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Population growth and unemployment in South Africa: A 24-Year analysis

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ABSTRACT

This study explores the nexus between population growth and unemployment in South Africa from 2000 to 2023, a period marked by significant demographic changes and economic challenges. South Africa has experienced rising unemployment alongside rapid population growth, which has led to concerns about the country's ability to absorb its expanding labour force. The aim of this research is to examine how population growth influences unemployment, considering additional factors like foreign direct investment (FDI), gross domestic product (GDP), and inflation. Using time series data from the World Bank, Statistics South Africa, and the South African Reserve Bank, the study employs the Augmented Dickey-Fuller unit root test for stationarity, Johansen cointegration for long-term relationships, and Ordinary Least Squares (OLS) regression to estimate the impact of population growth on unemployment. Key findings indicate that population growth has a positive and statistically significant relationship with unemployment, meaning higher population growth increases unemployment levels. Foreign direct investment also shows a positive effect on unemployment, while GDP and inflation exhibit negative but statistically insignificant relationships. Based on these findings, the study recommends strategic urban planning, family planning initiatives, and targeted policies to attract labour-intensive FDI. Additionally, the government should focus on economic diversification, supporting SMEs, and investing in skill development to create sustainable jobs. This research contributes to understanding the dynamics between population growth and unemployment in South Africa and offers insights for more effective policy interventions.

Introduction

Population growth has remained a key issue facing developing countries in the globe. While developed countries are experiencing diminished or negative population growth, several countries in Southern African Development Community, including South Africa are having population growth above the economic growth rate (Ojimadu & Ogu, 2023). Population growth is a key determinant shaping the socio-economic landscape of developing countries, with profound implications for economic performance, social stability, and poverty reduction. Population growth may also have adverse effect on a nation's growth according to Gajjar (2017). In economies such as South Africa, where high unemployment is a persistent challenge, rapid population growth exacerbates existing issues such as poverty, inequality, and limited access to essential services. The relationship between population dynamics and labour market outcomes is complex and multifaceted, influencing policy decisions at both national and international levels. While population growth can stimulate demand for goods and services, potentially driving economic expansion, it also places immense pressure on the labour market, especially in urban areas where competition for jobs is most intense (Bala et al., 2020).

At the turn of the 21st century, the global population was estimated at 6.1 billion, with projections suggesting a rise to 9.2 billion by 2050, and 11 billion by 2100. Over 90% of this population growth is expected to occur in developing countries (Todaro et al., 2006;

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Abu et al., 2018). According to the United Nations (2022), the world's population surpassed 8 billion in 2022, marking a significant demographic milestone. However, this rapid growth has not been matched by corresponding increases in economic development. Since the 1970s, global economic growth has slowed, widening the gap between an expanding labour force and available job opportunities. In developing economies, this mismatch has often led to persistently high levels of unemployment and underemployment, posing significant barriers to sustainable development (UN, 2022).

South Africa stands as a stark example of the challenges arising from the nexus between population growth and unemployment. Despite being classified as an upper-middle-income country, South Africa faces one of the highest unemployment rates globally, with youth and women particularly affected. Unemployment in South Africa is compounded by several factors, including a high dependency on low-skilled labour, a mismatch between the education system and labour market demands, and macroeconomic policies that have failed to generate sufficient employment opportunities (Minhaj et al., 2021). In this context, the country's rapidly growing population further strains the labour market, exacerbating inequalities and social tensions.

The nexus between population growth and unemployment has long been a central concern in development economics. Scholars such as Ekpeyong (2023) have argued that unemployment, both open and hidden, is a key determinant of living standards in developing economies. High unemployment not only results from slow economic growth but also drives social and economic disparities, including poverty, inequality, and social unrest. Aronu et al. (2023) argue that in countries like Nigeria, population growth and inadequate policy responses to labour market demands have contributed to rising unemployment rates. South Africa is similarly affected, with increasing unemployment levels leading to broader socio-economic problems, including growing poverty and social exclusion (Bakare, 2011; Patel, 2019).

South Africa's large youth population compounds these challenges. Young people, particularly those who are not in education or training, experience disproportionately high unemployment rates. Although the South African government has implemented various employment initiatives and skills development programmes, these efforts have been insufficient in alleviating the high unemployment rates, especially given the rapidly expanding population and the economy's limited capacity to generate jobs at scale (World Bank, 2023). Additionally, South Africa is a major destination for migrants across Africa, adding further complexity to the unemployment issue. According to UNICEF (2023), South Africa hosts one of the largest migrant populations in Africa, with estimates indicating the presence of around 642,000 migrant children. While this migration contributes to growth in some sectors, it also increases competition for scarce job opportunities and places additional strain on public services, such as education and healthcare. This trend underscores the need for a nuanced understanding of the relationship between population growth and unemployment in South Africa.

Given the evidence of a strong relationship between population growth and unemployment in South Africa, this study aims to investigate this nexus in greater detail. By examining the period from 2000 to 2023, the research will explore how changes in population size, both through natural growth and migration, have impacted the labour market and contributed to persistently high unemployment. This analysis will provide a clearer understanding of the economic forces at play and offer insights into the policy interventions needed to address these challenges. The study is structured as follows: literature review, materials and methods, results and discussion, and finally, conclusion and policy implications.

Literature Review

The nexus between population growth and unemployment has been a subject of ongoing academic research, especially in developing countries where rapid population increases often outpace the capacity of economic systems to create jobs. This complex and dynamic relationship is shaped by various factors, including demographic changes, economic development, labour market structures, and migration patterns. Understanding the nexus between population growth and unemployment is crucial for policy development, particularly in countries facing significant socio-economic challenges. The decomposition of population growth and unemployment in developing countries presents a complex research outcome. It explores the significance of population growth in relation to development of the nation and its influence at large especially at the rural areas which depends mainly on subsistence economy (Chinda, 2025). Minhaj et al. (2021) suggest that the primary aim of global and national economic development policies is to align population growth with economic expansion. As populations grow, it becomes increasingly important to manage this growth in a way that ensures that economic development keeps pace with demographic trends. This is particularly important in developing countries, where labour market absorption often fails to match the increase in the workforce. Imran et al. (2015) argue that population growth is driven by a combination of fertility rates, mortality rates, and migration. When the interaction between these factors is not balanced, population growth can place significant pressure on economic systems, potentially leading to higher unemployment rates if job creation does not keep up.

Several studies indicate that population density and unemployment are often linked in complex ways. Minhaj et al. (2021) find that both population density and high unemployment rates tend to correlate with higher crime rates, as economic hardship can increase social instability. This situation can exacerbate poverty and reduce living standards, particularly in urban areas where population growth is often most concentrated. Larbi-Siaw (2015) argues that shifts in the demographic composition, such as changes in age structure or urbanisation, can influence economic progress, poverty reduction, and employment levels. Countries with rapidly growing populations often face challenges in creating sufficient employment opportunities for a young, growing workforce.

Population growth also plays a pivotal role in national development planning. Okafor (2004) suggests that understanding population dynamics is essential for formulating effective development strategies. Without accurate population data, it is difficult for policymakers to predict labour market trends and ensure that sufficient resources are allocated to education, infrastructure, and job creation. Similarly, Degu (2019) notes that unchecked population growth, especially in countries with high fertility and emigration rates, can hinder economic development, leading to higher levels of poverty and unemployment. The classical theory of population, first advanced by Robert Malthus in 1798, suggests that population growth outpaces the growth of resources, resulting in poverty. While Malthus' predictions were based on the assumption of limited technological progress, the modern-day challenge remains relevant, particularly in countries with high population growth and limited economic development (Dennis & Robert, 2008).

Population Growth in South Africa

In the context of South Africa, the interplay between population growth and unemployment is particularly critical. According to Degu (2019), South Africa's population growth is driven by a combination of factors, including natural population increase (where birth rates exceed death rates) and immigration. South Africa's population has grown significantly over the past few decades, with the population rising from 29.1 million in 1980 to 50.6 million by 2011. The most recent estimates from Statistics South Africa (2022) place the population at approximately 60.6 million, with an annual growth rate of 2.1%. While birth rates have been a major driver of this growth, immigration—especially from other African countries—has contributed to the rising population as well (Patel, 2019). This rapid population growth poses significant challenges for the South African labour market. More than half of South Africa's population resides in three provinces—Gauteng, KwaZulu-Natal, and Western Cape—which are the country's economic hubs. However, despite this concentration, unemployment remains high, especially among youth, women, and Black South Africans, who constitute the majority of the population. Statistics South Africa (2022) reports that the Black African population comprises approximately 81% of the total population. This demographic profile is crucial because it reflects the historical socio-economic inequalities that continue to shape the South African labour market today. The rising population increases the demand for jobs, but the South African economy has struggled to generate sufficient employment opportunities. As a result, the country's unemployment rate has remained persistently high, with official figures standing at 32.4% in the first quarter of 2024 (Statistics South Africa, 2024). This figure represents a stark challenge, as South Africa faces both structural and cyclical unemployment. High unemployment among young people, particularly graduates, is a pressing concern, as these groups often find it difficult to secure employment in a market that demands higher levels of education and skills.

Unemployment in South Africa

The labour markets in Southern Africa exhibits similar characteristics to those of the rest of Africa, they are segmented into rural and urban, formal and informal or public and private, about two-thirds of the labour force in Zimbabwe, Zambia, Malawi and Mozambique work in the agriculture sector (Zgambo, 2022). Unemployment is a central issue in South Africa, with profound socio-economic consequences. According to Azolibe et al. (2022) the high unemployment rate in South Africa is one of the most vital issues that distinguish them from those of developed nations. The authors stress that unemployment is an imperative macroeconomic challenge due to its social and economic consequences and therefore vital for policy markers to identify the factors that are affecting it the most. Patel (2019) notes that South Africa's unemployment problem is largely structural, a result of a mismatch between the skills that the workforce possesses and the skills required by the labour market. As South Africa's economy has become more integrated into the global economy, there has been a marked shift in demand towards high-skilled labour, leaving low-skilled workers, particularly those with little formal education, at a disadvantage (Pauw et al., 2006). MacGinty (2024) highlights this trend, noting that while there is a growing demand for skilled professionals, the majority of South Africa's workforce remains unskilled or semi-skilled, unable to meet the demands of a modern economy. Unemployment remains persistently high, it raises questions about its broader economic implications, especially for a country with vast natural resources an entrepreneurial population (Magaji et al.,2025; Adekoya et al.,2025).

Shah (2022) further explains that after South Africa's transition to democracy in 1994, the country experienced a significant increase in unemployment. This rise in unemployment was largely due to a surge in the labour supply, as more people entered the workforce at the same time that the economy was undergoing transformation. The working-age population increased from 55% of the total population in 1988 to 65% by 2008, intensifying the pressure on the job market. Statistics from Statistics South Africa (2024) confirm this trend, with the number of unemployed people rising from 5.1 million in the first quarter of 2014 to 8.2 million by the first quarter of 2024. Despite various government efforts to reduce unemployment, the country continues to grapple with high rates of joblessness, particularly among youth and graduates. The labour market is marked by a significant divide between the skilled and unskilled workforce, further exacerbating the unemployment crisis, especially among young people and women.

Empirical Evidence across different countries

Empirical studies have extensively explored the nexus between population growth and unemployment, employing various methodologies and datasets across different countries. Larbi-Siaw (2015), for instance, examined this relationship in Ghana using data from 1993 to 2013 and found a positive but statistically insignificant correlation, suggesting that structural factors and economic policies may play a more decisive role in influencing unemployment trends. In Nigeria, Abu et al. (2018) applied ARDL and Error Correction Models to data from 1980 to 2016, revealing a significant relationship between population growth and rising

unemployment, particularly in contexts of sluggish economic expansion. Degu (2019) analysed annual data from Ethiopia between 1991 and 2018 and found that population growth negatively affected economic growth, underscoring the developmental challenges faced by low-income countries with constrained resources. In the South African context, Patel (2019) identified GDP growth, foreign direct investment, and government spending on education as key factors that mitigate unemployment, thereby implying that sound economic policies could offset the labour market pressures caused by population growth. Minhaj et al. (2021), using the ARDL bound testing approach, found a long-term positive association between population growth and unemployment in Pakistan, while Yusuf (2021) reached similar conclusions in Somalia, linking population pressure to increased unemployment. Zgambo (2022), employing the Fully Modified Ordinary Least Squares method, reported that population growth significantly influences unemployment across the Southern African Development Community (SADC) region. More recently, Awa et al. (2025) used time series data from 1980 to 2023 in Nigeria and applied the OLS model, concluding that birth rate—a proxy for population growth—had a negative but statistically insignificant impact on unemployment. Overall, the empirical evidence suggests a strong and complex link between population growth and unemployment, particularly in developing nations. Rapid population increases, when not matched with adequate job creation, exacerbate unemployment challenges and hinder economic progress. Addressing this issue requires comprehensive policy responses, including investment in education, skill development, job creation, and strategies aimed at fostering inclusive economic growth.

Research Methodology

This study aimed to investigate the nexus between population growth and unemployment in South Africa over the period from 2000 to 2023. Given that the period under review encompasses significant socio-economic shifts, including a notable influx of migrants, a rising population due to natural increase (birth rates), and a surge in unemployment rates, this time frame offers a robust context for examining the relationship between population growth and unemployment in South Africa.

To analyse this relationship, the study employed the Ordinary Least Squares (OLS) regression model, which is widely used for estimating the parameters of linear relationships in time-series data. The reason of using the Classic OLS is that of all classes of estimators, OLS is the Best Linear Unbiased Estimator (BLUE) and it has minimum error (Awa et al, 2025). The data was sourced from reputable institutions including the World Bank, Statistics South Africa, and the South African Reserve Bank (SARB), ensuring the reliability and accuracy of the time series data for the variables under consideration.

Model Specification

The model adopted for this study is based on the approach used by Yusuf (2021) in his investigation of the effect of population growth on unemployment in Somalia. This model has been modified to suit the specific context of South Africa, incorporating relevant macroeconomic variables that are thought to influence unemployment, such as Foreign Direct Investment (FDI), Gross Domestic Product (GDP), and inflation. The general model structure used in this study is as follows:

$$UN = \alpha 0 + \alpha 1 POP + \alpha 2 FDI + \alpha 3 GDP + \alpha 4 INF + \epsilon$$

Where:

- UN represents the unemployment rate
- PO is the population growth
- FDI is foreign direct investment at time
- GDP is the gross domestic product
- INF is inflation rate
- ϵ is the error term
- $\alpha 0$ is the intercept
- $\alpha 1$ to $\alpha 4$ are the coefficients of the explanatory variables.

Variable Justifications

i. Unemployment (UN): The dependent variable in this study is unemployment, defined as the condition where the labour force actively seeking employment exceeds the number of available job opportunities. Unemployment is typically caused by a variety of factors, including a mismatch between labour supply and demand, technological changes, or economic downturns (Hjazeen et al., 2021). This study will explore how fluctuations in population growth influence unemployment levels in South Africa, considering the supply-side pressures on the labour market.

ii. Population Growth (POP): As the main independent variable, population growth reflects the increase in South Africa's population due to natural growth (birth rates) and net migration. This variable is critical in understanding labour market dynamics, as increasing population typically means more individuals entering the labour force, thereby potentially raising unemployment levels if job creation fails to keep pace (Aronu et al., 2023).

iii. Foreign Direct Investment (FDI): Foreign direct investment is considered a control variable in this study. FDI refers to investments made by foreign entities in the South African economy, which can play a significant role in job creation and economic development. A growing inflow of FDI is often associated with increased industrial activity and employment opportunities (Patel, 2019). This study will investigate how changes in FDI levels impact unemployment rates in South Africa.

iv. Gross Domestic Product (GDP): The GDP variable represents South Africa's economic output, measured annually. A higher GDP generally correlates with higher employment levels, as economic growth tends to stimulate job creation (Larbi-Siaw, 2015). This study will examine how GDP growth influences the unemployment rate, with the hypothesis that higher economic output reduces unemployment.

v. Inflation (INF): Inflation, measured by the Consumer Price Index (CPI), will be included as a control variable to account for price changes that might influence the cost of living and employment conditions. Inflation can affect unemployment in various ways, such as influencing wage dynamics and affecting the purchasing power of households (Yusuf, 2021). The study will analyse how inflation impacts unemployment rates in South Africa.

Data Sources and Econometric Modelling

The study utilised time-series data spanning from 2000 to 2023, sourced from World Bank, Statistics South Africa (Stats SA), and the South African Reserve Bank (SARB). The dataset will cover the following variables outlined in Table 1.

Table 1: Summary of Variables and Data Sources

Variable	Abbreviation	Definition	Data Source
Unemployment	UN	Rate of unemployment (percentage)	World Bank
Population Growth	POP	Annual growth rate of population	World Bank.
Foreign Direct Investment	FDI	Foreign investment inflows	World Bank
Gross Domestic Product	GDP	Total economic output	World Bank,
Inflation	INF	Consumer price index (annual inflation rate)	World Bank

The data was subjected to various econometric techniques, including **stationarity tests** to ensure that the time-series data is suitable for regression analysis, and **cointegration tests** to examine the long-term relationships between the variables.

Findings and Discussion

Empirical Analysis and Discussion

The empirical analysis in this study begins by testing the stationarity of the time series data used to examine the relationship between population growth and unemployment in South Africa. As noted by Brooks (2014), it is crucial to ensure that the time series data is stationary before conducting any econometric analysis. If the series is non-stationary, it can lead to spurious regression results, meaning the relationships observed between variables may not be meaningful or may be distorted. Non-stationary data can exhibit characteristics such as a fluctuating mean or changing variance over time, making it unreliable for analysis. To test for stationarity, the Augmented Dickey-Fuller (ADF) unit root test was applied to the variables at both the level and first difference, including constant and trend terms. The results are presented in Table 2 below.

Table 2: Unit Root Test Results

Variable	ADF Statistic
Unemployment (UN)	1(1)
Population Growth (POP)	1(1)
Foreign Direct Investment (FDI)	1(0)
Gross Domestic Product (GDP)	1(0)
Inflation (INF)	1(0)

The notation 1(0) and 1(1) indicate stationarity at the level and after first differencing, respectively. The unit root test was conducted at a 5% significance level.

Stationarity and Implications for the Analysis

The results from Table 3 indicate that the variables GDP, FDI, and INF are stationary at level, while UN and POP only became stationary after first differencing. This means that these variables are integrated of order one (1)), and further analysis can proceed. The stationarity of the variables is a prerequisite for conducting meaningful regression analysis. Non-stationary data would have led

to unreliable estimates and potentially misleading conclusions, highlighting the importance of testing and transforming the data before proceeding to the cointegration and regression stages.

Cointegration Test: Establishing Long-term Relationships

Once stationarity was confirmed, the study proceeded with the Johansen Cointegration Test to examine the long-term relationships between the variables. Cointegration analysis is particularly important when dealing with time series data that may exhibit trends or non-stationarity. If two or more variables are cointegrated, it suggests that, despite their individual non-stationary nature, they move together in the long run, maintaining a stable equilibrium relationship.

The Trace test results, as shown in Table 3, indicate that the null hypothesis of no cointegration is rejected at the 5% significance level, confirming the presence of cointegration among the variables.

Table 3: Johansen Cointegration Test Results

Hypothesised No. of CE(s)	Trace Statistics	5% Critical Value	P-value
None*	109.6601	88.80380	0.007
At most 1*	65.45999	63.87610	0.0366
At most 2	32.48160	42.91525	0.3629
At most 3	16.35451	25.87211	0.4644
At most 4	6.140860	12.51798	0.4426

The Trace Statistics provide strong evidence that there are at least two cointegrating equations, suggesting that the variables used in the model—population growth, unemployment, FDI, GDP, and inflation—are related in the long term. This implies that despite fluctuations or short-term divergences, these variables are bound by long-run equilibrium relationships.

Regression Analysis: Estimating the Relationships

Following the cointegration tests, the study estimated the relationships between unemployment (UN) and the explanatory variables using an Ordinary Least Squares (OLS) regression model. The regression results are summarised in Table 4.

Table 4: Summary of Regression Results

Variable	Coefficient	Std. Error	T-Statistic	P-value
Population Growth (POP)	0.427267	0.014540	29.38465	0.0000
Foreign Direct Investment (FDI)	0.342058	0.148268	2.307017	0.0319
Gross Domestic Product (GDP)	-0.126396	0.112969	-1.118862	0.2765
Inflation (INF)	-0.107792	0.129861	-0.830063	0.4163
R-Squared	0.818748			
Adjusted R-Squared	0.791560			
Durbin-Watson Statistic	1.120061			

Discussion of the Results

The results from the regression analysis reveal several noteworthy findings:

i. Population Growth (POP): The coefficient for POP is 0.427, and it is statistically significant with a p-value of 0.0000. This indicates a positive relationship between population growth and unemployment. Specifically, a 1% increase in population growth leads to an increase in the unemployment rate by approximately 0.43%. This result is consistent with prior studies, such as those by Yusuf (2021) and Aronu et al. (2023), which found a positive relationship between population growth and unemployment in Somalia and Nigeria, respectively. The underlying explanation is that an increase in population leads to an expanded labour force, but if job creation does not keep pace with this growth, unemployment rises.

ii. Foreign Direct Investment (FDI): The coefficient for FDI is 0.342, with a p-value of 0.0319, indicating that it is statistically significant. This result suggests that FDI has a positive effect on unemployment in South Africa, which is counterintuitive to traditional economic theory, which generally associates FDI with job creation. One possible explanation for this paradox is that South Africa may attract capital-intensive FDI—investments in sectors that require less labour (e.g., mining, technology). Additionally, issues like corruption, poor governance, or inefficient public policies may prevent FDI from being effectively translated into employment opportunities. A positive relationship between FDI and Unemployment rate

occurs when there is mergers and acquisitions between a foreign company and domestic company and a domestic company that will lead to reduction in work force (Azolibe et al., 2022).

iii. Gross Domestic Product (GDP): The coefficient for GDP is negative (-0.126), suggesting that higher GDP growth would typically reduce unemployment. However, the result is not statistically significant, with a p-value of 0.2765, meaning we cannot confidently reject the null hypothesis that GDP does not affect unemployment in South Africa. This could be due to the fact that economic growth in South Africa has not been inclusive enough to absorb the growing labour force. The country has faced structural challenges such as income inequality, mismatched skills, and high youth unemployment, which have limited the employment impact of GDP growth.

iv. Inflation (INF): Similarly, the coefficient for inflation is negative (-0.107), indicating that an increase in inflation could theoretically reduce unemployment. However, the result is also not statistically significant, with a p-value of 0.4163, suggesting that inflation does not have a robust impact on unemployment in South Africa. This could be due to the complex nature of inflation, which may have both positive and negative effects on employment, depending on the underlying causes of inflation (e.g., demand-pull or cost-push inflation). Azolibe et al. (2022) states that the relationship between inflation rate and unemployment has traditionally been an inverse correlation. The authors continue to contend that Phillips was one of the first economists to present compelling evidence of the inverse relationship between unemployment and inflation rate through what is known as the Phillips curve.

v. Model Fit: The R-squared value of 0.8187 indicates that approximately 82% of the variation in unemployment is explained by the independent variables included in the model. This suggests a strong model fit, meaning the variables in the study (population growth, FDI, GDP, and inflation) explain a substantial portion of the fluctuations in unemployment. The remaining 18% of the variation is attributed to other factors not included in the model, such as labour market policies, technological changes, or social factors.

Policy Implications

The findings from this study have several important policy implications:

Population Management

Strategic Urban Planning: Given the strong positive relationship between population growth and unemployment, South Africa should focus on strategic urban planning to accommodate the growing population. This includes expanding infrastructure, providing affordable housing, and improving public services to ensure that urban areas can handle increased demand without exacerbating unemployment.

Family Planning Initiatives: Promoting family planning, particularly through education and access to contraceptive methods, can help moderate population growth. Education, especially for women, is a key factor in reducing fertility rates and aligning population growth with economic development. Certain strategies must necessarily be introduced within the framework of the South African society so as to constitute incentives for attracting and committing individuals, especially those considered in this exposition to embrace the need for serious and practical involvement in population control measures and check (Ojimadu & Ogu, 2023).

Foreign Direct Investment

Attracting Labour-Intensive FDI: To counter the negative impact of FDI on unemployment, South Africa should target investments in sectors that are labour-intensive, such as manufacturing, agriculture, and technology. By focusing on sectors that require a larger workforce, the government can ensure that FDI leads to meaningful job creation.

Improving Governance: Improving government effectiveness and reducing corruption are critical to ensuring that FDI contributes to the broader economy, rather than exacerbating inequality or failing to generate sufficient employment opportunities.

Economic Diversification

Support for SMEs and Job Creation: Fostering a diversified economy with a strong emphasis on small and medium-sized enterprises (SMEs) and entrepreneurship can provide more job opportunities for the growing labour force. Encouraging innovation and start-ups is crucial for reducing unemployment in both the short and long term.

Monitoring and Evaluation

Regular Assessments of Economic Performance: Given the complex relationships identified in the study, it is important for the South African government to continuously monitor economic performance indicators and adjust policies to ensure they effectively address unemployment.

Inflation Control: Stabilising inflation is crucial for maintaining economic stability and reducing its adverse effects on employment.

Conclusion

This study highlights the complex nexus between population growth and unemployment in South Africa. The results show that population growth and foreign direct investment have significant positive effects on unemployment, while economic growth and

inflation exhibit negative relationships, though not statistically significant. These findings underscore the need for targeted policy interventions that address the challenges posed by rapid population growth and improve the effectiveness of foreign direct investment. Future research should consider expanding the model by including additional control variables and comparing the results across countries in the Southern African Development Community (SADC) to develop a more comprehensive understanding of the factors driving unemployment in the region.

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