisation' of industrial policy research, it holds potential for state policy learning and capacity building (*IV 3*, *IV 2*, interviews). Whether this is, the case is a matter of interest. Even more important is whether the state is able to take charge of commission research to assure the effective utilisation of research conducted by private-sector research institutions to build state capacity

(*IV 9, Iv 6*, interview). The policy research in these private research institutions in South Africa is extensive, as in many other high-middle countries such as Chile, Vietnam, Argentina, Brazil, China and Singapore (*IV 3*, interview). High-middle-income countries tend to have a high capacity in the private sector to conduct policy research (*IV 3*, interview). While on the other hand, government agencies in these countries tend not to lag in their capacity but to be resources constrained as well as have different organisational priorities. South Africa has a plethora of private research institutions (including those based in institutions of higher learning) on which government departments often rely for research.

Even so, the tendency (risks) of the government when commissioning policy research is to commission conceptualise aspects (*IV 1*, interview). That is to say; government tends to outsource the questions to a problem simply because it often does not know which questions to ask. There is a clear lack of capacity in many government departments to ask the right questions; therefore, government agencies look outward not only to develop solutions but also to determine the right questions to ask (*IV 1*, interview). The danger of this approach is that where there is no clear understanding or purpose, the state, in effect, risks outsourcing policy design to consultants instead of leveraging their expertise and skills. The policy design from outside the state structure often leads to generalised outcomes with inappropriate recommendations concerning the operation of the particular state agency (*IV 1*, interview). Consequently, policy documents do not have practical applications and remain just that, policy documents. If the critical matters are not addressed, it is unlikely that the recommendations of commissioned research report be implemented. What has often been interpreted as policy incoherency is, in fact, a sign of policy documents not relating to actual policy. That is, policy documents are not so impractical that they are completely estranged from reality but that there is no meaningful integration largely due to the influence of external researchers and their understanding of government structures. Outsourcing of capabilities could be developmental when there is a need to support the department's research activity rather than being a systematic solution to a lack of capacity.

Even so, the research capacity in the private sector in South Africa is key in building state capacity (*IV5, IV 2, IV 3*, interview2). Overseeing policy research would allow the DTIC to prioritise other activities, such as the coordination of policy, and deploy resources accordingly. After all, an overwhelmed bureaucracy operates off stretched capacity; therefore, outsourcing research may lessen the load and allow the bureaucracy to focus on

strategic functions. It thus seems sensible to pass the burden of the policy research value chain to policy advisory firms and think tanks, which are specialised and not constrained by the same limitations faced by researchers and policymakers in the DTIC. The specialised nature of these private institutions and, in some instances, their proximity to industries and stakeholders allows for a better understanding and insight into policy implications than government agencies. The DTIC does not currently have this sort of specialisation and seeks to draw from it to develop practical policy (*IV 3*, interview). What is crucial for the DTIC is for it to leverage the research done by private-sector researchers and implement mechanisms to prevent outsourcing of policy design. In this way, policymakers are able to use the commissioned research to inform policy design, amendments and implementation, as intended by the DTIC. And in this regard, South Africa is no different from other high-middle-income countries (*IV 7*, interview). The concern is whether the government can leverage the external research capacity without eroding existing capacity within government agencies or allowing external consultants to design policy directly or indirectly (*IV 8*, interview). The challenge herein is for the DTIC to determine the balance between outsourcing and maintaining policy research and design integrity so as to make outsourcing policy research developmental instead of de-capacitating. And just as excessive responsibilities erode capabilities, the opposite is true; reduced responsibilities (by commissioning research) allow for capacity building in strategic areas of industrial development. Through internal structures such as the Economic Research and Coordination unit and other structures of the DTIC, the DTIC could monitor and critically engage commissioned research, reinforcing the capacity of the state instead of eroding capacity. Continuous training, whether through policy dialogue or interactions with research partners, holds the potential to develop and keep policymakers conversant with policy discourse and, in some instances, broaden their scope of knowledge (*IV 8*, interview). This nexus between outsourcing and capacity building, of course, functions where policymakers and researchers themselves are able to conduct the same research and are in a position to analyse, interpret and apply existing research.

The unwillingness or lack of critical engagement of policy research has, in many instances, led to the isomorphic mimicry of policies. The term isomorphic mimicry is a biological term that describes the process in which living organisms evolve to look alike without being related or a process of organisms mimicking one another to gain an evolutionary advantage (Krause, 2013). However, in this context, it refers to the act of organisations adopting world

best practises without modifying them to best suit the environmental context or to align them with the existing capabilities in the economic context. This is a conventional act that is practised in many government departments in developing economies across the world. National economic plans, macroeconomic policy and industrial policy, are littered with features of uncontextualized "world best practices" simply because it is easier to adopt the existing policy as opposed to designing new policies. It is often the case that researchers and policymakers, after undertaking studies of other regions, attempted to apply similar policy reforms in hopes of achieving similar outcomes. It is easier for policymakers to say that because the set policy has worked in one country, it could work in another. The effect of applying world best practices that are not well-matched would often erode existing capabilities in the domestic environment.

**Implementation and coordination of economic policy**

Separate from the challenges of isomorphic mimicry in the design of industrial policy, is that much attention has been paid to capacity building in the design of industrial policy, but very little translates into the implementation of policy (*IV 1, IV6, IV 9*, interviews). This gap results from issues of power between key policy stakeholders. State capacity building, particularly in the implementation of policies, tends to comprise political and ideological mechanisms for operationalising policies between state agencies and across different spheres of government (*IV 3*, interview). The concepts of state capacity building hold an implicit preference for a particular set of social, political and institutional arrangements (Hameiri, 2009). Essentially making state capacity-building a process underscored by dense political undertones. Policy implementation space is built on negotiations and requires buy-in from businesses, labour, civil society and other government entities and from within the government for implementation success. This political economy aspect of industrial policy is often left out of discussions of industrial development. Yet, the political economy aspects are key in shaping industrial policy (*IV 3*, interview).

The first and obvious place to assess the root cause of policy failure (in relation to operationalisation) is often in the formation of policy. However, as already noted, much is done to increase the knowledge capacity of individuals and institutions. But the fact of the matter is even if the research and evidence are clear in identifying bottlenecks or mechanisms to develop [new] industries if there is no buy-in, for whatever reason, the policies arising

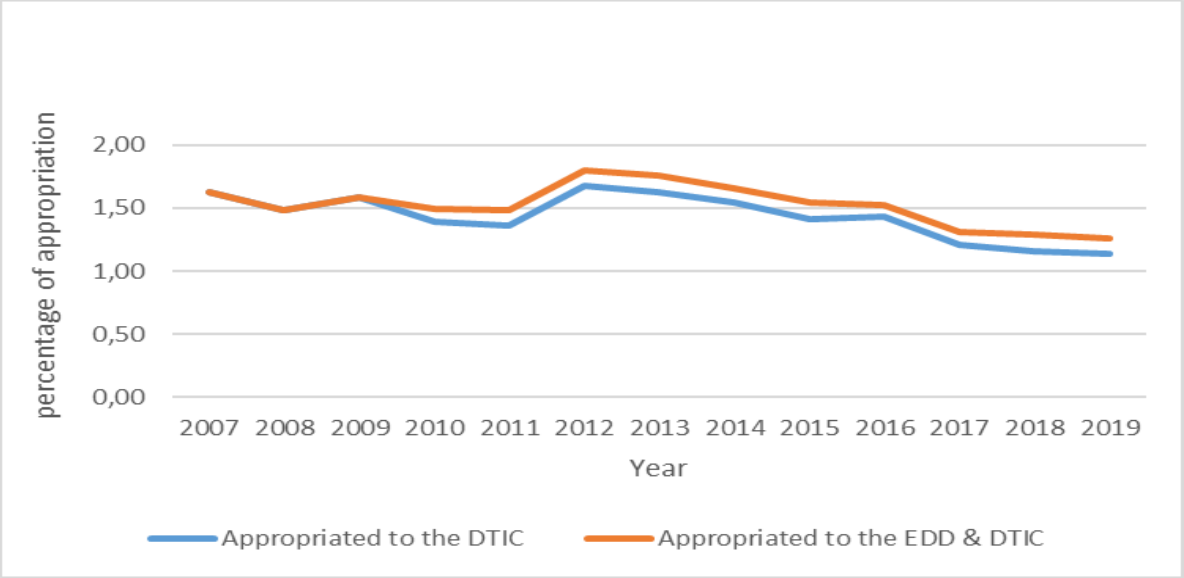
from the evidence-based policy formation may not see the light of day. Industrial development is thus not merely an academic exercise but a process involving political dynamics and requires skilled negotiating. Therefore, policymakers, in addition to possessing adequate academic capacity, also require the support of a strong institutional capacity to convince and attain buy-in from the relevant stakeholders in order to translate their policy into action. The latter may well be the biggest challenge to Industrial policy. Building an efficient [economic] bureaucracy is a political process. And in the South African context, there have been assertions of such developments (building a capable state), but little has come out of efforts to achieve this end.

**NT v DTIC**

Despite the challenge that plagues the institutional capacity of the DTIC, the DTIC has, over time, showing a high capacity to do industrial policy (*IV 2*, interview). The challenge to test the true institutional capacity of the DTIC lies in the inadequate financial support from the National Treasury arguably because, at a political level, there is a preference to redistribute state income to improve the standard of life rather than restructure the economy (*IV 3*, interview). In the 2022/2023 business year, the DTIC's budget amounted to ZAR 11 Billion, accounting for 0.6% of the national government budget, ranking 15$^{th}$ largest government department according to government budget allotment (TIPS, 2023). Since the global financial crisis of 2008, austerity measures have curtailed jobs and capacity-building initiatives in industrial policy, and again in more recent times with the coronavirus pandemic. As a result, resources have shifted away from increasing capacity in industrial policy or industrial development (*IV3, IV 4, IV 8 & IV 9*, interviews). Even if the DTIC had the right capacity to do industrial policy, if it does not receive the necessary resources to do industrial policy, the capacity of the DTIC would not truly be tested. Fiscal austerity measures have kept absolute expenditure in industrial development relatively constant since 2007; however, it has declined as a share of GDP, as shown in Figure 1. Even if the DTIC had the necessary skills, sufficient knowledge set, and the appropriate institutions to build capacity, if the financial resources allotted to it are not supportive of the goals of the bureaucracy, the bureaucracy could be rendered ineffective (*IV 1, IV 2 & IV 9*, interviews). If a bureaucracy is capable and has high-capacity employees, where it is constrained by resources, its ability to achieve is lessened. Another clear illustration of the mismatch in systematic capacity

building. This underlying factor makes it complex to judge whether the DTIC has sufficient capacity when it does not enjoy complimentary fiscal support.

Figure 1. The budget share of industrial development in South Africa




*Source*: Calculated from data collected from the South African National Treasury Appropriation Bill. Downloaded from www.treasury.gov.za in January 2022.

The share of the National Budget appropriated to government agencies tasked with industrial development (the DTIC and EDD) has had a downward trend since the inception of the NIPF in 2007 and the iteration of the IPAPS, a trend also noted in Zalk (2014). The EDD came into existence in 2009, after separating roles from the DTIC, only to be merged with the DTIC in 2019. The domination of the NT and its somewhat hostility to industrial interventionist policy has played a critical part in the inadequate support, whether financial or otherwise, of industrial policy. This a concerning trend, considering that wherever there has been successful industrialisation, there has been a conscious support of the industrial policy.

Since policy decisions are de facto made through budgetary processes, the relationship between the NT and the DTIC can be seen as one of a super ministry and a subordinating ministry. This relationship is key to understanding the allotment of state funds to the DTIC or policy support from the NT. The NT perceived scepticism of interventionist policy and unrelenting commitment to the neoliberal framework limits the DTIC's capacity to effectively implement industrial policy (Pearson, Pillay and Chipkin, 2016). The challenge to test the true institutional capacity of the DTIC is founded on its inadequate fiscal support

from the National Treasury. Through fiscal measures, the NT either endorses or rejects policy. Industrial policy in South Africa has not been given the appropriate level of backing it requires to achieve structural change. It does not benefit from crosscutting supported enjoyed by the macroeconomic policies or considered in conjunction with macroeconomic policy. Whereas macroeconomic policies are fundamental to national economic discourse, industrial policy, on the other hand, has merely been concentrated in the DTIC (Pearson, Pillay and Chipkin, 2016). The conflict in policy regimes between these state bureaucracies only highlights the challenges of industrial development and the underpinning of political settlements within government departments.

**State capacity and policy coherency**

It has become clear that in the context of economic policy and bureaucratic hegemony, the NT has been perceived to tower above all other state agencies (a point also noted in Padayachee and Sherbut, 2007; Pearson, Pillay and Chipkin, 2016; Segatti and Pons-Vignon, 2013). The NT has been seen to embody Weberian bureaucratic traits. It is not questionable that, intellectually, the NT, together with the SARB, are sites for potent capacity and supra ministries of economic orthodoxy, indicative of their determination to achieve fiscal prudence and the maintenance of the inflation-targeting framework. The policies from these institutions percolate through the bureaucratic hierarchy to dominate the prevailing policy paradigm. At the same time, the DTIC has been perceived, whether justifiably or not, to be a capacity constraint, both in research and design and implementation of policy and has been seen to regularly outsource [industrial policy] capabilities to private consultants. Indeed, The DTIC faces constraints to its capacity. However, these are not particularly capabilities of bureaucrats, as may be generally perceived. Certainly, the training in research methodologies, policy evaluation and implementations can be improved upon. But amongst the fundamental constraints concern issues of the internal structure of the bureaucracy and interagency. That is the systematic and structural capacities of the organisation, the decision-making processes and flow of information and resources inside the DTIC and between other state agencies, and the power structure between state agencies and spheres of government. The research capacity of individual technocrats is only secondary to systematic and structural capacities. It is thus only logical that if the national driver of industrial policy is constrained, then the state's industrial policy will also be constrained. The state is found to not possess sufficient levels of these capacities to effectively do industrial policy. Without the necessary levels of systematic

and structural capacities, capacities in staff, infrastructure, skills or even tools become redundant. These other capacities depend on the existence of the appropriate levels of systematic and structural capacities.

In addition to the struggle for policy supremacy between national government departments, there is the issue of which sphere of government is best positioned to support industrial development. In this paper, the discussion of industrial policy has been from the perspective of policy operation at a national government level. It is important to note that industries are located within local government or on provincial territories, where the national government is often administratively too far from firms to be sectorally embedded. The national government has no institutional intimacy to appropriately monitor or respond to the need of the individual manufacturer. The distance between the national government and firms limits the learning and effective implementation of industrial policy. While at the same time, this challenge can be overcome by assigning the responsibility of policy to the provincial and local government, argues Morris (2010). In line with this argument, the provincial and local governments are more in tune with the intimate needs of firms operating in their locality than the national government. Therefore, they are best positioned to implement industrial policy. In this way, Industrial development is directly affected by interventions in other spheres of government. However, this argument neglects the capacity and embeddedness to formulate and implement policy in the different spheres of government. While local government, as a way of example, has institutional intimacy with firms, they are often characterised by highly incompetent bureaucrats and are centres of corruption. They typically embody the attributes of bureaucracies described in previous sections. It can be argued that it is for this reason that the DTIC has restricted the influence of industrial policy formation and implementation within its bounds. This situation exemplifies the determination to “safeguard” the industrial policy formation process from not only other spheres of government but from other government departments. At the national government level, the DTIC has resisted engagement and the relinquishing of power to other spheres of government and government departments in the formation of policies, which in turn has limited the DTIC’s ability to obtain buy-in and cooperation for the sake of successful implementation of industrial policy. The exercise of building state capacity in industrial policy is, at its core, a function of transforming a state or a way of producing and reproducing political settlement in a society (Mondliwa and Roberts, 2021). To this end, the state is required to strategically organise its functions that determine

how an organisation responds to various external variables, particularly market conditions as well as internal state variables (Nelson and Winter, 1989).

**The challenges of a fragmented state capacity**

Linked to the issue of political settlement in industrial policy is the issue of fragmented state capacity. *IV 3* (interview) claims that the state has been deliberately arranged to be uneven and fragmented by the apartheid government at the end of its tenure, with the aim of inducing confused economic reconstruction in the new democratic dispensation. However, where there has been strong business interest, there has been relatively high capacity and continuity of policies, especially in the macroeconomic policy and in pockets of industrial policy. The National Treasury and the South African Reserve Bank are examples of institutions whose capacity, to some extent, remained intact post-apartheid. The two policy agencies were central to the interest of large South African businesses as well as the international development community. Since the transition, the NT has been central to integrating different economic and geographical administrations inherited from the apartheid government. The capacity of NT has often surpassed all other state agencies. The NT has been renowned for its relatively efficient bureaucracy and elements of meritocracy, premium skills and expertise and, to some extent, a greater level of intradepartmental coherency, perhaps to a lesser extent in recent years, be that as it may, many state agencies still lag behind.

*Legislative solutions*

Efforts to overcome fragmentation and build broad-based capacity in policy were presented in the form of an attempt to develop an industrial policy act. This act was intended to deal with issues of fragmented state capacity in industrial policy by setting up a legal requirement forcing departments to coordinate and align, in turn breaking down silos and forming coherent policy. However, according to *IV 3* (interview), the formation of such a legal framework collapsed when senior bureaucrats in the DTIC realised that meant surrendering some of their policy formation authority to technocrats in municipalities and other national departments. As a result, the legislation failed to see day light. As it stands, current legislation is unable to support the formation of the kind of infrastructure that will allow for communication between departments through the policy design, monitoring, implementation, and evaluation process. The collapse of the Act is a clear illustration of the strong tendency for bureaucrats to protect their territory from perceived threats, including other government

departments. Just as the NT resists threats of interventionist policy, the DTIC resists threats of decentralised policy formation. To this extent, there tends to be push-back to perceived threats to the supremacy of national or provincial state agencies. *IV 8* (interview), on the other hand, argued that the problem lies not with the current legislature and what it does but rather with what it fails to do. Arguing that the country already has a plethora of legislation, with varying extents of implementation success. It does not require additional legislation. Instead, it requires an amendment of current legislation to support the trajectory of industrial policy. This is despite current legislation predating 1994 and existing in a completely different economic landscape.

***Neoliberal autonomy v embeddedness***

*IV 1* (interview) argues that public agencies ought to integrate the [semi]- autonomous capacities that exist around the state, the DTIC in particular. For instance, the incorporation of research institutions such as the Trade and Industrial Policy Strategies (TIPS) or the International Trade Administration Commission (ITAC) would significantly increase the capacity of the DTIC. Through setting up a range of autonomous and semi-autonomous bodies such as ITAC to support the function of the state, it is assumed that there is sufficient capacity in the state to leverage off work done in these [semi]-autonomous institutions in order for the state to perform their duties. These assumptions may hold in the case of advance economies such as the US or the UK, but it is not always the case in the South African state. The setting of tariffs, for instance, provides a textbook example that illustrates this point. Tariffs are set through ITAC, a semi-independent institution that is linked to the DTIC. The ITAC independently review applications for tariffs and provide a set of recommendations. This structure offers the impression of a transparent and neoliberal "good governance" framework. Still, this framework can be seen to remove the capacity and responsibility of actually understanding what is happening in different sectors of the economy from the DTIC. Under the prevailing structures, the DTIC depends on recommendations made by several semi-autonomous structures that have taken on the responsibility of understanding the needs of different economic sectors. Effectively the DTIC has no clear information on the needs of the sectors. Conversely, according to *IV 2, IV 3, & IV 4* (interviews), an integrated approach to policy research would (and has in the past) only divert the highly skilled, high-capacity researchers away from policy research and design into supportive roles for senior officials. It was for this particular reason that the likes of TIPS and ITAC were created to provide

external support in research capacity and capacity-building processes. The external supportive measures ensure that the DTIC is able to pay increased attention to implementation issues and research oversight as opposed to focusing on the finer details, which may further detract resources. Still, it is justifiable for one to ask why advance economies have policy capacity within public institutions. What allows them to successfully integrate capabilities into the state agencies?

# Chapter Four

# Conclusion and recommendations

## Conclusion

Industrial development has been rather uninspiring in South Africa. Its objectives have proven hard to attain as the share of manufacturing to GDP, and the share of manufacturing labour to total labour continue to fall. The failure of South Africa to realise its developmental aspirations has shown to be a complex matter that cannot be ascribed to a single factor; rather, it is a result of a multitude of overly intertwined issues. These attempts to unravel have proven futile, as determining which issue matters the most or requires the most attention is an even more complex assignment. Entangled in this complexity are questions underlying state capacity, which oftentimes tend not to be treated with sufficient analytical rigour but rather as an opportunity for consultants to sell a solution to the government. With this background, a study of the state's capacity to do industrial policy became necessary. Evaluating state capacity and capacity building in the South African industrial policy has required the balancing of microeconomic dynamics involving institutional capacity, linking the macroeconomic and meso-economic factors of the political economy of industrial development, and locating the private sector in the capacity-building discourse.

At a microeconomic level, DTIC has the shown capacity to do industrial policy, but it faces critical obstruction to organisational capacity. Underlying the organisational is the need to recognise that the efficiency of an administration is a collection of capacities and not the development of a particular capacity. An organisation may require capable individuals as a building block to achieving efficiency. But the collection of individual capabilities does not ensure a capacitated bureaucracy. Notable in the constrain to capacity in the organisational structure of the DTIC and the state is the inadequate flow of information within the

department and between departments. Nonetheless, the DTIC and, by extension, the state has some capacity to do industrial policy, though fragmented across sectors and across spheres of government. Furthermore, the bureaucratic supremacy of the NT and its deep hostility toward industrial interventionist policy has also played a critical role in constraining industrial policy and industrial development.

The key drawback of development is the problem of limited resources. Resultantly, governments are often faced with constraints on resources to engage in conducting research. Therefore, the presence of strong research capacity outside of government in developing countries forms part of building state capacity for the state to engage in industrial policy formation. Many developing countries that have had successful industrialisation have had significant capacity outside of government to do research. The concern should herein be whether the government can use external researchers to enhance the capacity and capability of the state as opposed to eroding state capabilities and capacity. The state needs to balance between enhancing existing capacity and drawing on private sector capacity, and it is required to monitor its reception mechanism of using external researchers. If the state does not have the necessary mechanisms to support the effective use of external capacity to feed into policy development, it risks the loss of capacity to the private sector and the weakening of institutional capacity. The correct use of outsourced research can be mutually reinforcing.

**Recommendations**

The DTIC, in its approach to improving the implementation of the policy, should focus on identifying and testing policies and building coalitions within and outside of government to gain support in implementing industrial policy. The DTIC could develop specific costed policies after the commissioned research is received and consolidate the political settlement of industrial policy. Without high institutional capacity and a supportive political-economic environment, the capacity to effectively do industrial policy cannot exist.

A key blockage to the implementation of industrial policy has been the centralisation of industrial policy in the DTIC. The formation and implementation of industrial policy need to be decentralised across all government departments and different spheres of government. In this way, a fragmented state of industrial policy can be brought together to create a coherent industrial policy with the buy-in of stakeholders.

1. The alignment of industrial policy with macroeconomic policies. This entails an equal foot partnership between the National Treasury, The South African Reserve Bank and the Department of Trade, Industry and Competition, in which members of this partnership engage in regular consultation with one another. This sort of partnership would allow for industrial policy integration and alignment with macroeconomic policy.
2. Increased attempts to align industrial policy and other [economic] policy, across different spheres of government, by allowing staff training, funding, and increased flow of information and other elements of capacity building in a coordinated and systematic manner between departments, provinces, cities, and especially municipalities.
3. To further build capacity within the DTIC, a mentorship programme for future leaders in the DTIC should be developed, wherein senior or highly-ranked outgoing bureaucrats mentors identified potential leaders within government agencies.
4. The state should engage in extensive consultation when undertaking industrial policy formation processes; this consultative effort could be further supported by the Industrial Policy Act, which would foster state-wide participation in industrial policy development and implementation processes.
5. The development of a few targeted industrial policies, with clear policy outcomes instead of an all-encompassing or widespread industrial policy. That is the development of a few comprehensive master plans as opposed to developing a master plan for each sector. The latter risks spreading capacity thin over several sectors.
6. The development of a live (or frequently updated) dashboard of all key industrial policy activities. The dashboard should monitor the progress of such activities and be made available across divisions of the DTIC and other relevant stakeholders for scrutiny. This would allow for increased follow of information between internal departments, ensure ongoing monitoring of key policy activities as well as improve transparency.
7. As it stands, the NT, a true fund allotment, coordinates all policies across the government. In this way, NT can be seen as both referee and player in coordination and implementation. And so, the development or strengthening of national coordinating bodies such as the National Planning Commission with the aim to take over from the NT as the referee of national policy coordination.

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