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Article

Modelling South Africa's Economic Transformation and Growth: A Prospective and Retrospective Analysis

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Abstract

The economic downturns in South Africa present a significant threat, with the potential to disrupt the nation's notable advances in addressing the persistent challenges of high unemployment, widespread poverty and stark inequality. In the absence of substantial and extensive structural transformation, South Africa's aspirations to achieve its ambitious development goals may remain unattainable. Building on the precedent of a blend of literature review, comprehensive ex post analysis, and applied general equilibrium modelling tailored for ex ante assessments, this paper assesses options and impacts of alternative ambitious developmental interventions. The results indicate that, despite implementing a variety of strategies, there remains a disheartening underperformance in economic indicators. However, ex ante evaluations indicate that with targeted interventions and supportive government policies, the country can achieve economic growth and job creation. Simulation results identify sectors of personal and social service activities, transport, finance, and insurance as having the most formidable potential to significantly reduce unemployment while simultaneously catalysing robust economic growth. These pivotal sectors, nestled within the broader services and industries, are uniquely poised to bolster overall productivity and diminish unemployment, while adeptly absorbing a considerable influx of highly educated and skilled labour. This suggests that South Africa can decisively accelerate its economic progress by embracing a dual-pronged approach: fostering structural shifts towards manufacturing and services, while steadfastly advancing the upskilling of its dynamic workforce.

Keywords: economic transformation; stock tacking; economic growth; South Africa

JEL Classification: E1; C5; O40; O47



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1. Introduction

Economic transformation refers to a process of structural change in an economy. In this transformation, the economy typically moves away from traditional or low-productivity activities and toward more modern, high-productivity, and competitive activities. This transformation can involve changes in the composition of production, employment and trade and the underlying institutions and policies that support economic activity. Economic transformation can take many forms. First, it can involve industrialisation, which is a shift from an agrarian economy to an industrial economy, characterised by the growth of manufacturing and services (Jayne et al., 2018). Second, it can be a structural change,

which is a shift from traditional industries to new high-growth sectors, such as technology or renewable energy (Fischer & Gelb, 1991). Third, it can be diversification through a reduction in dependence on a single industry or export commodity and an increase in the variety of economic activities (Chow, 2015). Fourth, it can be through innovation-led growth, which is a shift towards an economy driven by innovation entrepreneurship and the creation of new products and services (Hughes & Un, 2011). Economic transformation should not be pursued solely for its own purpose. Faced with substantial challenges such as rising poverty, inequality, and unemployment, it is vital to focus on transformation that promotes inclusive and sustainable growth and productivity, especially in today's developing and emerging economies. A comprehensive understanding of a country's structural transformation is crucial for addressing these challenges, alongside the strategic allocation of limited resources, to steer the economy towards inclusive growth. By promoting cross-sectoral investments and transformations, economies can initiate a multiplier effect, where interventions produce a significantly greater positive impact on the gross domestic product (GDP) relative to the size of the investment (Deleidi & Mazzucato, 2019).

This paper seeks to provide an extensive insight into, and analysis of, the structural transformation in South Africa since the onset of democracy in 1994. Our study is inspired by Stiglitz (2018), who posits that development approaches aiming for inclusive growth must also integrate a wider range of sectors where jobs for relatively unskilled labour are plentiful. Therefore, a comprehensive strategy that includes every sector of the economy is crucial, targeting skill enhancement while maintaining the nation's capacity to generate essential foreign exchange (Stiglitz, 2018). We describe and examine these transformations using a hybrid analytical approach, based on the recent contributions of Gollin and Kaboski (2023), who survey a burgeoning body of literature that examines patterns associated with growth and development. We use descriptions based on evolution of the economy, as well as economy-wide modelling, which considers the micro-, meso-, and macro-dimensions of structural transformation. Through these approaches, we are able to capture a richer array of changes, facilitating a nuanced and contextualised understanding of South Africa's growth trajectory and a broader array of potential policy measures (Ciaffi et al., 2024).

The remainder of this paper is organised as follows. Section 2 begins with a concise overview of the relevant literature on structural transformation, with a predominant focus on Africa. The section considers the implications for development strategies suited to the African context and ends with a review of recent work that considers the broader set of transformations. Section 3 then uses an ex post description of growth patterns and structural change, as well as associated policies since 1994 in South Africa. Section 4 develops an ex ante empirical methodology, alongside the simulations tested, to tease out effective entry points for a more effective role of government in implementing development strategies for structural transformation, with a particular emphasis on taking into consideration limited resource availabilities. Section 5 presents findings from economic modelling combined with a discussion of the results. Finally, the paper concludes in Section 6.

2. Literature Review

The W. A. Lewis (1954) model introduced the idea of the mechanism behind the structural transformation of a subsistence rural economy with surplus labour to an advanced industrial sector, where the process is facilitated by accumulation by capitalists in the industrial sector leading to expanded production in this sector, which then draws labour in from the low-productivity sector, at a constant wage. Since then, there has been a proliferation of studies, including C. M. Lewis (2021), Song et al. (2021), Dev (2023) and Jiao (2024). Increasingly, many scholars have studied the notion of economic transformation in an African context. We shall now review this literature.

Jayne et al. (2018) used a Pearson's correlation analysis to investigate the relationship between agricultural growth and poverty reduction to understand the unfolding economic transformation of Africa. The authors highlighted the fact that the drivers of economic transformation in the region include strong local and foreign investment, a period of high global commodity prices, strong agricultural growth in certain countries, improved governance, policy reforms, and employment growth in rural areas of off-farm activities. The authors recommend that agricultural growth through job expansion in non-farm sectors is likely to remain the main driver of economic transformation through productivity growth. McMillan and Zeufack (2022) point out that industrialisation is one of the pillars of the African Union's Agenda 2063 to transform the continent through the shift from agriculture to manufacturing, as it has been a hallmark of poverty reduction, job creation, and rapid growth in low-income countries. The authors further reveal that the restricted growth of employment in the large African manufacturing firms is due in part to the capital-intensive nature of the manufacturing sectors on the continent, particularly those focused on resource processing, and is a consequence of the increased capital intensity in manufacturing. In contrast, the authors indicate that increasing capital intensity in manufacturing, business environment, and political instability, are challenges to structural transformation.

Dappe and Lebr (2024) employed a spatial general equilibrium model to quantify the impacts of investments in electricity and Internet and future regional transport investments on economic development in the Lake Chad and Horn of Africa regions. Findings indicate that access to fast Internet and paved roads has a greater impact on structural change, by shifting labour from agriculture to the manufacturing and service sectors. However, the authors highlight the fact that better connectivity through reduced transportation costs and border delays results in higher shares in non-agricultural employment in areas with a comparative advantage in non-agricultural activities. Taking into account evidence from 42 developing countries for the period 1990–2018, Erumban and de Vries (2024) present a framework that explores the link between poverty reduction and structural change in the production structure. The findings indicate that poverty reduction is linked to productivity growth, specifically within manufacturing and structural change. Further results show that increased agricultural productivity and structural change contributed to alleviating poverty in developing Asian and sub-Saharan African nations. The authors recommend a greater focus on structural transformation and productivity growth through shifting labour to the manufacturing sector to reduce poverty and income inequality.

Exploring demand-side limitations in development, Goldberg and Reed (2023) examine development trajectories within a context marked by decreasing global integration and rising economic nationalism. They have developed a framework that links the application of increasing returns to scale technology among imperfectly competitive firms. The analysis indicates that reduced global integration restricts sustainable poverty alleviation for the average individual in low- or middle-income nations. The authors further assert that, in a scenario in which poor countries compete for lucrative and affluent markets, global integration might not be the ideal strategy for development. Despite this, Goldberg and Reed (2020) analyse how development can proceed in an environment dominated by heightened economic nationalism and diminished global integration, using a framework that underscores the importance of demand-side hurdles in national development and their connection to ongoing poverty reduction. Within this framework, economic advancement is linked to the adoption of technology with increasing returns to scale by firms in imperfectly competitive markets, who must bear the fixed setup costs associated with such a transition. The findings carry significant economic implications for both the size of the domestic market, which is a function of income distribution, and the size of the international market, which is tied to legally enforceable elements of the General Agreement on

Tariffs and Trade, the World Trade Organisation, and 279 preferential trade agreements. Counterfactual analyses suggest that domestic policies that promote a larger middle class can partially compensate for the lack of an international market.

In the context of global governance, [Stiglitz and Rodrik \(2024\)](#) argue that certain forms can be counterproductive when they prioritise the interests of powerful nations rather than focussing on collective challenges. They examine aspects such as financial flows, monetary policy, investment agreements, debt management, and trade policy, to propose a basic framework for global governance. However, they caution that in the current international environment, those who aim to craft a global framework that benefits wealthy and influential corporations have become adept at masking their own agendas with the noble language of Adam Smith. This manipulation is evident in how global agreements and institutions often reflect power imbalances among major countries and the flaws in democratic systems within those countries, frequently manifesting in ways that predominantly serve the interests of major players in these powerful nations. Additionally, [Newfarmer et al. \(2019\)](#) note that structural change, or the shift of workers from less productive to more productive jobs, has played a disappointingly minor role in Africa's growth and industrialisation, compared to other fast-developing regions. The authors also point out that manufacturing has traditionally driven initial structural transformation; however, it is unclear whether economic transformation today should focus on mining, manufacturing, utilities, or construction, especially as changes in transportation costs and ICT reshape industry boundaries. Despite these shifts in structural change, maintaining economic growth depends on the speed of industrialisation and incorporation of labour. Moving labour out of agriculture is essential for development, and growth can falter if productivity does not increase in other sectors.

In the context of globalisation and robotics influencing structural transformation, [Baldwin and Forslid \(2023\)](#) propose that the transformation driven by robotics may impede the traditional manufacturing-focused development model demonstrated by China, while it may support the service-orientated model followed by India. Although these projections cannot be definitively proven, since they pertain to future developments, the authors argue for their consideration. They suggest that the service-led development model might become the norm, taking India's example, rather than an exception like China, because success in services hinges on distinct factors, unlike manufacturing. Hence, developmental strategies and mindsets might need to evolve. The authors view this as positive because it implies that developing countries can export their comparative advantage, such as cheap labour, directly, without the prerequisite of first manufacturing goods. Addressing the importance of manufacturing in economic development, [Haraguchi et al. \(2017\)](#) investigate whether the low levels of industrialisation in developing nations are due to global long-term changes in manufacturing opportunities. Their findings reveal that, since the 1970s, the manufacturing sector's contribution to global GDP and employment has remained steady, while industrialisation has consistently supported the growth of developing nations. The authors stress that economic development through industrialisation is likely to remain essential for low-income countries. They can exploit their relative underdevelopment, compared to rapidly industrialised nations with higher manufacturing activity, as they potentially shift into more advanced industrialisation phases.

In an effort to bridge the performance gap between developed and developing nations, [Rodrik \(2011\)](#) examines whether developing countries can maintain rapid productivity growth through convergence and structural changes in sectors like manufacturing and modern services. The author highlights the fact that strategies such as currency undervaluation and industrial policies may face increased resistance from industrialised nations experiencing slow economic growth and significant unemployment. Rodrik suggests that a

promising unconditional convergence could be achieved if governments focus on liberalising, stabilising, and opening markets to facilitate progress. Aimed at evaluating growth, poverty alleviation, and employment in developing countries, [Rodrik \(2014\)](#) stresses the importance of economic growth in improving living standards and opportunities for the average citizen in developing countries. The author identifies two main drivers of growth: First, the development of essential skills through human capital and institutional frameworks. Sustained growth is dependent on expanding these capabilities, including better education, healthcare, regulatory systems, and governance. Second, the process of structural transformation, marked by the rise of high-productivity industries and the shift of labour from less-productive sectors to more-advanced ones, leads to remarkable growth rates, particularly through industrialisation and significant structural shifts.

Relying on [W. A. Lewis' \(1954\)](#) dual economy concept and [Solow's \(1954\)](#) neoclassical growth theory, [Rodrik \(2013\)](#) argues for a structural transformation that reallocates resources to more productive modern economic sectors and emphasises building skills and robust institutional capabilities to sustain productivity increases. The author also highlights a significant debate over how institutional quality and levels of human capital impact long-term income. Research suggests that industrialisation-driven growth is the most effective way to revolutionise the economy, by moving labour from low-productivity to high-productivity sectors while simultaneously boosting productivity within those sectors. Regarding the potential for global economic convergence amid new technologies, [Rodrik \(2022\)](#) points out that, after COVID-19, developing countries face challenges such as high poverty rates, health and education issues, public debt, investment, and medium-term economic outcomes. The research indicates that the structural transformation needed for the growth of these nations after the pandemic hinges on industrialisation, education, skill development, improved institutions, effective governance, ICT services, and business and financial services. The author concludes that increasing productivity in employment within smaller informal firms is key to sustainable poverty reduction and achieving improved economic security.

The research by [Diao et al. \(2024\)](#) delves into the complexities of African manufacturing, specifically examining firms in Tanzania and Ethiopia. They note that recent economic growth in Africa has been characterised by increased agricultural productivity, a shift of the labour force away from agriculture, and a decline in productivity within modern sectors such as manufacturing. The study finds a stark distinction between larger firms, which exhibit high productivity but minimal job creation, and smaller firms that hire more people without improving productivity. The authors suggest that large firms' limited job growth is due to their adoption of capital-intensive technologies, following global trends. In examining Tanzania's economic evolution, [Diao et al. \(2020\)](#) investigate micro, small and medium-sized enterprises (SMMEs). Their findings reveal that these enterprises operate in both rural and urban areas, mainly within trade services and manufacturing, with around half of the proprietors expressing no intention of changing their current positions. The results also indicate that 15% of these small companies significantly boost national labour productivity and advocate for the growth of small-medium enterprises that can foster productive job creation and focus on the most promising companies.

In 2014, McMillan and Headey characterised structural change as the transition of labour from low-productivity sectors such as agriculture to more advanced economic areas. They showed that African manufacturers enjoy a productivity advantage when factors such as access to finance, political competition, and infrastructure are controlled. Their findings also reveal that factors such as foreign ownership, Chinese-supported special economic zones, a shift away from smallholder farming toward poverty reduction, government-backed commercial agriculture, enhanced resource access, and targeted public investment

in urban sectors to foster agglomeration, are crucial for driving structural transformation, reducing poverty, diversifying economies, and increasing productivity. Investigating the convergence of labour productivity and the progression of technology within Africa, [Mensah et al. \(2023\)](#) analysed productivity convergence, the effect of technological shifts, and technological catch-up using a non-parametric framework. Their study identifies Botswana and Mauritius as the only African nations to achieve productivity convergence, highlighting the importance of structural change in bridging the productivity divide. The authors recommend that nations accelerate their economic progress through a dual approach of structural change and technological catch-up.

[Kruse et al. \(2023\)](#) focus on the interconnectedness of the European Union macro-region, underscoring how Research and Innovation Strategies for Smart Specialisation (RIS3) play a vital role. Their research uses a straightforward pooled OLS regression model to reveal how 'Smart Specialisation' heavily influences productivity and benefits from geographic proximity. They advocate for Smart Specialisation as a fundamental element of Europe's structural and innovation strategies. In critiquing dominant DSGE models in macroeconomics, [Stiglitz \(2011\)](#) asserts, in a recent work re-evaluating development economics, that successful countries adopted policies distinct from the Washington consensus, which, despite some commonalities, did not yield substantial growth, stability, or poverty reduction. He argues that development economics often focusses on transitioning developing countries towards market-orientated policies, emphasising the importance of acquiring, assimilating, producing, and disseminating knowledge for effective development. The study advises that successful development also requires investing in infrastructure, technology, education, finance, trade, intellectual property rights, and competition policies.

Exploring the factors behind Africa's remarkable growth, [McMillan and Harttgen \(2014\)](#) indicate that a considerable share of the continent's recent economic progress and poverty reduction arises from a significant decrease in agricultural employment. Their research reveals that this decline in farm labour aligns with increased labour productivity, due to the shift of the workforce from low-productivity farming to more productive manufacturing and service sectors. The study notes that these changes have been more rapid in countries with initially higher percentages of agricultural labour and where rising commodity prices have coincided with improvements in governance. Amid Africa's global crisis and socioeconomic vulnerabilities, [Adjei et al. \(2014\)](#) determined that targeted efforts for impoverished and vulnerable groups are more effective in reducing the impact of food and financial crises on children and caregivers. Therefore, the authors emphasise that governments, NGOs, civil society, donor agencies, and the international community have a responsibility to actively support social intervention programmes to reduce the effects of crises on vulnerable populations, particularly children. The study concludes that African countries can only eliminate extreme poverty and address its repercussions on health, human capital, and the environment through comprehensive pro-poor strategies, thus enabling them to achieve the Millennium Development Goals for their citizens, further challenged by ongoing food, fuel, and financial challenges.

[Gollin and Kaboski \(2023\)](#), in their recent comprehensive study, delve into an emerging area of economics that seeks to integrate macroeconomic themes of structural transformation and growth with detailed microlevel data. This integration is explored through the lens of moving populations from rural to urban areas, transitioning work from home-based to market-orientated activities, moving from informal to formal sectors, and shifting from self-employment to salaried jobs. The authors highlight the challenge of advancing comprehension of development, growth, and structural shifts, using this insight to tackle critical issues such as poverty, inequality, injustice, climate change, and environmental degradation. When examining transformations in South Africa, this research draws on

this wider spectrum of transformations, offering a deeper insight into growth processes and expanding the array of potential policy instruments. We commence with an ex post analysis of transformation, followed by an ex ante analysis of transformation.

3. Patterns of Growth and Structural Change in South Africa Since 1994

South Africa has implemented a variety of development strategies since the advent of democracy in 1994. This section discusses the main development strategies and the economic transformative outcomes.

3.1. Overview of South Africa's Economic Transformation Policies and Initiatives Since 1994

3.1.1. Reconstruction and Development Programme (RDP) 1994

The Reconstruction and Development Programme (RDP) of 1994, initiated by the African National Congress (ANC)-led government, aimed to address the socioeconomic disparities and poverty of apartheid, focussing on social progress, economic expansion and human resources (South Africa, 1994). Its main goals were poverty eradication, job creation, and meeting basic needs through housing, healthcare, education, sanitation, job creation, land redistribution, and infrastructure development. The RDP involved various stakeholders, marking a shift from apartheid policies to tackle social and economic disparities. Evaluation of the RDP has been mixed, with Corder (1997) noting that RDP's success hinged on the Government of National Unity's stability, but funding cuts to reduce deficits hindered it. Kiková (2015) stated that, while economic goals were met, social demands lagged, and expectations were low. Sethole and Sebola (2020) claimed that RDP failed, leading to new programmes, with this view corroborated by Nokulunga et al. (2018), who conclude that RDP failed due to corruption, fostering commodity dependency, and inequalities.

3.1.2. Growth, Employment, and Redistribution (GEAR) Strategy 1996

The GEAR policy, launched in 1996 as the successor to RDP, aimed to boost South Africa's economy, create jobs, and redistribute wealth post-apartheid (Department of Finance, 1996). It focused on reducing fiscal deficits, controlling inflation, and liberalising trade by cutting government spending and foreign exchange restrictions. Its goal was to drive economic growth for social investment and reduction of inequality. Key points included cutting government spending, lowering taxes, promoting exports, easing exchange controls, and flexible labour markets. Many have argued that GEAR prioritised growth over immediate social redistribution, neglecting disadvantaged groups. Streak (2004) notes that GEAR did not deliver the promised job creation and poverty alleviation from 1996 to 2000, despite improving investment conditions, due to the lack of a proactive government role. Mseleku (2023) emphasises GEAR's reduction of national debt and inflation as successes, but the successes were negated as they exacerbated issues like unemployment, health, poverty, education, and welfare. Generally, GEAR's reliance on export growth overlooked social programmes and deep-rooted inequalities and poverty, which remain a challenge today.

3.1.3. Accelerated and Shared Growth Initiative (ASGISA) 2005

Launched by the South African government in 2008, AsgiSA aimed to reduce poverty and unemployment while boosting economic growth (Department of the Presidency, 2008). Its goals were a 6% annual growth rate by 2010, halving poverty and unemployment by 2014, increasing infrastructure investment by 15–20% annually until 2014, and improving freight logistics. ASGISA achieved 4.9% economic growth in 2006, initiated the Gautrain phase 1 Metrorail service, and implemented a school quality strategy. However, it was

lacking in its infrastructure, skills shortages, competitiveness, currency volatility, small-business regulations, and government support capacity targets. According to [Hausmann et al. \(2023\)](#), failure was partly due to missing high-skill immigration benefits. [Mbaleki \(2024\)](#) mentions that President Zuma replaced AsgiSA with RDP after Mbeki, shifting priorities without reducing poverty and unemployment. Ultimately, AsgiSA failed due to organisational, capacity, and leadership issues, ineffective implementation, lack of accountability, and a focus on human capital and bureaucratic inefficiencies ([Mabasa, 2014](#); [Mbaleki, 2024](#)).

3.1.4. National Development Plan (NDP) 2011

The 2030 National Development Plan (NDP), launched in South Africa in 2011, targets poverty elimination and inequality reduction by 2030 ([Department of the Presidency, 2011](#)) by targeting an annual rate of 5.4% economic growth. Developed by the National Planning Commission, its objective is to address issues such as unemployment, poor education for black people, inadequate infrastructure, spatial divides, unsustainable economy, poor public healthcare, substandard public services, high corruption, and societal division since 1994. The NDP's 2011 actions focus on job creation, improving education, reversing apartheid's spatial effects, transitioning to a low-carbon economy, providing healthcare for all, reforming public services, fighting corruption, transforming society, and economic integration. Despite strategic planning indicating commitment, [Naidoo and Maré \(2015\)](#) argue that challenges in policy implementation and coordination have persisted. [Stiglingh-Van Wyk \(2020\)](#) advises continuous monitoring for accountability, with active department roles and fiscal responsibility for growth. [Rapanyane \(2021\)](#) recommends reviewing the NDP for a more transformative approach. Although ongoing, the NDP has not yet resolved the issues of unemployment, economic growth, poverty, and inequality in South Africa, as these challenges are still persistent.

3.1.5. South Africa and Global Development Strategies: SDG Agenda 2030 and Africa 2063

South Africa is dedicated to the Sustainable Development Goals (SDGs) by 2030 and the Agenda 2063 of the African Union, aligning its NDP with these agendas. The focus is on eradicating poverty, inclusive growth, and reducing inequality (StatsSA, 2019). In 2023, South Africa highlighted commitments to energy transition, digital inclusion, climate finance, women's empowerment, and biodiversity. Initiatives include the South African Financial Sector Development Programme for financial reforms ([Louis & Chartier, 2017](#); [Odhiambo, 2004](#); [Botha & Makina, 2011](#); [Shipalana, 2019](#)) and the COVID-19 Response Development Policy Operation of USD 750 million ([De Villiers et al., 2020](#); [Onyango & Ondiek, 2022](#); [Khambule & Mdlalose, 2022](#)). The Eskom Just Energy Transition Project, approved in 2022 with USD 497 million, supports the decommissioning and repurposing of the Komati coal plant ([Winkler et al., 2023](#); [Strambo et al., 2024](#)). Employment and economic initiatives include the Expanded Public Works Programme (EPWP) ([Phillips, 2004](#); [Hlatshwayo, 2017](#); [Meth, 2011](#)), the Jobs Fund ([Allie-Edries & Mupela, 2019](#); [Marumo, 2020](#)), Youth Employment Service (YES) ([Lottan & Scheepers, 2024](#); [Velelo, 2023](#); [Tulani, 2024](#)), and the Employment Tax Incentive (ETI) ([Ranchhod & Finn, 2015](#); [Budlender & Ebrahim, 2021](#); [Bhorat et al., 2020](#)). The Amavulandlela Funding Scheme helps disabled entrepreneurs ([Mbeki, 2004](#)). Industry-specific plans include the clothing and textiles and poultry master plans ([Edwards, 2024](#); [das Nair, 2021](#); [Lefophane, 2024](#)). Despite progress, challenges such as poverty, inequality, and unemployment persist. However, the country remains committed to the SDGs and a sustainable and equitable future.

3.1.6. Economic Reform and Reconstruction Programme

The South African Economic Reconstruction and Recovery Plan, announced in October 2020, is an action plan designed to mitigate the economic impact of COVID-19 and foster a resilient, inclusive, and sustainable economy. It focusses on infrastructure, jobs, energy security and industrialisation for sustainable growth (South Africa, 2020). Mosala (2022) emphasises the plan's aim for equitable growth through three phases: participation and preservation, with a health response to the pandemic; recovery and reform, to restore economic stability while managing health risks; and reconstruction and transformation, to build a resilient economy. Structural reforms include modernising industries and state enterprises, re-orienting trade for regional integration to enhance exports, employment, and innovation, reducing business entry barriers, and supporting sectors like tourism and agriculture for inclusive growth. The plan also addresses economic inclusion, job creation capacity, education and skill development, raw material beneficiation, and racial, gender, and geographical inequalities (South Africa, 2020).

3.1.7. Operation Vulindlela 2023

Operation Vulindlela, initiated by the Presidency and the National Treasury, aims to accelerate reforms to advance the South African economy and improve the lives of citizens (National Treasury, 2024). The initiative has progressed significantly in restructuring Eskom and introducing the Bill to amend the electricity regulation for a competitive electricity market. In the logistics sector, reforms include improving the rail system and opening the rail freight network to operators (National Treasury, 2024). The private sector's role in container terminal operations will boost investment and capacity, although Transnet ports need significant modernisation (Bruwer et al., 2024). Other advances include restoring water quality monitoring, re-building the water use licence system, and reforming work visas to attract skills (Oxford Analytica, 2024). These reforms support rapid, inclusive growth, fostering investment and job creation (National Treasury, 2024). However, researchers like Charles and Kobus (2025) question the recovery of the economy, indicating the need for more study of the impact of Operation Vulindlela. Operation Vulindlela was recently launched into a second phase.

3.1.8. Industrial Policy Action Plans (IPAPs)

Industrial policy action plans, within the South African Department of Trade and Industry, guide industrial development and job creation with action plans for growth and sustainability (DTI, 2018). The key objectives are to reverse industrial decline, create jobs, and promote sustainable growth and competitiveness in manufacturing (DTI, 2018). IPAPs face challenges like deindustrialization, skills shortages, policy uncertainty, and misalignment, but have opportunities in agro-processing and renewable energy. Mbatha and Mason (2023) noted inconsistencies in the apparel policy since 2007, and suggested policy revisions. Robbins (2025) pointed out the lack of focus on cities' economic role and multiscalar policymaking, highlighting the need for better coordination and implementation.

3.1.9. Integrated Development Plans (IDPs)

An integrated development plan (IDP) is a five-year strategic plan under the Municipal Systems Act that outlines the development priorities and strategies of a municipality (Mamokhere & Meyer, 2022). Other scholars, like Mulaudzi et al. (2023), view IDPs as tactical planning tools for transformation and governance. IDPs align municipal planning with goals for integrated and sustainable service delivery, covering areas such as social services, infrastructure, environmental sustainability, and economic development (Masipa, 2021). They are key to local government planning (Dlamini & Zogli, 2021), and provide a strategic

framework linking municipal actions and budgets, ensuring coordinated development. Public participation is integral, allowing resident input and ensuring resources match development priorities (Mamokhere, 2022). IDPs are reviewed annually to obtain the necessary updates based on evolving needs. Despite the prospects for improved service delivery and community participation (Mamokhere & Meyer, 2022), IDPs face challenges such as resource insufficiency, community engagement, capacity issues, unfinished projects, data gaps, lack of commitment, and political interference, leading to service failures, stagnant development, and inequality.

3.2. Growth Patterns and Structural Change Since 1994

After the onset of democracy in 1994, and alongside the implementation of the just-outlined strategies, South Africa has displayed varied patterns of economic growth, as depicted in Figure 1. The economy thrived in the decade following the end of apartheid, recording an average annual growth rate of 3.6% from 1994 to 2007. However, growth subsequently tapered off, averaging only 1.1% from 2008 to 2023, suggesting underperformance in light of the targets set in the NDP. This scenario is likely to have contributed to the increase in unemployment rates during this period of time. Indeed, the poor growth pattern is reflected in persistently high unemployment figures, which increased from 22.94% in 1994 to 32.10% in 2023. Throughout the period, South Africa's population growth rate has remained steady, slightly below 2% annually, surpassing the rate of economic growth, and indicating declining per capita GDP growth rates (Figure 1).

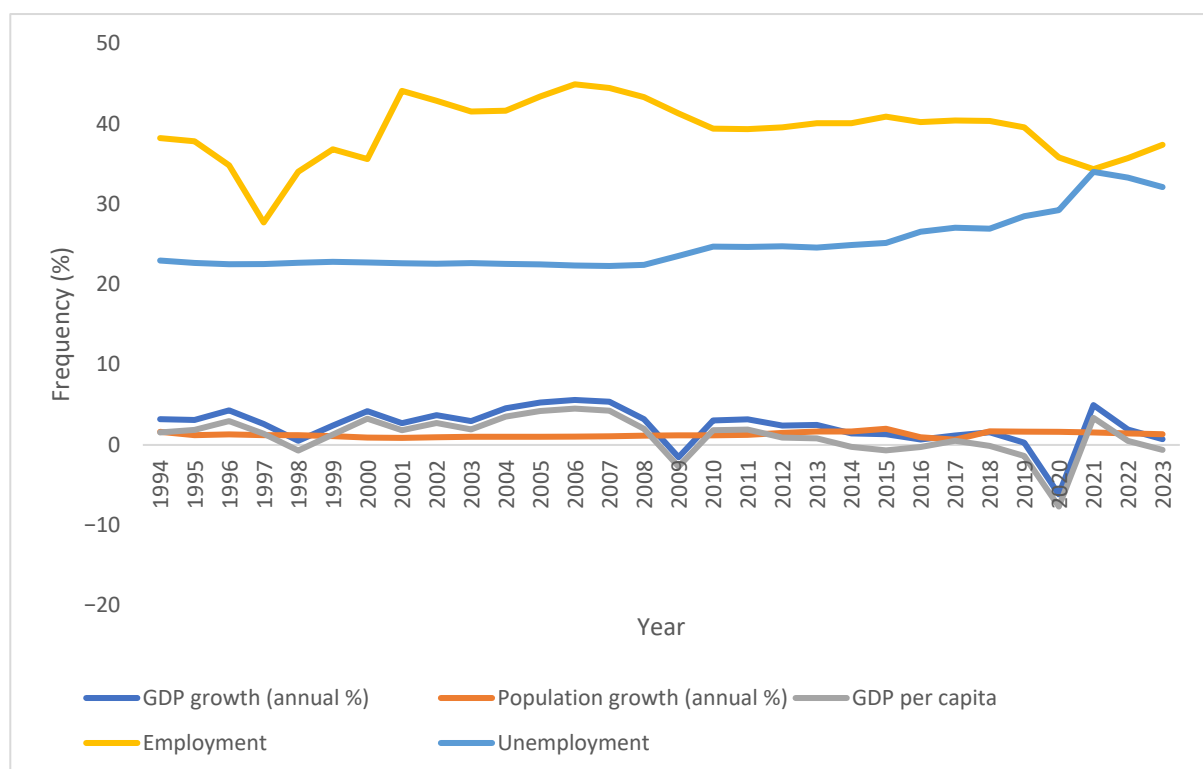


Figure 1. Economic growth, employment, and population in South Africa. Source: Authors' computation using data from the World Bank.

Figure 2 illustrates the transformative changes in the sectoral makeup of the economy over the years, using the value added by agriculture, mining, services, industry, and manufacturing. There is a distinctive reduction in the industry and manufacturing's share of the total economic output, underlining the profound deindustrialisation the nation has boldly navigated. Despite this noticeable decline, industry remains the second largest

sector, with its value-added share declining from 31.23% in 1994 to 24.62% in 2023. Within industry, manufacturing commands the largest share of the economy, with its value-added share declining from 21.05% in 1994 to 12.96% in 2023. On the other hand, the service sector has soared, as the undisputed largest contributor to the nation's GDP, expanding from 57% in 1994 to an even more dominant 62% in 2023. Despite experiencing fluctuations, mining remains an essential pillar of the economy, boosting its contribution from a modest 1.95% in 1994 to 3.83% in 2021. Contrary to trends seen in most developing nations, agriculture's contribution to GDP in South Africa is small, marking the lowest contribution to GDP, as it declines from 3.76% in 1994 to a mere 2.62% in 2023, continuing a long-term declining trend.

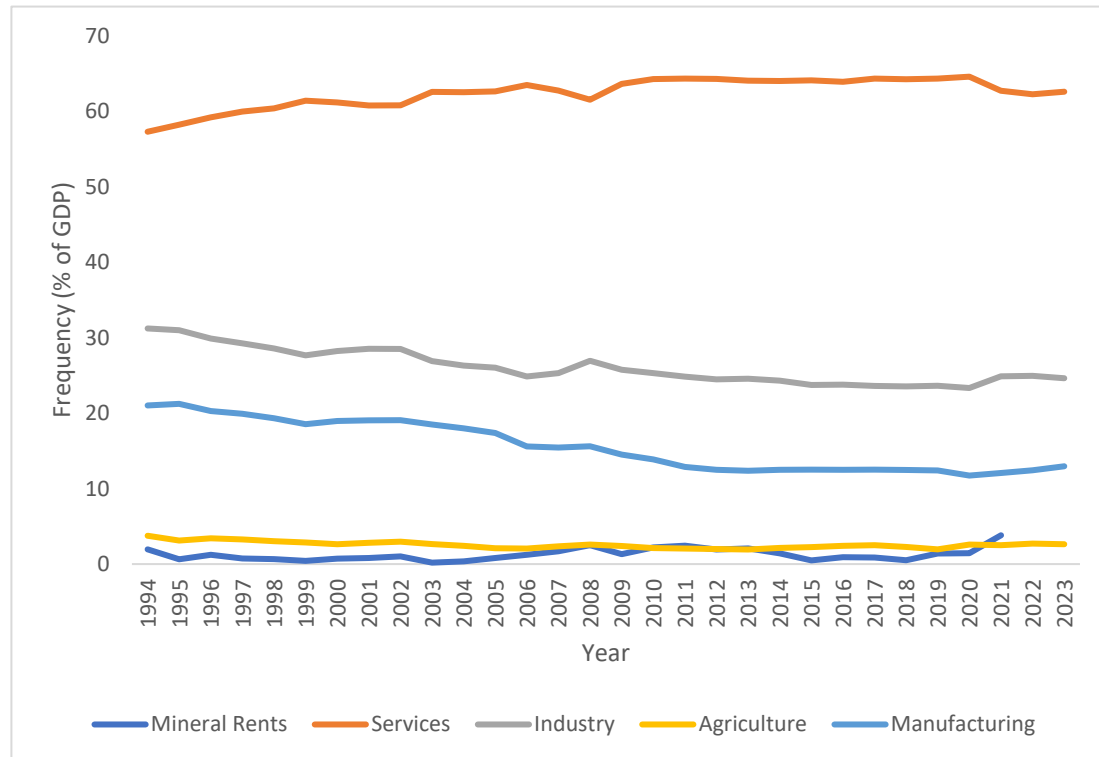


Figure 2. Share of agriculture, mining, industry, services, and manufacturing in GDP. Source: Authors' computations using data from the World Bank.

Figure 3 provides a breakdown of South Africa's GDP by expenditure from 1994 to 2023. Household spending consistently serves as the predominant contributor to GDP, ranging between 64.47% in 1994 and 64.73% in 2023, illustrating a mildly variable pattern. Meanwhile, imports and exports collectively serve as the second major contributors to the GDP, with exports and imports accounting for 19.54% and 17.56%, respectively, in 1994, rising to 32.42% for both categories in 2023, indicating an upward trajectory. Government spending ranks as the third largest factor in South Africa's economic expansion when evaluated using the expenditure approach, moving from 18.94% in 1994 to 19.15% in 2022, and maintaining a relatively stable course. Conversely, investment is the least significant contributor to GDP through expenditure analysis, shifting from 14.99% in 1994 to a peak of 21.61% in 2008, before settling at 14.93% in 2023, reflecting a varying path largely influenced by investor confidence (De Jongh & Mncayi, 2018; Hammond et al., 2022). These observed trends highlight the central role of household spending, government, exports, and imports in driving South Africa's GDP and subsequent economic growth (Adjasi & Yu, 2021; Fedderke, 2014; Manete, 2018).

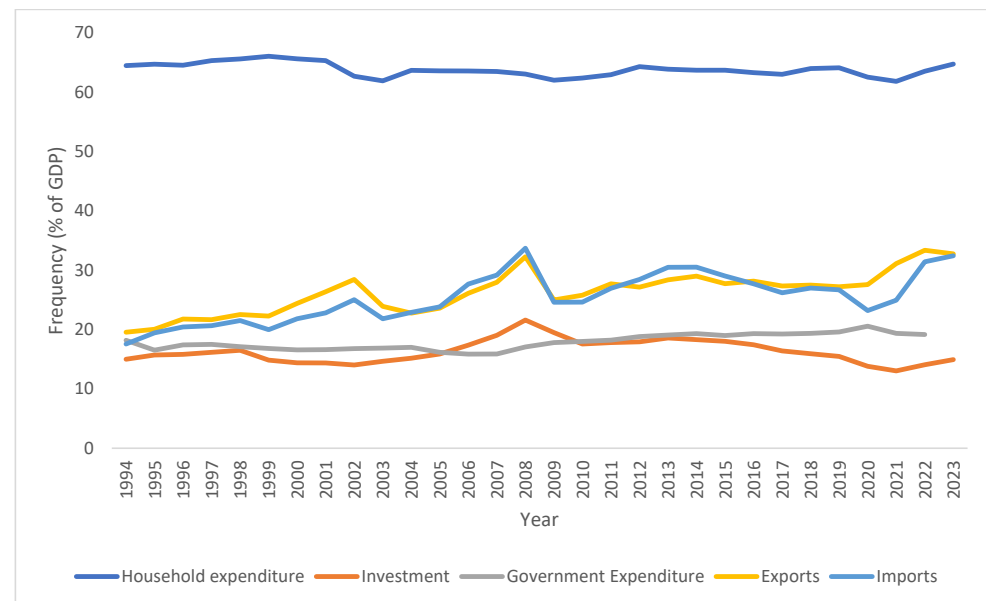


Figure 3. South Africa's GDP by expenditure approach. Source: Authors' computations using data from the World Bank and Global Economy.

Figure 4 illustrates the patterns of government expenditure, tax revenue, total debt, and debt service from 1994 to 2023. In particular, there is a consistent rise in total debt, starting at 14.34% in 1994, moving to 27.79% by 2002, reaching 52.73% in 2020, and reaching 43.38% in 2022. This indicates a significant dependence on borrowing. Debt service increases from 1.92% in 1994 to 6.10% in 2023. This increase poses economic risks, and can hamper economic transformation as South Africa contends with sluggish economic growth. The increase in public debt can adversely affect economic growth in South Africa, as evidenced by the works of [Mhlaba and Phiri \(2019\)](#), [Ncanywa and Masoga \(2018\)](#), and [Fourie and Blom \(2022\)](#). Both tax revenue and government spending have shown a stable incline in their GDP contribution, increasing from 19.60% and 18.19% in 1994, respectively, to 26% and 19.15% in 2022. Studies by [Dare et al. \(2019\)](#) and [Pamba \(2022\)](#) discuss various influences on tax revenue that affect the nation's economic progress.

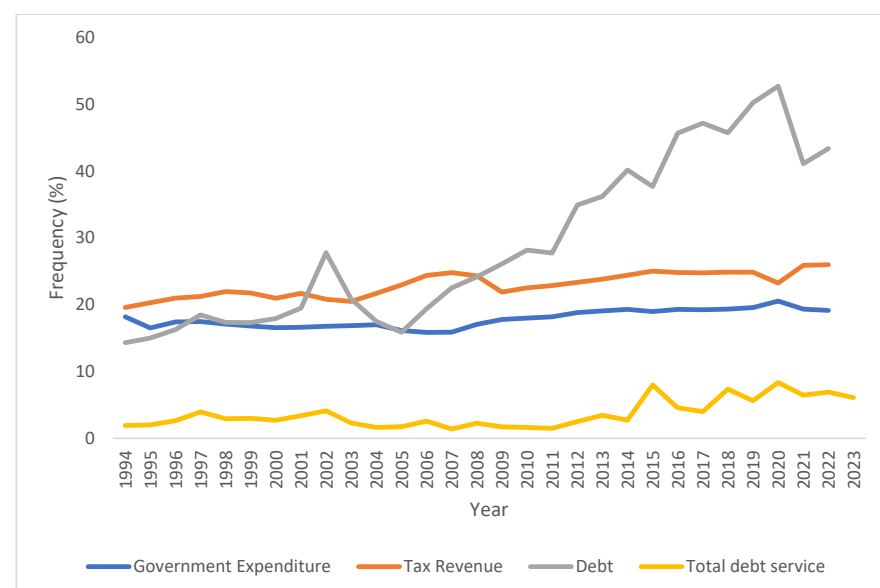


Figure 4. Government expenditure, tax revenue, and debt from 1994 to 2023. Source: Authors' computation using data from the World Bank and Global Economy.

4. Modelling Framework and Scenarios

This section takes a further step, building on the literature review and economic evaluation to present the modelling framework and scenarios used for ex ante economic transformation and growth in South Africa. The section is further grouped into two subsections: in Section 4.1, the model employed for the study is presented, while Section 4.2 covers scenarios that are evaluated.

4.1. The Model

The impacts of economic growth and structural transformation across the country are analysed using various modelling frameworks, although their application varies (Dervis et al., 1982). Key macroeconomic modelling frameworks employed to evaluate the effects of growth and transformations involve input–output (IO) models, social accounting matrices (SAMs), macroeconometric models, and CGE models. These methods begin with a multi-sectoral representation of the economy, utilising macroeconomic data and IO tables, which are routinely released by national statistics offices within the framework of the System of National Accounts. In this paper, we use CGE models.

CGE models can be classified by temporal scope and application range. Temporal scope divides models into comparative static and dynamic categories, while coverage spans single-country or global economies. Comparative–static models, like the neoclassical Arrow–Debreu framework, focus on a single period to calculate capital stock but ignore economic dynamics during adjustment (Devarajan & Robinson, 2013; Baldacci et al., 2008). Investment is seen as demand, excluding money or asset markets. These models assume decisions are based solely on the current period, akin to a steady-state economy where new capital is not created, but only maintained. Dynamic CGE models address intertemporal distortions from policy changes like taxes and subsidies (Pereira & Shoven, 1988), assuming that firms and households optimise over time. Growth rates are based on savings and investment decisions, with expansion of trade efficiency, investment in infrastructure that increases TFP, and investment in education that improves labour productivity. Dynamic models are further divided into recursive or intertemporal categories.

A recursive-dynamic CGE model links static models sequentially (Bacchetta et al., 2012). Devarajan and Robinson (2013) note that these models resolve each period by establishing variables based on initial values at the period's end, which then serve as initial values for the next period. Equilibria are connected through capital accumulation, with some variables changing exogenously, following a baseline or updates like population. An intertemporal CGE model, based on optimal growth theory, assumes that economic agents have perfect foresight (Bacchetta et al., 2012), making sequential decisions to maximise their utility. Bacchetta et al. (2012) state that forward-looking behaviour in these models increases computational complexity, as future variables affect current ones. Finally, country-specific models, such as PEP1-t or PEP1-1, from the Partnership for Economic Policy, provide detailed actor information to examine single-country policy issues. On the contrary, global models like GTAP focus on multilateral policies, offering less sector and institution detail (Bergman, 2005; Carri, 2008; Dixon, 2006).

An examination of the South African economy is conducted through the use of a macro- and micro-modelling framework. The model employed is a dynamic recursive CGE model. The design, features, and structure of the CGE model are primarily inspired by the standard model of Partnership for Economic Policy by Decaluwé et al. (2013). This standard CGE model was tailored to fit the South African economy by altering various assumptions, particularly the free parameters (see Fofana et al., 2023; Chitiga-Mabugu et al., 2025). On the supply side, it assumes a constant returns-to-scale production technology, represented by a three-level nested Constant Elasticity of Substitution (CES) function. On

the demand side, consumption choices are modelled using an extended linear expenditure system (ELES) demand function, which originates from the maximisation of a Stone–Geary utility function, with saving behaviour considered endogenous (see [Fofana et al., 2024](#)).

The model distributes domestic production between exports and the domestic market, based on suppliers aiming to maximise sales revenue at any specific production level, while accounting for imperfect transformation between exports and domestic sales, as defined by a constant elasticity of transformation (CET) function ([Mabugu et al., 2015](#)). When a commodity is imported, the domestic market's demand for a composite good consists of both imports and domestic output, stemming from the premise that domestic consumers aim to minimise costs, given imperfect substitutability, depicted by a constant elasticity of substitution (CES) function. Both domestic exporters and importers act as price takers on the global market, which means they face perfectly elastic demand for exported goods and supply for imported goods at established world prices ([Mabugu et al., 2025](#)).

The model incorporates a suite of constraints that the system must meet. These restrictions pertain to markets (both commodities and factors) and macroeconomic aggregates, including government balances, the international current account, and savings and investment. Relative prices are able to balance supply and demand for domestically produced goods. The labour market is segmented and is modelled under conditions of imperfect competition following [Fofana et al. \(2024\)](#). Government savings, defined as the discrepancy between current government revenues and ongoing expenses, are variable, whereas tax rates remain constant. The real exchange rate is adjustable, but foreign savings, referring to the current account deficit or the difference between spending and receipts in foreign currency, are fixed. Investment is driven by savings, its determination based on total savings from the private sector (households and firms), the public sector (government), and international entities (the rest of the world).

The model is a recursive dynamic framework that spans ten periods. This dynamic configuration chiefly draws inspiration from the work of [Jung and Thorbecke \(2003\)](#). Within this framework, it is presumed that consumers aim to maximise utility and producers aim to maximise profits within a single period. The effects of these consumer and producer decisions are carried over to subsequent periods, primarily through mechanisms of savings and capital accumulation. The model employs a conventional capital accumulation equation; therefore, savings contribute to the net increase in capital stock, accounting for depreciation. The sectoral distribution of new investments is determined by the specific capital costs and returns of each sector. Production factors, namely capital and labour, along with private and public consumption, are set to grow from one period to the next at a predetermined exogenous rate.

- Unemployment

South Africa's high unemployment rate and constrained informal economy are partly due to challenges in accessing informal labour markets. [Davies and Thurlow \(2010\)](#) created a CGE model categorizing informal activities, to demonstrate the links between the formal and informal sectors in South Africa's product and labour markets. Their results highlight the critical role of interactions between these sectors in influencing policy outcomes. Our model implicitly addresses the formal–informal divide, and, instead, classifies labour into five skill levels, based on education: Unskilled (no schooling and less than grade 1), Lower Skilled (grades 2 to 7), Medium Skilled (grade 12), Skilled (certificate and diploma), and High Skilled (degree and postgraduate diploma). Labour markets with high-skilled workers tend to have lower unemployment rates and offer better wages and salaries. The PEP standard model presupposes constant employment levels, with fixed labour resources. However, this contradicts the observed unemployment in South Africa. To address this, [Blanchflower and Oswald \(1995\)](#) proposed incorporating a wage curve, which explains the

link between the unemployment rate and the real wage rate for a specific labour group. This relationship is used for our model, using the elasticities reported in [Kingdon and Knight \(2006\)](#) when applying the wage curve for South Africa (see [Chitiga-Mabugu et al., 2025](#)).

- Productivity

The growth stimulus scenario requires increasing public investments, to stimulate output growth. To properly capture the effects of public investments in the model, we distinguish public investment in infrastructure (transportation, energy, and communication) from other public investments. Public investments in infrastructure have potential externality effects on industry output ([Fofana et al., 2023, 2024](#)). Therefore, the standard model is extended to introduce an externality parameter ($\theta_{j,t}^{pub}$) in the production.

$$VA_{j,t} = \theta_{j,t}^{pub} F(L, K)$$

where $VA_{j,t}$ is the value added to the industry j , t is the time dimension, and $F(\cdot)$ is the CES function of composite labour (L) and capital (K). The externality of public investments is expressed as follows.

$$\theta_{j,t}^{pub} = \left(\frac{K_{gov,t}}{K_{gov,t-1}} \right)^{\xi_{gov,j}}$$

where $\theta_{j,t}^{pub}$ is the elasticity of public investment, with respect to the value added to the industry. The elasticity values are obtained from [Chitiga-Mabugu et al. \(2025\)](#).

The model setup underwent sensitivity analysis on alternative closure and parameter choices ([Fofana et al., 2024; Mabugu et al., 2015](#)). Elasticities are from the existing literature: trade elasticities from [Ntombela et al. \(2018\)](#) using a vector error-correction model. The demand elasticities from the literature are high, ranging from -3 to -6 ([Hartley et al., 2025](#)). Supply elasticity is typically around 1, but can be as low as 0.35 ([Chitiga-Mabugu et al., 2025](#)). [Fofana et al. \(2024\)](#) further examined various data options, showing results depend, to some extent, on the series chosen.

In summary, CGE models are widely used to assess economic policy changes, due to their ability to link economic theory with policy analysis ([André et al., 2010; Bergman, 2005](#)). They realistically represent economies under policy changes, identifying winners, losers, and timing of impacts, helping policymakers understand potential changes ([Adams & Parmenter, 2013](#)). Despite incorporating modifications for country-specific factors like unemployment, economic dynamics, and structure, the CGE models used have limitations in design, data accuracy, validation, and result transmission ([André et al., 2010](#)). Evaluating the socioeconomic impacts of the growth and transformation transition requires models considering country context, sectoral details, multiregional views, dynamic traits, financial feedback, and sociocultural aspects, such as trust and credibility, which impact the strategies. These later areas that highlight distinct limitations constitute useful areas for extension of the modelling in this paper.

4.2. Simulation Scenarios

Defining simulation scenarios is a crucial step, as they should allow precise modelling and facilitate meaningful comparisons and interpretation of the modelling results. The scenarios are selected to contribute to progress in key development challenges in South Africa of slow economic growth, unemployment, poverty, and inequality, which are synonymous with suboptimal structural transformation. More specifically, the following scenarios are developed:

- Business-as-Usual Scenario (BAU)

In economic modelling, it is customary to establish a business-as-usual (BAU) scenario, serving as a baseline against which potential policy adjustments are assessed. Essentially, the BAU outlines an economic growth path without significant disruptions, over a specified period of time. For this analysis, the BAU scenario presupposes that South Africa's growth path aligns with the 2021 projections of the International Monetary Fund (IMF). According to the 2021 World Economic Outlook report by the IMF, the forecast for South Africa anticipates an average annual real GDP growth of 1.8% between 2021 and 2028. This growth average is further extended, to include 2029 and 2030.

- Stimulating Inclusive Economic Growth

The primary objective of the Inclusive Economic Growth Stimulation (IEGS) scenario is to pinpoint sectors that can simultaneously attain a higher real GDP growth rate from 2025 to 2030, lower unemployment, and amplify the productivity of total factors. Technically, the IEGS scenario was executed incorporating the impact of public investments in the CGE models, as suggested by [Montaud et al. \(2019\)](#). Under this framework, the total productivity parameter in the value-added production function (the scale parameter discussed earlier) is adjusted and defined, based on public investments, the sensitivity of sectoral production to these investments, and the responsiveness of sectoral output to investments, particularly in construction and transport (see [Montaud et al. \(2019\)](#) for details). To implement this scenario, an economy-wide growth rate increase of 1 percentage point led by a total-factor productivity (exogenous) increase in industries was used.

5. Results and Discussion

This section presents and discusses the results generated from the simulation scenarios, i.e., BAU and IEGS. The section proceeds by presenting the effects of BAU and IEGS on economic growth, unemployment, and total-factor productivity. Table 1 summarises the results of the two simulations and identifies economic sectors and subsectors to target when operationalising the growth scenarios. As mentioned above, this table is generated by simulating an economy-wide growth rate increase by 1 percentage point, led by a total-factor productivity increase in the industries.

Table 1. Sectors to target for the demand stimulus, based on the contribution to change in economic growth and in the reduction of unemployment.

Industry	Contribution to GDP	Annual Change in Total Factor Productivity (%)	GDP Growth Acceleration (Percentage Point)	Labour, All Skill Categories	Labour with Primary School Education (Grades 1–7)	Labour with Middle School Education (Grades 8–11)	Labour Completed Secondary School Education (Grade 12)	Labour with Tertiary Education
Personal and social service activities	16.8%	5.0	1	−3.7%	−6.8%	−4.3%	−1.9%	−2.3%
Transport	9.7%	8.4	1	−3.3%	−2.7%	−2.8%	−3.4%	−4.9%
Business activities	8.9%	15.0	1	−3.1%	−3.8%	−2.9%	−2.6%	−3.5%
Electricity and distribution of water	7.6%	14.3	1	−3.0%	−3.3%	−2.9%	−2.7%	−3.3%
Construction	5.1%	11.9	1	−2.9%	−3.0%	−2.8%	−2.7%	−3.6%
Financial and insurance	4.6%	4.9	1	−2.9%	−2.7%	−2.7%	−2.8%	−3.9%

Table 1. *Cont.*

Industry	Contribution to GDP	Annual Change in Total Factor Productivity (%)	GDP Growth Acceleration (Percentage Point)	Labour, All Skill Categories	Labour with Primary School Education (Grades 1–7)	Labour with Middle School Education (Grades 8–11)	Labour Completed Secondary School Education (Grade 12)	Labour with Tertiary Education
Real estate activities	4.3%	13.7	1	−2.9%	−3.4%	−2.8%	−2.4%	−3.3%
Post and telecommunications	3.8%	46.0	1	−2.8%	−3.4%	−2.8%	−2.4%	−2.9%
Agriculture	2.9%	21.5	1	−1.9%	−1.2%	−1.7%	−2.0%	−2.9%
Mining of coal and lignite	2.5%	13.6	1	−1.8%	−2.1%	−1.5%	−1.6%	−2.5%
Mining of gold and uranium ore and metal ores	2.4%	13.6	1	−1.8%	−2.1%	−1.5%	−1.6%	−2.5%
Food industry	2.0%	23.7	1	−1.4%	−2.0%	−1.0%	−1.0%	−1.8%
Government	1.8%	4.8	1	−1.1%	−1.5%	−1.3%	−0.8%	−0.8%

Source: Authors' compilation based on CGE Model Simulation.

The results in Table 1 show that the largest contribution to GDP growth is from personal services and social activities, transport, business activities, electricity, water, and construction, all growing above 5%. A closer look shows that this economic growth is driven by the higher increases in total-factor productivity associated with these sectors. Outside these sectors, post and telecommunications, as well as the food industry, show good total-factor productivity growth. Indeed, there is overall gain in productivity within modern sectors like services, manufacturing, and even agriculture.

The employment impacts show that the sectors driving growth are crucial for structural change, as they absorb most of the labour force. In particular, the largest employment gains across all labour categories are for personal activities and social service activities, as well as transport (with 3.7% and 3.3% declines in unemployment, respectively). The results hold largely the same pattern across labour categories from unskilled to skilled labour. The results demonstrate that South African transport and services enjoy a productivity edge when it comes to cleaning up skilled labour, especially compared to the government.

Exploring the results further indicates that a considerable share of economic growth is driven less by government and primary sectors such as mining and agriculture. Indeed, the productivity gains in these sectors are less, and align with relatively smaller absorptions of the workforce compared to the more productive manufacturing and service sectors. On the other hand, personal and social services, transport, business activities, electricity and water, construction, finance and insurance, real estate, and post and telecommunications all show unemployment reduction above 2.8%, with the largest reductions experienced as the skill category progresses. In fact, transport and finance reduce the highest skilled-labour category's unemployment the most.

Summing up the modelling results, the combined results show that personal and social service activities, transport, finance, and insurance, can make the greatest contribution out of all the industries tested to reducing unemployment while increasing economic growth. These sectors within services and industries can contribute to increasing overall productivity and reducing unemployment, while also contributing to absorbing a high amount of highly educated skilled labour. This suggests that South Africa can accelerate economic progress through a dual approach of structural change toward manufacturing and services while continuing with upward skilling of its workforce. Putting together a programme to stimulate these sectors would be economically viable.

6. Conclusions

South Africa's economic transformation since 1994 has been marked by mixed progress. Initially, the country experienced reasonably rapid growth for about a decade after apartheid ended. However, since then, the economy has stagnated, and growth has barely kept pace with population growth. This has led to worrying trends, including rising poverty and unemployment rates. Today, South Africa faces significant challenges, such as an unemployment rate of more than 33% and youth unemployment exceeding 60%. Poverty has increased, according to the national poverty line, and many households rely heavily on government transfers.

Despite efforts to transform the economy, South Africa's growth trajectory remains disappointing and the country must address these underlying challenges to achieve inclusive and sustainable economic growth. The economic downturns in South Africa present a significant threat, with the potential to disrupt the nation's notable advances in addressing the persistent challenges of high unemployment, widespread poverty, and stark inequality. In the absence of substantial and extensive structural transformation, South Africa's aspirations to achieve its ambitious development goals may remain unattainable. Economic modelling can provide important information in this context. In particular, it has shown that measures that simply increase economic growth or even increase employment will not, in themselves, have the desired impact on the more intractable challenges of reducing poverty and marginalisation of the poorest members of the South African community. Equally as important, it has been shown that measures to increase the funding of social grants for the poor could, if carefully managed and conditioned, result in marginal economic growth. If not conditioned with an increase in deficit, it would cause a severe decline in economic growth.

The prevailing situation underscores the critical urgency not only to identify, but also to rigorously implement, innovative and alternative strategies that are capable of advancing the nation toward a prosperous future. As such, a strategy grounded in sectoral growth and accompanied by a precisely focused programme for skill enhancement has undergone a thorough evaluation aimed at stimulating economic expansion and substantially reducing unemployment rates nationwide. This comprehensive approach integrates a detailed analysis of the literature, exhaustive ex post evaluation, and an advanced computable general equilibrium model tailored for ex ante assessments. Building on the precedent of descriptive–narrative impact reports, we used economic modelling-based dynamic computable general-equilibrium modelling to assess alternative development interventions. Despite the deployment of a variety of strategies, the findings indicate disappointing underperformance in economic indicators. However, ex ante evaluations reveal that the sectors of personal and social service activities, transport, finance, and insurance, possess the greatest potential to significantly reduce unemployment while simultaneously stimulating robust economic growth. These essential sectors, located within broader services and industries, are poised to significantly enhance overall productivity and reduce unemployment, while effectively integrating a significant influx of highly educated and skilled labour. This implies that South Africa can decisively advance its economic development by adopting a dual-pronged strategy: fostering structural shifts toward manufacturing and services, while consistently promoting the upskilling of its dynamic workforce. Implementing a robust programme to strengthen these sectors is not only a strategic imperative, but also a sound economic strategy.

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