Relevance of Democracy and Economic Freedom to Employment and Entrepreneurship in Post-apartheid South Africa

https://doi.org/10.36369/2616-9045/2024/v13i2a8
Online ISSN: 2616-9045.Print ISSN: 2218-5615

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Abstract

Development success hinges on ever-growing freedom and individual values in a democracy rather than in a state-inspired framework with collectivist ideas (Easterly, 2021). Against the background of government failures, with low employment growth, this paper uses a VAR model and Granger causality tests to examine the relationship between economic freedom, democracy, real GDP, unemployment and entrepreneurship (TEA) in post-apartheid South Africa, using 1994-2023 data.

The findings indicate a short run relationship exists between the variables under study. A point increase in the previous year's democracy score results in a notable 10% gain in TEA, confirming that democracy has a highly beneficial impact on entrepreneurship. Unemployment, third lag, has a positively significant impact on TEA, thus supporting the push-hypothesis. Declines in TEA negatively impact on real GDP, and first lag entrepreneurship positively impacts freedom. The Granger tests show a one-direction causality running from democracy to entrepreneurship, from democracy to freedom, and from real GDP to entrepreneurship. A bi-direction causality is found to exist between TEA and unemployment. Individually, democracy, unemployment and real GDP Granger cause TEA. As a group, that includes freedom, the four factors jointly cause TEA. Hence, a strengthening of democracy, entrepreneurship, real GDP and freedom in South Africa can assist in reducing the country's unemployment.

Keywords: Democracy, Freedom, Unemployment, Entrepreneurship, Economic Growth

Introduction

South Africa registered uneven development after democracy in May 1994. Under the Mbeki and Mandela presidency years, progress in the 'rainbow nation' was quite robust. The economy registered an average growth rate of 3% during the period 1994-2012, over 5% between 2005 and 2007. With sensible macroeconomic policies, under Trevor Manuel as Minister of Finance, there was even an overall budget surplus during the fiscal years 2006/2007 and 2007/2008 (Cronje, 2017; Bisseker, 2024). Using the proceeds of GDP growth, ANC-led governments delivered housing, electricity, education, water, and welfare benefits, including pensions, disability, child support and state grants, to millions of households, abating their poverty (The Economist, 2021; Stats SA, 2023). Further, millions of black South Africans have transitioned into the middle class, partly as a result of black economic empowerment (BBE) and employment equity measures (The Economist, 2024).

In the past 15 years, South Africa's economic growth and fiscal positions experienced a downturn, partly driven by governance failures. Average real GDP growth, during the period 2010-2019, was 1.7%, -6% during the Covid 2020 period, and about 2% during 2021-2023. Despite the overall output growth, employment in democratic South Africa has not increased sufficiently to absorb the rising annual number of job seekers. Amidst a period of weak economic growth and low labour absorption capacity South Africa's population increased from 51.8m in 2011 to 62m in 2022, thus resulting in a rising joblessness rate (Stats SA, 2024).

When Ramaphosa replaced Zuma as President in 2018, there was great hope that a 'Ramaphoria dawn' would inject a rapid phase GDP and employment growth, and that he would rapidly tackle state capture, service deliveries, and unemployment, trending to a better life for all. However, people are disillusioned, as South Africa remains besieged by poverty, corruption, service delivery failures, rampant crimes, slowing growth, rising unemployment, ineptitude, crippling electricity shortages, poor rail and port logistics, and a deteriorating fiscal situation (Basson and Hunter, 2023). According to the NDP, if South Africa's unemployment rate is to be reduced to 6% in 2030, employment growth would have to come from small business entrepreneurship, and to reach that goal the country needs to register an average annual growth rate of at least 5.4%. However, the actual growth rate is far below the NDP target.

After steady progress in the first 15 years of freedom, many South Africans allege that they are dissatisfied with democracy, as they no longer see their lives getting better (The Economist, 2024). More state involvements in the allocation of scare resources, with threats of expropriation of land and other assets without compensation, encroach on the economic freedom and voluntary choice of people (World Bank, 2024).

As South Africa is underperforming and is vulnerable to various shocks, one needs to understand what is the 'right' trajectory to take in its pursuit of inclusive economic growth,

job creation, freedom, entrepreneurship development and democracy, and whether there is a relationship among these variables. Thus, this study investigates, firstly, whether there is a short run and a long run relationship between democracy, total early stage entrepreneurship (TEA), real GDP, unemployment and freedom in post-apartheid South Africa, covering the period 1994-2023, using the vector autoregression (VAR) approach. Secondly, it examines the direction of causality of the relationship among the selected variables, using the Granger causality test. The goal is to generate valuable governance and policy insights to support democracy in South Africa, understand the interplay between GDP growth, citizens' freedom, unemployment and entrepreneurship, and develop economic resilience in a challenging domestic environment, at a time when certain regions seem to experience a gradual regress from democracy. The paper consists of four sections; the first covers the literature on freedom and other variables under the study, with highlights of some post-apartheid macroeconomic conditions of South Africa. The second covers the research methodology. The third discusses the results, and the last discusses the relevance of democracy and freedom to advancing the country's employment, growth and entrepreneurship, with some policy directions.

South Africa's Macroeconomic and Governance Conditions

After decades of apartheid rule and a negotiated transition, Nelson Mandela powered the ANC to victory in South Africa's first democratic election in May 1994. The electoral manifestoes then and in subsequent elections consistently hinged on 'a better life for all' and 'jobs, jobs, jobs'. With political freedom, people expected that the democratic dispensation would generate handsome dividends fast, in the form of decent jobs, basic needs satisfaction and a better life for all. However, the idealism of freedom and democracy under the successive post-apartheid ANC governments, has failed to deliver benefits to all. After three decades of transition to democracy, a culture of impunity has taken root in South Africa among those close to the seat of power, undermining the system of good governance (Ramphele, 2017; Leon, 2021). Under the same governance party, key institutions of democracy have been undermined and captured for selfish gains (Basson and Hunter, 2023).

While some in governance leadership were selfless to advancing the interests of the people in the democratic dispensation, others were greedy, corrupt and entirely selfish, with accountability swept aside, eminently during the Zuma presidency period 2009-2018 (Bisseker, 2024; Johnson, 2019). Every layer of governance – state-owned entities, municipal, provincial and national- is infested with cadre deployment. The governance party was subsumed by corruption and greed, facilitated by cadre appointments in different spheres of government (The Economist, 2017; De Ruyter, 2023). As these were based on political loyalties rather than competence, this resulted in a network of mafias hell-bent on looting the state and eroding the state capacity, with negative consequences for rising dysfunctionality and service delivery failures (Jeffery, 2023; Basson and Hunter, 2023). In 2020, for instance, after it was uncovered that ANC politicians and their business

partners had looted state money earmarked to procure Covid-19 protective equipment, President Ramaphosa stated that the ANC was corruption 'accused number one' (Basson and Hunter, 2023). Many leaders in state sector were involved in massive frivolous expenditures and rent-seeking activities. According to South Africa's Auditor General reports, only 15% of 257 municipalities get clean audits from the relevant watchdog (The Economist, 2024).

After attaining democracy, South Africa started off well with economic development, registering an average economic growth rate of about 3% in the first 15 years of democracy, but regressed to about half that rate in the next 15-year period (The Economist, 2024). Although GDP per capita increased from just under R62,000 in 1994 to R75,726 in 2022 (SARB, 2023), employment has lagged behind GDP growth. Thus, unemployment increased from 20% in 1994 to 25% in 2000 to 32% in 2023 (SARB, 2024). In effect, the unemployment rate, on average, has risen, on average, by about half a percentage point annually since 1994, to almost 33% in 2024, and is the highest in the world (The Economist, 2024). Factoring in the discouraged worker effect, the expanded unemployment is over 40%, and youth unemployment is shockingly much higher (SARB, 2024). Jobs are scarce, partly because of low economic growth and inflexible labour market, with labour laws making it expensive to hire, and hard to fire anyone (The Economist, 2021). Holding free and fair elections is a prerequisite of democracy. South Africa held its 7th election on 29 May 2024. Nationally, the ANC failed to win a majority, giving rise to a new democracy, with coalitions.

Even in a young democracy, institutions and political parties have become unresponsive and unrepresentative to citizens' needs. It is no surprise that many South Africans are fed up after 30 years of democracy. South Africa's debt ratio, as a proportion of the country's GDP, increased from 28% in 2008 to 74% in 2024, the debt stock grew from R525bn to R2-trillion, and debt service costs absorb about a fifth of the budget, with adverse liability implications for present and future generations (SARB, 2021, 2024; Bisseker, 2024). Policy makers promise a lot, thinking that democracy owes people increasing prosperity, advocating that a national democratic revolution through more state involvement would deliver 'miracles' fast. However, the second 15 years of democracy show state developmental progress has regressed, with weakening public institutions (Silke, 2024).

There has also been a deterioration in democracy in certain countries in Sub-Saharan Africa, the Middle East and Latin America, as a result of military coups, wars and conflicts. These include the recent atrocities between Israel and Palestine and invasion of Ukraine by Russia (The Economist, 2024). Encouragingly, the number of countries classified as democracies increased from 72 to 74 in 2023, according to the Economist's Intelligence Unit report (The Economist, 2024).

Democracy, Economic Freedom and Entrepreneurship

Empirical studies linking economic growth to democracy, proxied in terms of indexes of political freedom, in about 100 countries over a prolonged period (1960-1990), have shown that more democracy has a positive effect on enhancing growth, and the favourable effects on growth include maintenance of rule of law, free markets, small government consumption and high human capital. Countries with good functioning institutions and that register growth in their human development index (measured by GDP per capita, health status and education development) over time are likely to experience growth in political freedom and become more democratic (Barro, 1996; Acemoglu, Naidu, Restrepo and Robinson, 2019). Other studies have confirmed that economic freedom is positively related to GDP per capita growth (Heckelman, 2000; Li and Kumbhakar, 2022).

Economic freedom is the fundamental right of every person to control his labour and property, enabling individuals to be free to work, produce, consume and invest as they please, without government constraints or coercions on their liberty itself (Kantor, 2017). In accordance with the Heritage Foundation, economic freedom is measured as an index, based on 12 factors, grouped into four categories of freedom. These are the rule of law (property rights, government integrity, judicial effectiveness), government size (government spending, tax burden, fiscal health), regulatory efficiency (business freedom, labour freedom, monetary freedom), and open markets (trade freedom, investment freedom, financial freedom). Countries with a high score (closer to 100) on the freedom index, such as New Zealand (83.9) and Switzerland (81.9) were rated as top freedom regions, whereas those on the opposite end of freedom spectrum, with lower scores, were rated as repressed and less free countries (Heritage Foundation, 2024).

Countries with higher economic freedom (score above 80) and those that are mostly free (score between 70 and 79.9) tend to experience significantly higher economic growth rates and higher levels of entrepreneurship and innovative activities. These, in turn, reduce poverty levels and contribute to citizens' happiness relative to the repressed, low-freedom countries (Barro and Sala-i- Martin, 1995; Gwartney, Holcombe and Lawson, 2006; Hall and Sobel, 2008; Bennett, 2021). GDP per capita is more than seven times higher in free countries compared to the least-free ones, and extreme poverty is as much as sixteen times greater in the least-free countries (Norberg, 2023).

Studying the effect of economic freedom on entrepreneurship in 73 countries, Nikolaev, Boudreaux and Palich (2018) found that freedom is a significant determinant of both opportunity-motivated entrepreneurship (OME) and necessity-motivated entrepreneurship (NME); positive in the case of OME and negative in the case of NME. They also found that countries with lower levels of corruption and greater freedom have higher levels of OME. Entrepreneurship, whether necessity or opportunity-motivated, brings capital and labour together, and generates income, output and employment growth (Parker, 2018).

According to Global Entrepreneurship Monitor (GEM) reports, a strong relationship exists between a country's economic growth, proxied by per capita real GDP and its level of total early-stage entrepreneurial activity (TEA). The TEA shows the percentage of working age individuals (16-64 years) who are involved in starting a business less than 3 months old, and new businesses, that they will own and run for at least 3.5 years. Early stage entrepreneurship in South Africa, as reflected by its TEA, increased from 6.5% in 2002 to 10.8% in in 2019 and to 17.5% in 2021, but declined to 8.5% in 2023 (GEM Report, 2023). Concerningly, established business ownership (more than 3.5 years) declined from 3.5% in 2019 to 1.8% in 2022/23 (GEM Report, 2023).

Economic freedom in South Africa is on a declining trend, as its score declined from 59.7 (out of 100) in 2021 to 56.5 in 2022, to 55.7 in 2023 and to 55.3 in 2024. South Africa's global ranking position in freedom dropped accordingly, from 99 in 2021 to 112 in 2022 and to 111 in 2024 (out of 184 countries), (Heritage Foundation, 2024). Further, according to Fraser Institute's 2023 Annual Report on Economic Freedom of the World, South Africa's score declined from 6.97 (out of 10) in 2000 to 6.53 in 2021, and its global rank also declined from 47 position to 94 (out of 165 countries). South Africa is thus placed in the third quartile of global freedom ranking, while Singapore (8.56 out of 10) and Switzerland (8.47) are placed in the most top positions as most free countries (Fraser Institute, 2023).

Similarly, the Economist Intelligence Unit's report (2024) on democracy across the world indicates that the level of democracy in South Africa, as reflected by the democracy index decreased, from 7.91 (out of 10) in 2006 to 7.05 in 2023. In terms of global position, South Africa ranked at 45 in 2022, but declined to 47 out (of 167 countries) in 2023 (The Economist, 2024). Scored on a 0-10 scale, the democracy index is based on 60 variables, grouped into five categories. These are electoral process and pluralism, functioning of government, political participation, political culture and civil liberties. Based on its score, the index categorises each country as one of the four types of regimes: full democracies (scores from 8 to 10), flawed democracies (scores under 6 to 7), hybrid democracies, that combine elements of both formal democracy and authoritarianism (scores from 4 to 6), and authoritarian regimes (scores less than or equal to 4). About half of the world's population live in a democracy of some sort, about two fifths (39.4%) live under authoritarian rule, and only about 8% reside in a full democracy. Hybrid and authoritarian regimes are mainly present in Sub-Saharan Africa, Middle East and North Africa. But what is of concern is that non-democratic regimes are becoming more entrenched, and countries under hybrid regimes are struggling to enhance democracy (The Economist, 2024).

The above trends clearly reflect that South Africa is moving in the wrong direction. Even the Mo Ibrahim Index of African Governance (IIAG, Index Report, 2023) indicates that although South Africa is ranked 6th (out of 54 African countries) with an overall governance score of 68 (out of 100), the country has been regressing on human development, security and law over the 2012-2021 period. Whilst there has been an undeniable slippage in South

Africa's economic performance, the country seems to be positioning itself close to certain non-democratic countries, such as China and Russia. Given the deteriorating trends in GDP growth, entrepreneurship, employment, freedom and democracy in South Africa, under the same governance party for the past three decades, one needs to assess whether there is a short- and long-run relationship among these variables, over the period 1994-2023, and needs to know the causal direction of those relationships.

As people in South Africa fought for years to obtain liberation and democracy, greater benefits from these liberation efforts in terms of entrepreneurship, job creation, economic growth and income are yet to be reaped, possibly by an entrenchment of democracy and freedom, or contrastingly lost by a move towards a state dirigiste regime, that impinges on corporate and individuals' freedom. Most of the studies on entrepreneurship and unemployment in South Africa have looked at push-pull, micro and macro factors, but they have overlooked democracy and freedom. Hence, this study addresses this gap. Democracy may have been a disappointment in the second half of the ANC-governance period. However, democracy offers the potential for renewal, depending on the quality of governance and policies that will be taken.

Methodology

Based on the above literature, this paper aims to establish relationships between democracy, unemployment, freedom, entrepreneurship and GDP growth in post-apartheid South Africa, using data for the period 1994-2023. It also seeks to examine causal directions of the relationships among the variables under study. This is done by using the Granger causality test. Given that data on TEA and democracy index were available only as from 2001 and 2006 respectively, we had to do an extrapolation exercise similar to that of Mahadea and Kaseeram (2018) to get an estimate of both variables for missing period (from 1994 to the target years). Stata is used for data analyses.

At the outset, it is essential to test for unit roots using the augmented Dickey-Fuller (ADF) test (Dickey and Fuller, 1981). The ADF unit roots test results are presented in Table 1 below. In absolute terms, the ADF test statistics (2.572) for democracy (DEM) is greater than critical value (1.950) at 5% level, after first difference. The ADF test statistics (5.046) for entrepreneurship (TEA) is also higher than the critical value (2.994) at 1% level, after first difference. Similar results exist for the other variables, Real GDP, Unemployment (U) and Freedom (FREE). The results thus confirm that all variables are stationary at the first level, suggesting that the variables can be used for either a Vector error correction model (VECM) or Vector autoregressive (VAR) model.

Table 1: ADF Unit Root Test Results

Variables	Levels		First difference	
	T statistics	Critical value	T statistics	Critical value
DEM	-2.733	-3.588	-2.572	-1.950**
TEA	-4.897	-1.950	-5.046	-2.994 ***
Real GDP	-1.695	-2.992	-3.736	-2.994 **
U	-2.902	-1.950	-5.135	-2.992 ***
HFREE	-0.963	-1.950	-4.974	-1.950**

Notes: *** and ** represent 1% and 5% significance levels.

Further, the Johansen test for cointegration was used to determine the appropriate model between the VECM or VAR model. If variables are integrated, meaning they exhibit a long-run relationship, the VECM would be appropriate. Alternatively, the VAR model would be suitable. The result of the Johansen test (Appendix 2) suggests no cointegration, and thus no long run relationships among the variables (trace statistic = 40.44*< critical value = 47.21, p<.05), confirming the use of a VAR model to assess the short-run causality between DEM, U RGDP, TEA and FREE in South Africa. This VAR model is specified as follows:

$$DEM_t = a + \sum_{i=1}^{k} \beta_i DEM_{t-i} + \sum_{j=1}^{k} \emptyset_j TEA_{t-j} + \sum_{m=1}^{k} \varphi_m U_{t-m} + \sum_{n=1}^{k} \vartheta_n FREE_{t-n} + \sum_{l=1}^{k} \lambda_l RGDP_{t-n} + U_{1t}$$

$$TEA_t = b + \sum_{i=1}^{k} \beta_i DEM_{t-i} + \sum_{j=1}^{k} \emptyset_j TEA_{t-j} + \sum_{m=1}^{k} \varphi_m U_{t-m} + \sum_{n=1}^{k} \vartheta_n FREE_{t-n} + \sum_{l=1}^{k} \lambda_l RGDP_{t-n} + U_{2t}$$

$$U_t = c + \sum_{i=1}^{k} \beta_i DEM_{t-i} + \sum_{j=1}^{k} \emptyset_j TEA_{t-j} + \sum_{m=1}^{k} \varphi_m U_{t-m} + \sum_{n=1}^{k} \vartheta_n FREE_{t-n} + \sum_{l=1}^{k} \lambda_l RGDP_{t-n} + U_{3t}$$

$$FREE_t = d + \sum_{i=1}^{k} \beta_i DEM_{t-i} + \sum_{j=1}^{k} \emptyset_j TEA_{t-j} + \sum_{m=1}^{k} \varphi_m U_{t-m} + \sum_{n=1}^{k} \vartheta_n FREE_{t-n} + \sum_{l=1}^{k} \lambda_l RGDP_{t-n} + U_{4t}$$

$$RGDP_t = e + \sum_{i=1}^{k} \beta_i DEM_{t-i} + \sum_{j=1}^{k} \emptyset_j TEA_{t-j} + \sum_{m=1}^{k} \varphi_m U_{t-m} + \sum_{n=1}^{k} \vartheta_n FREE_{t-n} + \sum_{l=1}^{k} \lambda_l RGDP_{t-n} + U_{5t}$$

Notes:

- The dependent variable is a function of its lagged values and the lagged values of other variables in the model.
- k = the lag length, and all variables have equal lags.
- β_i , $\emptyset_j$, φ_m , ϑ_n and λ_l are short-run dynamic coefficients of the model's adjustment long-run equilibrium.
- U_{nt} = residual (stochastic error terms often called impulses, innovations, or shocks).

To analyse the relationship between TEA, U, EG and FREE, yearly time series data from 1994 to 2023 were obtained from the South African Reserve Bank, Economist Intelligence Unit (EIU) and GEM reports. Table 2 below briefly describes all variables used in this paper.

Table 2: Description of variables

Variables	Variable name	Description of variables and measurements
Democracy	DEM	Represents democracy, measured in terms of democracy index, 0 to 10 scale. A higher score, above 8 and closer to 10, reflects a higher level of full democracy. Non-democracies, classified as hybrid regimes and authoritarian regimes have low scores, 4 to 6, and under 4 respectively. Data sourced from EIU.
Total Entrepreneurial Activity	TEA	It represents the proportion of working-age groups about to start an entrepreneurial activity and those involved in one for at least a year. TEA is measured in a percentage rate. Data sourced from GEM reports.

Unemployment	U	Represents the narrow definition of unemployment (persons aged 15 to 64 who did not work and who actively looked for work in the last three weeks, but could not find a job). U is measured in a percentage rate. Data sourced from SARB.
Real GDP	RGDP	Represents a proxy for measuring national income. It is measured in millions of Rands. Data sourced from SARB.
Freedom	FREE	Represents a proxy for measuring economic freedom. It is measured using an index, ranging from 0 to 100. Data sourced from the Heritage Foundation.

Hypothesis Testing

The hypotheses underpinning this study are presented below.

- H1: There is a relationship between changes in democracy levels and changes in unemployment, real GDP, TEA (Total Entrepreneurial Activity), and freedom.
- H2: Fluctuations in unemployment rates have an effect on democracy, real GDP, TEA, and freedom.
- H3: Changes in real GDP have an impact on democracy, unemployment, TEA, and freedom.
- H4: Variations in TEA lead to fluctuations in democracy, unemployment, real GDP, and freedom.
- H5: Changes in freedom indices have an impact on democracy, unemployment, real GDP, and TEA.

Results and Discussion

The results are presented in two stages; first, the VAR findings and this is followed by those of the Granger causality tests**.** The results of the VAR model show partial support for all the

hypotheses, and these are presented in Table 3. Looking at the relationship between democracy (DEM) and the other variables, the first result indicates that there is a short-run relationship running from last year's democracy (lag 1) to current year's democracy, suggesting a unit increase in past democracy increases the current democracy by about 1.1 unit, at a 5% significant level, on average, *ceteris paribus*. Similarly, a short-run significant relationship exists, running from democracy to freedom. The first lag of freedom negatively impacts democracy at a 10% level of significance, *ceteris paribus.* Transitional political dynamics may thus explain the inverse relationship between the latency in FREE and DEM. Rapid expansions in civil liberties and personal freedoms could create temporary political and social instability, leading to challenges in maintaining democratic processes and institutions. Such situations might arise from power struggles and societal overreactions that may hinder democratic governance despite increased freedoms.

Table 3: VAR results

VARIABLES	**DEM**	**TEA**	**U**	**RGDP**	**FREE**
	Coef	Coef	Coef	Coef	Coef
DEM					
L1	1.101897***	-.0055987	.0186933	-9.06e-08	-.025041*
	(.2380531)	(.0124121)	(.0190139)	(1.74e-07)	(.012904)
L2	-.498544	-.0086947	-.0098589	9.32e-08	.0104469
	(.389497)	(.0130855)	(.0157671)	(3.27e-07)	(.0185364)
L3	.2996925	-.0100882	-.0041416	-4.12e-08	.0023526
	(.2408975)	(.0156848)	(.0162426)	(2.62e-07)	(.0140726)
_cons	1.640789				
	(1.941455)				
TEA					
L1	10.13819**	-.0545508	.1830983	-.0000154***	-.5131493**
	(4.298341)	(.2241158)	(.3433202)	(3.14e-06)	(.2329975)
L2	-9.514211	.0377968	-.7151524**	.0000155***	.3635541
	(7.032848)	(.2362751)	(.2846939)	(5.90e-06)	(.3346978)
L3	.3992654	.1725483	.597118**	1.47e-06	-.269589
	(4.349702)	(.2832075)	(.2932806)	(4.72e-06)	(.2540973)
_cons		1.640789			

VARIABLES	DEM	TEA	U	RGDP	FREE
	Coef	Coef	Coef	Coef	Coef
		(1.941455)			
	-3.969292				
U	(2.759537)	.7335306***	-.2120268	-.0000118***	.3119738**
L1	-6.631477	(.1438824)	(.2204117)	(2.02e-06)	(.1495845)
L2	(4.515092)	.6817057***	-.1705541	6.50e-06*	.2321811
	-1.334177	(.1516887)	(.1827736)	(3.79e-06)	(.2148761)
L3	(2.792511)	.3657932***	.3660446*	-5.58e-06*	.0722194
		(.1818194)	(.1882863)	(3.03e-06)	(.1631306)
_cons			109.9827***		
			(22.50556)		
RGDP	62100.22				
L1	(202272.4)	-16251.63	4169.194	.8811426***	11591.65
	396652.2	(10546.49)	(16156.04)	(.1479566)	(10964.45)
L2	(330953.5)	-15740.63	18287.64	-.3457835	7903.54
	7248.257	(11118.69)	(13397.19)	(.277772)	(15750.29)
L3	(204689.3)	-25042.91*	20778.74	.7904823***	-44032.02***
		(13327.25)	(13801.27)	(.2222163)	(11957.37)
_cons				-3856614**	
				(1649644)	
	-.1701845				
FREE	(3.557134)				
L1	-6.328044	.3960569**	-.0558029	-3.76e-07	.305923
	(5.820101)	(.1854692)	(.2841179)	(2.60e-06)	(.1928193)
L2	8.348977**	.1962599	-.2831217	5.97e-06	.2438059
	(3.599638)	(.1955318)	(.2356012)	(4.88e-06)	(.2769824)
L3		-.0281826	.0746875	-6.64e-06*	.4182269**

VARIABLES	DEM	TEA	U	RGDP	FREE
	Coef	Coef	Coef	Coef	Coef
_cons		(.2343711)	(.2427072)	(3.91e-06)	(.2102806) -7.611288 (29.0104)

Notes: ****; ** and * represent the significance levels of 1%, 5%, and 10%, respectively, and standard error in parenthesis.*

The short-term associations between DEM, U, RGDP, FREE, and TEA have significant effects. An increase of one point in the previous year's DEM score results in a notable 10.13% gain in TEA, confirming the highly beneficial impact of democracy on entrepreneurial activity. Furthermore, the impact of unemployment on TEA is observed in the second and third lags. Specifically, a 1% rise in unemployment leads to a decrease of -0.71% in TEA, and an increase of 0.59% in TEA, respectively, with a 5% level of statistical significance. This may reflect that when people are unemployed, after undergoing a protracted search period, they are pushed into entrepreneurship as a survival mode. Additionally, a mere 1% rise in the initial and subsequent delays of RGDP directly impacts TEA resulting in a decrease and an increase, respectively.

Moreover, a single point increase in the FREE score from the previous year results in a TEA reduction (-0.51) at a 5% significance level, on average, *ceteris paribus*. This finding highlights the complex connection between socioeconomic issues and the dynamics of entrepreneurship. An increase in freedom (lag 1) may 'pull' people to search for more wage-employment opportunities relative to self-employment, *ceteris paribus.* Exceptionally high levels of unemployment in the past impede short-term entrepreneurial activity, but previous decreases in unemployment (L3) can stimulate entrepreneurial endeavours. This finding underscores the significance of tackling unemployment as a way to promote economic resilience and creativity, emphasising the intricate relationship between labour market dynamics and entrepreneurial activity in South Africa. Moreover, the result underscores the significance of political liberties and economic stability in fostering a conducive environment for entrepreneurial endeavours. Policymakers should prioritise efforts to foster economic expansion, protect civil liberties, and reduce regulatory obstacles to entrepreneurship to promote innovation and employment within the country. Such actions would ultimately serve to advance democratic principles and sustainable economic development.

The third short-term relationship between TEA, U, RGDP, FREE and U provides insights into the relevance of freedom, real GDP growth, as a proxy for economic growth, and

entrepreneurship, for unemployment, and possible policy implications for South Africa. An increase of one unit in the first and third lags of RGDP results in a decrease in unemployment of -0.0000118% and -5.58e-06, respectively, with statistical significance at the 1% and 10% levels. Furthermore, the first lag in achieving freedom benefits unemployment, with statistical significance at the 5% level. These findings indicate that economic growth, especially in the short term, can have different consequences on reducing unemployment rates, with certain delays having more significant implications. In addition, it seems that the freedom indicators from the previous era have a beneficial impact on unemployment levels, albeit the significance of this impact varies. Hence, policy initiatives promoting economic growth should consider the subtle impacts on unemployment, highlighting the significance of comprehensive strategies that tackle economic and socio-political elements.

The fourth short-run relation from DEM, TEA, U and FREE to RGDP revealed that a 1% increase in the third lag of TEA negatively reduced RGDP by R25042.9 million, at a significant level of 10%, on average, *ceteris paribus*. Furthermore, a R1 million increase of the first and third lags of RGDP positively increases current RGDP by R881142.6 and R790482.3, respectively, at a significant level of 1%, on average, *ceteris paribus*. Lastly, the finding showed that a one-unit increase of the third freedom lag reduces RGDP by R44032 million at a 1% significant level, *ceteris paribus*. The finding suggests that historical declines in entrepreneurial activity tend to decrease South Africa's economic output. Thus, economic downturns may have consequences for entrepreneurial activities, possibly due to reduced consumer demand or limited availability of financing for innovative undertakings. Furthermore, the first and third lags of RGDP have a significant positive impact on RGDP at the 1% level of significance, indicating that previous phases of economic expansion have contributed to the current expansion. This highlights the importance of sustaining policy interventions in South Africa to stimulate economic growth.

Overall, the study finds that a substantial 1% negative impact on RGDP due to the third lag of freedom; this implies that limitations on political liberties may hinder the progress of the South African economy. This discovery underscores the need for policies that promote democratic governance and economic progress. Policymakers must prioritise efforts that foster an environment conducive to entrepreneurial endeavours, maintain economic stability, and protect political liberties, to advance economic development and growth within the country.

The fifth short relation running from DEM, TEA, Real GDP to FREE revealed that a one-point increase of the third lag of democracy and freedom increase FREE by 8.348977 and 0.4182269, respectively, at a significant level of 5%, on average, ceteris paribus. Further, a 1% increase of the first lag of TEA positively increases FREE by 0.3960569 point, at a significant level of 5%, on average *ceteris paribus.* These findings suggest that previous increases in freedom and democracy in South Africa generally led to higher levels of freedom, assuming all other variables remain constant. Thus, the country's history of

democratic progress and adherence to political freedoms influence the preservation and growth of personal liberties in the long run. Also, greater entrepreneurial activity in the past is correlated with greater freedom in the present context of South Africa. These results may imply that entrepreneurship could potentially play a constructive role in advancing economic freedom, and greater economic autonomy with entrepreneurial activities may boost economic growth.

Granger Causality Tests

Relationships among variables can be one-way or bi-directional. In order to further examine the direction of the relationship among the variables under study, the Granger causality was administered, with each variable being an outcome factor at a time. This test determines the extent to which past or lagged values of one variable can predict other variables' future behaviour in the VAR model. If $p < 0.05$, it implies that a variable (X) Granger causes another (Y), and exhibits a short-run relationship in the VAR model. Alternatively, if $p > .05$, X does not Granger cause Y.

The Granger causality results are presented in Table 4 below. The results show that when entrepreneurship (TEA) is considered as the outcome factor, democracy (p= 0.065), unemployment (p=0.028) and real GDP (p= 0.000) help to predict TEA at 10%, 5% and 1% levels respectively. The causality test result suggests that past values of each of these three variables Granger causes TEA individually. Freedom as an individual predictor does not seem to Granger cause TEA. However, when freedom is added as a predictor with the other three variables, they jointly cause TEA, and the relationship is highly significant, (p-value of 0.000).

Table 4: Granger Causality Walt tests

Equation	Excluded	Chi2	Df	Prof>Chi2
DEM	TEA	.53749	3	0.911
	U	1.5314	3	0.675
	RGDP	.28793	3	0.962
	FREE	3.8531	3	0.278
	ALL	11.604	12	0.478
TEA	DEM	7.2284	3	0.065*
	U	9.0671	3	0.028**

	RGDP	27.267	3	0.000***
	FREE	5.8196	3	0.121
	ALL	83.54	12	0.000***
U	DEM	28.073	3	0.000***
	TEA	32.622	3	0.000***
	RDGP	55.536	3	0.000***
	FREE	10.812	3	0.013
	ALL	102.72	12	0.000***
RDGP	DEM	8.0145	3	0.046**
	TEA	4.2687	3	0.234
	U	29.678	3	0.000***
	FREE	15.622	3	0.001***
	ALL	63.363	12	0.000***
FREE	DEM	7.6127	3	0.050**
	TEA	5.9691	3	0.113
	U	2.8841	3	0.410
	RGDP	2.9591	3	0.398
	ALL	39.947	12	0.000***

*Note: ***; ** and * represents 1%, 5% and 10% significance level, respectively*

When unemployment is considered as the dependent variable, freedom on its own as a predictor does not cause unemployment (p= 0.013). Individually, democracy, TEA and real GDP Granger cause unemployment at 1% level of significance, suggesting that past values of democracy, TEA and real GDP have a significant influence on unemployment. Moreover, freedom jointly with the other three predictors can predict unemployment (p= 0.000). There is a one-way causality running from democracy to TEA. A bi-directional causality is found to exist between TEA and unemployment, reflecting that TEA can predict unemployment, and unemployment can predict TEA. This result suggests the existence of

push and pull influences on entrepreneurship in South Africa. A similar bi-directional causality exists between real GDP and unemployment.

Further, democracy Granger causes real GDP at 1% level of significance, and freedom predicts real GDP at 5% level of significance. When all the four variables (including TEA and unemployment), are taken as a group, they jointly cause real GDP (p=0.000). Lastly, there is a one-way directional relationship between democracy and freedom. Democracy individually Granger causes freedom, at 5% level of significance. But the other three predictors together with democracy, as a group, jointly Granger cause freedom.

Diagnostics tests were conducted. No autocorrelation was detected. The results are in the appendix. The study may have certain limitations. Data on TEA in South Africa only started in 2001 with the GEM's report in 2001, while democracy was attained in 1994. Accordingly, some data for the 1994 -2000 period had to be extrapolated. Similarly, as the EIU's data on democracy only started in 2006, data for prior years to 1994 had to extrapolated. Over time, as more data become available, one may investigate long-run relationships between freedom, democracy, economic growth and entrepreneurship, as well as other variables, in a panel with other countries too. In light of the above, the results may be interpreted with some caution.

Policy Directions

Democracy and freedom tend to go together. The VAR results confirm a robust relationship exists between democracy and economic freedom in South Africa, suggesting that past changes in freedom can predict the current state of democracy. Further, democracy and real GDP have a highly beneficial impact on entrepreneurship, as individually, they both Granger cause TEA. A point increase in the previous year's democracy score results in a notable 10% gain in TEA. When democracy and freedom are taken together with TEA and unemployment, they jointly cause real GDP at a high level of significance. Enhancing economic freedom, by allowing people the liberty to ethically do more value-adding activities, possibly with renewed state support, may enhance labour absorption and economic growth. Strengthening the democratic institutions may help to fortify democracy and business entrepreneurship in South Africa in the long run, making positive headways in increasing employment. Hence, policy should focus on having 'rules of the game' that favour economic freedom, entrepreneurship and democracy, because of their associative benefits to the South African economy.

When economic freedom leads with democracy, income and employment growth follow. South Africa is currently stuck with low economic growth and high unemployment rates. The liberation-governing party that brought democracy to South Africa in 1994, lost its majority for the first time in the May 2024 election. It secured only 40% of electoral votes. The lack of majority by a single party could have posed a potential threat to democracy sustainability, especially amongst the youth who have not directly lived through the

liberation efforts. Encouragingly, a government of national unity (GNU) was subsequently formed. Against a background of the symbiotic relationship among the above variables, the new GNU, together with a consolidating public-private sector partnership, provide hope for a renewal of democracy. The fruits of the public-private partnership are already apparent. These are reflected in rising business confidence, growth in capital formation and infrastructure investment in South Africa, and corporate innovative steps in addressing some of the structural constraints that held back the country's economic growth and employment in the past decade. These constraints, as mentioned earlier, relate partly to electricity supply, public sector utilities, transport logistics and infrastructure capacity development (Bisseker, 2024).

Overall, given the findings of inherent interdependence between the variables, having more democracy and economic freedom in the South African society can have an amplifying effect on entrepreneurship, employment and economic growth. This point is also highlighted by the Free Market Foundation and the Libertarian school. Economic freedom opens up opportunities for exploiting market gaps and introducing innovations, thus expanding current businesses and generating new entrepreneurship. Succinctly expressed, nothing improves people's lives as much as the freedom to look for better jobs and entrepreneurial activities, and to find new markets to invest in the future (Norberg, 2023).

Entrepreneurship brings labour, capital and other inputs to generate output and employment (Lucas, 2009; Wolf, 2024). But for entrepreneurship to flourish, South Africa needs a strong market-friendly environment, conducive to investment, freedom and economic growth (Mahadea and Simson, 2010; Acemoglu and Robinson, 2020). Policymakers should, thus, prioritise endeavours that bolster entrepreneurial pursuits and democratic institutions to cultivate an atmosphere conducive to capital formation. More laws and regulations may stifle the market-oriented economy, impose labour market rigidities, add to transaction cost, and hinder employment growth (Baumol, 2012; Parker, 2018; Mahadea and Kaseeram, 2018).

Prolonged periods of unemployment drive many people to business formations in the formal and informal sectors. However, the environmental factors relating to South Africa's entrepreneurial ecosystem are perceived to be unfriendly (Whitefield, 2020; World Bank, 2020). Many firms cannot grow fast and create employment, partly because of funding and market constraints. Encouragingly, South Africa has a Ministry of Small Business Development, that is addressing the constraints of the entrepreneurs, for their firms to grow, become resilient, and in the process create employment opportunities. These institutional benefits need to be more accessible to more small entrepreneurs to have a bigger impact.

Selling public works programs as a platform for job creation is helpful in the short run, to the extent that fiscus can fund projects. However, job creation should not be the

responsibility of the public sector only. The private sector also has a critical complementary role in this regard, and should be encouraged to take on more learnerships and hire more labour rather than capital, where possible.

Any adverse shock on economic freedom and democracy is likely to dampen the spirit of entrepreneurship in South Africa, and may cause an outflow of human and entrepreneurial capital to other areas. As this study's findings show, South Africa needs to mitigate shocks to the economy. These require institutional measures, which include maintenance of the integrity and independence of the judiciary, entrepreneurship tax incentives, flexible labour legislation, property rights security, the rule of law, free and fair elections, high-quality media, competent governance and a delivery state (Kantor, 2017; Mahadea and Kabange, 2023; Basson and Hunter, 2023; Wolf, 2024).

By advocating for entrepreneurial endeavours and protecting freedom with good governance, South Africa has the potential to bolster its democratic infrastructure, foster inclusive economic and employment growth, and combat poverty, to the benefit of its citizens. As a constitutional democracy, the future depends largely on the citizens' constructive actions and their choices for wage or self-employment, and on effective transformational leadership.

Conclusion

A symbiotic relationship exists between economic freedom, entrepreneurship, GDP growth, unemployment and democracy. Shocks to economic freedom and democracy, with varying lags, impact adversely on job creation, entrepreneurship and income generation. South Africa has a daunting challenge of addressing its rising joblessness. More jobs can be created when the country registers economic growth, of at least 5%, as per the NDP, and strong elements of democracy and freedom are maintained without adverse shocks.

The government believes in more state involvement in economy to deliver employment and prosperity. Over the past 15 years, the government has attempted to roll out the development state, but it did not have as much success as expected (Whitefield, 2020). However, government reforms are underway and are being fast-tracked, especially under Operation Vulindlela, to boost up fixed investment, employment creation and growth, as well as service delivery (Bisseker, 2024). While the credibility of the development state model is emerging, the relevance of democracy and freedom for entrepreneurship, wealth and job creation, compatible with people's liberty aspirations, is beyond doubt. The government's role should be constructive in redeeming and promoting democracy, freedom and development (Stiglitz, 2020).

Appendices

Appendix 1 - Selection-order criteria

Sample: 1999 - 2023 Number of obs. = 25

lag	LL	LR	df	p	FPE	AIC	HQIC	BIC
0	-513.279				7.0e+11	41.4623	41.53	41.7061
1	-414.601	197.36	25	0.000	2.0e+09	35.5681	35.9737	37.0307*
2	-375.416	78.369	25	0.000	8.5e+08	34.4333	35.1771	37.1148
3	**-345.143**	**60.547***	**25**	**0.000**	**1.3e+09**	**34.0114***	**35.0932***	**37.9118**

Notes: * shows lag order selected by the criterion; b) FPE=Final prediction error, AIC=Akaike information criterion, BIC=Bayes information criterion, HQ: Hannan-Quinn information criterion

Endogenous: U TEA Real GDP Democracy Freedom

Exogenous: _cons

Appendix 2

Johansen tests for cointegration

Trend: constant Number of obs. = 26

Sample: 1998 - 2023 Lags = 3

Maximum Rank	Parms	LL	eigenvalue	trace statistic	5% critical value
0	**36**	**-387.04453**	**.**	**40.4454***	**47.21**
1	43	-377.53806	0.51870	21.4325	29.68
2	48	-370.13294	0.43426	6.6222	15.41
3	51	-368.22995	0.13617	2.8163	3.76
4	52	-366.8218	0.10266		

Appendix 3 – Diagnostics Test

Lagrange-Multiplier Test

Lag	chi2	df	Prob > chi2
1	33.0893	25	00.1288
2	37.3611	25	0.05334
3	43.0372	25	0.01387

H0: no autocorrelation at lag order

Jacque-Bera Test

Equation	chi2	df	Prob > chi2
DEM	0.436	2	0.80432
TEA	0.656	2	0.72046
U	0.118	2	0.94289
RDGP	7.100	2	0.02872
FREE	2.727	2	0.25576
ALL	11.036	2	0.35472

Residuals are normally distributed.

Eigenvalue stability condition

Eigenvalue	Modulus
.9923654	.992365
-.4479652 + .7944174i	.992365
-.4479652 - .7944174i	.992365
.8324294 + .276151i	.877039
.8324294 - .276151i	.877039
-.1844212 + .7994325i	.877039
-.1844212 - .7994325i	.877039
.6319262	.631926
-.5173148 + .2583573i	.578241
-.5173148 - .2583573i	.578241
-.00820243 + .478809i	.478879

-.00820243 - .478809i	.478879
.3012886 + .3530631i	.464143
.3012886 - .3530631i .4464644	.464143
	.446464

All the eigenvalues lie inside the unit circle. VAR satisfies stability condition.

References

Acemoglu, D., Naidu, S., Restrepo, R. and Robinson, J. A. (2019). Democracy Does Cause Growth, *Journal of Political Economy* Vol. 127 (1).

Acemoglu, D. and Robinson, J. A. (2020). The Narrow Corridor: States, Societies and the Fate of Liberty, Penguin, NY.

Barro, R. J. (1996). Determinants of Economic Growth: A Cross-Country Empirical Study, *NBER Working Papers 5698,* National Bureau of Economic Research, Inc.

Barro, R.J. and Sala-i- Martin, X. (1995). Economic Growth, McGraw-Hill, NY.

Basson, A. and Hunter, Q. (2023). Who will Rule South Africa? Flyleaf Publishing, Johannesburg.

Bennett, D. L. (2021). Local Economic Freedom and Creative Destruction in America, *Small Business Economics,* Vol 56(1): 333-353.

Baumol, W. J. (2012). The Cost Disease, Yale University Press, Yale.

Bisseker, C. (2024). SA at a Crossroads, *Financial Mail,* May 23-29.

Bisseker, C. (2024). How to Build a Winning Nation, *Financial Mail*, Oct. 31- Nov. 6.

Cronje, F. (2017). A Time Traveller's Guide to South Africa in 2030,Tafelberg, Cape Town.

De Ruyter, A. (2023). Truth to Power, Penguin, Cape Town.

Dickey, D. A. and Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with unit root, *Econometrica*, Vol. 55 (2): 251-276.

Easterly, W. (2021). The Tyranny of Experts, Basic Books, New York.

E I U (2024). Democracy Index Report 2023, The Economist Intelligence Unit Limited.

Fraser Institute (2023). Economic Freedom of the World: 2023 Annual Report, Fraser Institute, Canada.

GEM (2023). Global Entrepreneurship Report, GEM SA Stellenbosch University, https://www.sun.ac.za.

Gwartney, J., Holcombe, R. and Lawson, A. (2006). Economic Freedom, Institutional Quality, and cross-country Differences in Income and Growth, *Cato Journal,* Vol. 24 (3): 205-233.

Hall, J.R. and Sobel, R. (2008). Institutions, Entrepreneurship and Regional Differences in Economic Growth, *Southern Journal of Entrepreneurship,* Vol 1 (1): 69-96.

Heckelman, J. C. (2000). Economic Freedom and Economic Growth: A Short-Run Causal Investigation. *Journal of Applied Economics*, 3, 71-91.

Heritage Foundation (2024). The Index of Economic Freedom, The Heritage Foundation, https://www.heritage.org.

IIAG Index Report, (2023). Ibrahim Index of African Governance Index Report, Mo Ibrahim Foundation.

Jeffrey, A. (2023). Countdown to Socialism, Jonathan Ball, Cape Town.

Johnson, R.W. (2019). Fighting for the Dream, Jonathan Ball, Cape Town.

Kantor, B. (2017). Get South Africa Growing, Jonathan Ball, Johannesburg.

Leon, T. (2021). Future Tense: Reflections on My Troubled Country, Jonathan Ball, Johannesburg.

Li, M. and Kumbhakar, S. C. (2022). Do institutions matter for economic growth? International Review of Economics 69(4):1-21, DOI:10.1007/s12232-022-00400-9.

Lucas, R. E. (2009). Ideas and Growth, Econometrica Vol 76: 1-19.

Mahadea, D. and Simson, R. (2010). The Challenge of Low Employment Economic Growth in South Africa, South African Journal of Economics and Management Sciences, Vol. 13 (4): 391- 406.

Mahadea, D. and Kaseeram, I. (2018). Examining the Relationship between Unemployment, Entrepreneurship and Education in South Africa, Using VECM approach, the International Journal of Education Economics and Development, Vol 9(1), March: 193-209.

Mahadea, D. and Kabange, M. (2023). Entrepreneurship and Economic Freedom in a Tense Age of Discontent in South Africa, Interdisciplinary Journal of Economics and Business Law, Vol 12 (3): 46-70.

Nikolaev, B., Boudreaux, C. J., and Palich, L. (2018). Cross-Country Determinants of Early-Stage Necessity and Opportunity-Motivated Entrepreneurship: Accounting for Model Uncertainty, Journal of Small Business Management, 56 (1): 359-368.

Norberg, J. (2023). The Capitalist Manifesto: Why the Global Free Market will save the World, Atlantic Books, London.

Parker, M. (2018). The Economics of Entrepreneurship, Cambridge, NY.

Ramphele, M. (2017). Dreams, Betrayal and Hope, Penguin, Cape Town.

SARB, (2021). South Africa's National Accounts 1946-2021, SARB, Pretoria.

SARB, (2023). South African Reserve Bank Quarterly Bulletin, No. 308-309, Pretoria.

SARB, (2024). South African Reserve Bank Quarterly Bulletin, No. 310, Pretoria.

Silke, C. (2024). A 30-Year Exercise in Wasted Potential, Financial Mail, April 25- May 1.

Stats SA (2023). Quarterly Labour Force Survey Q1, Statssa.gov.za, accessed 28 May 2024.

Stats SA (2013). Quarterly Labour Force Survey Q1, statssa.gov.za, Statistical release P0211,

Stats SA (2024). Unemployment in South Africa, Department of Statistics, South Africa.

Stiglitz, J. E. (2020). People, Power and Profits, Penguin, London.

The Economist (2017). The Corruption of South Africa, 9 December.

The Economist (2024). How to save South Africa: 30 years after apartheid. 23 May.

Whitefield, B. (2020). The Upside of Down, Pan Macmillan, Johannesburg.

Wolf, M. (2024). The Crisis of Democratic Capitalism, Penguin, London.

World Bank (2020). Doing Business 2020: Comparing Business Regulations in 190 countries. World Bank Group, Washington D. C.

World Bank (2024). Macro Poverty Outlook for South Africa, April 2024, World Bank Group, Washington, D.C.