# THE EFFECTS OF SOUTH AFRICA'S MACROECONOMIC FACTORS ON YOUTH ENTREPRENEURSHIP

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#### ABSTRACT

This study investigates the effects of South Africa's macroeconomic factors on youth entrepreneurship using the Auto-Regressive Distributed Lag (ARDL) model, with quarterly data spanning from 2008Q1 to 2022Q4. The analysis reveals that macroeconomic variables, including GDP, human capital, interest rates, gross fixed capital formation, and youth unemployment influence youth entrepreneurship in both short and long runs. Notably, human capital and interest rates show significant relationships with education fostering entrepreneurship, while high interest rates constrain it. Although GDP and unemployment have positive associations with entrepreneurship, their effects are not statistically significant. The findings highlight the need for policies that prioritise youth entrepreneurship through improved education, supportive infrastructure, and alternative financing mechanisms. Such interventions could enhance youth-led entrepreneurial activities, mitigate unemployment, and promote sustainable economic growth. The study underscores the importance of targeted macroeconomic strategies to empower South African youth entrepreneurs and addresses gaps in existing literature on the economic determinants of entrepreneurship.

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#### 1. INTRODUCTION AND BACKGROUND

Youth entrepreneurship refers to young individuals applying practical entrepreneurial traits such as initiative, innovation, creativity, and risk-taking, while utilising the necessary skills for success in self-employment or small start-up businesses (Chigunta, 2002, p.2). As Chigunta (2002, p.12) explains,

while progress in youth entrepreneurship may be linked to certain age stages, the development of an entrepreneur is not a rigid, linear process and is not confined to a particular age group. Therefore, young entrepreneurs can be found at various points along the entrepreneurial continuum.

Like many business owners, young entrepreneurs often encounter numerous challenges, such as limited access to institutional capital, inadequate working spaces, a lack of business management skills, limited capacity for product development, insufficient ongoing business support, and poor or non-existent financial record-keeping (Chigunta, 2002, p.12). Additional difficulties highlighted by Malyadri and Sumana (2012, p. 379-380) include entrepreneurial isolation, lack of business networks, limited access to financial resources and advisory services, insufficient self-sustaining resources, absence of a solid credit history, inadequate collateral to secure loans, high interest rates, and a lack of distinction between business ownership and control. Moreover, young entrepreneurs often struggle with limited on-the-job training, lack of experience, and insufficient mentorship (Malyadri & Sumana, 2012, p. 379-380).

In response to these challenges, governments worldwide have implemented strategies to provide both financial and non-financial support to young entrepreneurs (OECD, 2001). Non-financial support services focus on providing essential business management tools, training to improve performance and productivity, and business idea development aimed at creating viable ventures (Awogbenle & Iwuamadi, 2010, p.834). Financial support, on the other hand, includes grants or microloans to help young people start or expand businesses (ILO, 2012, p.1-2). These interventions aim to foster entrepreneurial activities among the youth at various stages of their business ventures, and ultimately boost youth entrepreneurship development.

South Africa's youth policies (see Republic of South Africa, 2009: 26-27, 2015: 17-18, 2020: 23) emphasise promoting youth entrepreneurship, primarily, as a response to the country's high levels of youth unemployment. For example, Statistics South Africa reported youth unemployment rates of 35.7% in 2010, 41.0% in 2019, and 46.3% in 2022. In contrast, only 12% of employed youth were engaged in entrepreneurial activities in 2022, though this marked a 2% increase from 2017. Additionally, the Global Entrepreneurship Monitor (GME) South Africa reported low levels of early-stage entrepreneurial activity among 18 to 24-year-olds, with only 8% involved in 2022, and 10.4% among those aged 25 to 34. Likewise, the rate of established business ownership was also low, with only 0.6% of 18 to 24-year-olds and 0.9% of 25 to 34-year-olds owning established businesses (see Bowmaker-Falconer, Meyer & Samsami, 2023).

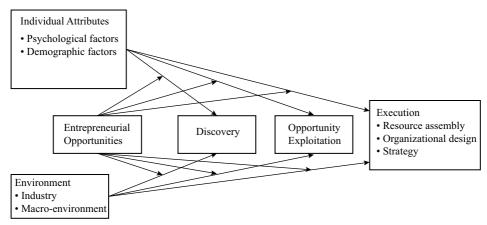
The increasing number of unemployed youth in South Africa, combined with low levels of youth entrepreneurship, underscores the importance of continued research in this area. While Hughes and Schachtebeck (2017) recognise that both personal factors (such as perceptions, demographics, background, and attributes) and contextual factors (such as the economic environment, available resources, and support) influence the entrepreneurial dynamics of young people in South Africa, there remains a gap in the literature. Many studies conducted in South Africa tend to be descriptive and/or qualitative in nature, and mostly with a focus on the entrepreneurial intentions of young South Africans rather than on how economic factors impact youth entrepreneurship (see for instance, Musengi-Ajulu, 2010; Fatoki & Chindoga, 2011; Fatoki, 2011; Skosana, 2012; Pendame, 2014; Memani & Fields, 2014; Malebana & Swanepoel, 2015; Mbuya, Diniso & Mphahlele, 2016; Zwane, Radebe, & Mlambo, 2021; Ndebele, Ndlovu, Mlambo & Thusi, 2022; Ndlovu, Radebe, Mlambo & Nkonde, 2024). This paper is therefore valuable, as it seeks to explore the relationship between South Africa's economic environment and youth entrepreneurship. Specifically, it examines the short- and long-term effects of macroeconomic factors on youth entrepreneurial activities in the country.

# 2. ENTREPRENEURSHIP AND THE MACROECONOMIC ENVIROMENT

Due to the complex and multifaceted nature of entrepreneurship, the literature has yet to provide a single, universally accepted definition of the phenomenon (OECD, 2017, p.18). Thus, understanding entrepreneurship requires an integrative approach that acknowledges the entrepreneurial process as starting with opportunity recognition, followed by the discovery and exploitation of opportunities, and culminating in execution (Shane, 2003, p.10-11). As illustrated in Figure 1, the entrepreneurial process is interconnected at all stages with both individual factors (such as psychological traits and demographics) and environmental factors (including industry-specific conditions and the broader macro-environment).

The interplay between the macroeconomic environment and entrepreneurship is explained by Casson (2010, p.3), in that volatility in the macro-economy drives demand for entrepreneurship, while the supply of entrepreneurship is determined by the availability of entrepreneurial people. This interaction of demand and supply, thus, determines both entrepreneurial reward as well as entrepreneurial activity in the economy Casson (2010, p.3). This is supported by studies that recognise that macroeconomic factors, indeed, play a significant role in shaping

entrepreneurship (Sipos-Gug & Badulescu, 2015; Fritsch & Kritikos, 2016; Ashena, Vosoughi & Hoshyarmoghadam, 2022; Vyrostková & Kádárová, 2023). Ashena, Vosoughi & Hoshyarmoghadam (2022), assert that at every stage of a business - from startup to growth, and to sustainability, the performance of macro-economy is crucial. As a result, shifts in economic conditions can influence decision-making about starting or continuing a business.



**Figure 1:** Entrepreneurial process Source: Shane (2003, p.11)

Although the entrepreneurial process remains fundamentally the same for both young and older people, Chigunta (2002) argues that the involvement of youth in entrepreneurship can have unique characteristics specific to their age group. Thus, this paper aims to explore how several macroeconomic variables - namely gross domestic product (GDP), human capital, interest rates, gross fixed capital formation (GFCF), and unemployment – affect, specifically, youth entrepreneurship in South Africa. The expected behaviour of these variables in relation to youth entrepreneurship is outlined below:

## Economic growth

A positive correlation is said to exist between entrepreneurial activity and economic growth (Wennekers & Thurik, 1999; Stam & van Stel, 2011; Smith & Chimucheka, 2014). It is therefore expected that an increase in demand as well as the expansion of markets that comes with economic growth would propel young people to venture into entrepreneurship.

## Human capital

Investment in education and skills development is found to enhance entrepreneurial activities (Van der Sluis, Van Praag, & Vijverberg, 2008; İlhan Ertuna, & Gurel,

2011; Nega, & Schneider, 2014). Thus, higher levels of education and skills training is expected to equip young people with the essential knowledge and capabilities valuable for entrepreneurship.

#### Interest rates

A counter-cyclical effect is observed between interest rates and entrepreneurial activity (Angeletos & Panousi, 2011; Somoye, 2013; Jackson & Madison, 2022). Thus, higher lending rates are expected to increase the cost of borrowing, making it more expensive for young people to have access to capital for their entrepreneurial activities.

## Gross Fixed Capital Formation

Investment in infrastructure development has been proven to boost entrepreneurial activities (Van de Ven, 1993; Yaluner, Chesnova, Ivanov, Mikheeva, & Kalugina, 2019). It is expected, therefore, that increased investments in fixed assets and infrastructure would support and make it easier for young people to do business.

### Unemployment

High unemployment rates are expected to increase entrepreneurial activities (Kheiravara & Qazvini, 2012; Mahadea & Kaseeram, 2018; Faria, Cuestas & Gil-Alana, 2019). When job opportunities are scarce in the formal labour market, entrepreneurship offers young people an opportunity for self-employment and income generation.

#### 3. RESEARCH METHODOLOGY

This study makes use of the Auto-Regressive Distributed Lag (ARDL) econometric model on a quarterly data series covering a period 2008Q1-2022Q4¹. The ARDL bounds testing approach to test for long run relationships follows from studies by Asid, Razi, Mulok, Kogid & Lily (2014), and Tsaurai & Odhiambo (2012). ARDL modelling approach has several advantages. Firstly, it is a versatile tool for examining short and long-run cointegrating relationships and incorporates lags for both dependent and explanatory variables (Pesaran & Shin, 1999). Secondly, it can be used regardless of whether study variables are integrated of order zero or one (Odhiambo, 2013). Thirdly, it accommodates an adequate number of lags to capture the data generation process within a general-to-specific modeling framework (Hirnissa, Habibullah & Baharom,

<sup>1</sup> The study makes use of secondary data from the following statistical agencies: Statistics South Africa (www.statssa.gov.za); South African Reserve Bank (www.resbank.co.za); and University of Groningen, Penn World Table 9.0 (https://doi.org/10.34894/QT5BCC)

2009). Fourthly, it yields robust results for studies with limited sample sizes and desirable small sample properties in parameter estimates (Narayan, 2005). Finally, it effectively addresses potential endogeneity in explanatory variables (Pesaran & Shin, 1999; Acikgoz & Mert, 2014).

The ARDL model can be written as follows:

$$Y_{t} = \alpha + \beta_{1} * Y_{(t-1)} + \beta_{2} * Y_{(t-2)} + \dots + \beta_{p} * Y_{(t-p)} + \gamma X_{t} + \varepsilon_{t}$$

Where:

 $Y_t$  is the dependent variable at time t.

 $Y_{(t-1)}, Y_{(t-2)}, ..., Y_{(t-p)}$  are the lagged values of the dependent variable.

X represents one or more independent variables.

 $\alpha$  is the intercept term.

 $\beta_1, \beta_2, ..., \beta_p$  are coefficients associated with the lagged dependent variables.  $\gamma$  is the coefficient associated with the independent variable(s).

 $\varepsilon$ , is the error term.

 $\beta_1$ ,  $\beta_2$ , ...,  $\beta_p$ : are coefficients which represent the short-term impact of the lagged dependent variables on the current value of the dependent variable. They indicate how past values of the dependent variable influence its current value.

The ARDL model allows one to examine the long-term relationship between the dependent variable and the independent variable(s) by testing for cointegration. If the variables are cointegrated, it implies a stable long-term relationship. The functional Equation formulated for this analysis is as follows:

$$Y_{t} = \beta_{0} + \beta_{1}X_{1t} + \beta_{2}X_{2t} + \beta_{3}X_{3t} + \beta_{4}X_{4t} + \beta_{5}X_{5t} + \varepsilon_{t}$$

Where:

 $Y_{t} = Youth entrepreneurship$ 

 $\beta_0 = intercept$ 

 $X_1 = GDP$ 

 $X_2$  = Human Capital Index

 $X_3 = Interest \ rates$ 

 $X_{A} = Gross Fixed Capital Formation$ 

 $X_5$  = Youth Unemployment

 $\varepsilon_{t} = Random \ error \ term$ 

 $\beta = coefficients$ 

We hypothesise that the selected exogenous variables have a statistically significant positive relationship with the dependent variable, namely, youth entrepreneurship.

#### 4. RESULTS

The data was tested for stationarity using Augmented Dickey Fuller and Phillips Perron stationarity teste. The results of the stationarity tests are reported in Tables 1 and 2 below.

Table 1: Augmented Dickey Fuller Test

	LYENTR	GDP	GFCF	HCI	INT	YUN
With Constant	-4.3625***	-11.4101***	-8.8417***	-1.7945	-4.0207***	-1.0403
With Constant & Trend	-4.4324***	-11.3149***	-8.7828***	-0.2681	-3.3998***	-3.6611***
Without Constant & Trend	-0.0664	-11.2698***	-8.9186***	-0.0020	-1.1708	1.0858
	d(LYENTR)	d(GDP)	d(GFCF)	d(HCI)	d(INT)	d(YUN)
With Constant	-10.9058***	-7.0025***	-6.3903***	-1.7212	-3.5499***	-11.0680***
With Constant & Trend	-10.8863***	-6.9354***	-6.2960***	-2.3201	-3.9894**	-10.9734***
Without Constant & Trend	-11.0029***	-7.0707***	-6.4577***	-1.8095*	-3.5403***	-10.9561***

Notes: (\*)Significant at the 10%; (\*\*) Significant at the 5%; (\*\*\*) Significant at the 1%. and (no) Not Significant

Source: Authors' survey

**Table 2:** Phillips – Perron Test

	LVENTD	CDD	CECE	HOL	INT	XZTINI
	LYENTR	GDP	GFCF	HCI	INT	YUN
With Constant	-4.4024***	-19.1701***	-9.4688***	-1.8414	-2.5612	-1.2020
With Constant & Trend	-4.3913***	-20.4519***	-9.4417***	-0.2665	-1.9034	-3.6189**
Without Constant & Trend	-0.1044	-12.9095***	-9.5582***	1.0144	-1.1911	1.6588
	d(LYENTR)	d(GDP)	d(GFCF)	d(HCI)	d(INT)	d(YUN)
With Constant	-11.2066***	-81.5313***	-44.9271***	-7.6447***	-3.7152***	-12.8036***
With Constant & Trend	-11.5565***	-80.7473***	-47.7576***	-8.1672***	-4.0640**	-12.7684***
Without Constant & Trend	-11.3108***	-81.3267***	-44.5805***	-7.5498***	-3.6986***	-11.3867***

Notes: (\*) Significant at the 10%; (\*\*) Significant at the 5%; (\*\*\*) Significant at the 1%. and (no) Not Significant

Source: Authors' survey

Tables 1 and 2 above both show that the data series were a mixture of I(0) and I(1); meaning that some of the data series were stationary at levels whilst others were stationary only after first differences. This make the ARDL econometric technique suitable for data analysis in this research. The ARDL results are shown next in Tables 2 and 3 below.

**Table 3:** Long Run Estimates

Selected model: ARDL(4,0,3,2,0,0)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LYENTR(-1)	0.297150	0.141226	2.104072	0.0415**
LYENTR(-2)	0.113356	0.147897	0.766448	0.4478
LYENTR(-3)	0.044341	0.146382	0.302915	0.7635
LYENTR(-4)	-0.305915	0.142473	-2.147180	0.0377**
GDP	0.002425	0.005559	0.436283	0.6649
HCI	-0.193908	0.286233	-0.677448	0.5019
HCI(-1)	0.111923	0.367658	0.304420	0.7623
HCI(-2)	-0.676839	0.386447	-1.751443	0.0873*
HCI(-3)	0.862463	0.280912	3.070222	0.0038**
INT	-0.024981	0.025626	-0.974827	0.3354
INT(-1)	0.089940	0.041414	2.171743	0.0357**
INT(-2)	-0.042704	0.022723	-1.879379	0.0673*
GFCF	0.000627	0.003586	0.174933	0.8620
YUN	0.001472	0.002720	0.540996	0.5914
C	10.79613	2.610092	4.136302	0.0002***
R-squared	0.541777			

Notes: (\*)Significant at the 10%; (\*\*)Significant at the 5%; (\*\*\*) Significant at the 1%.

Source: Authors' survey

Table 4: Short Run estimates

Variable	Coefficient	Std. Error	t-Statistic
COINTEQ*	-0.851068	0.167731	-5.074007***
D(LYENTR(-1))	0.148218	0.161679	0.916741
D(LYENTR(-2))	0.261574	0.142420	1.836630*
D(LYENTR(-3))	0.305915	0.123161	2.483871**
D(HCI)	-0.193908	0.230171	-0.842454
D(HCI(-1))	-0.185623	0.238862	-0.777115
D(HCI(-2))	-0.862463	0.240282	-3.589372***
D(INT)	-0.024981	0.016305	-1.532134
D(INT(-1))	0.042704	0.016463	2.593889**
R-squared	0.558503		

Notes: (\*)Significant at the 10%; (\*\*)Significant at the 5%; (\*\*\*) Significant at the 1%.

Source: Authors' survey

The R-squared value of the ARDL model, both in the long and short term, stands at 54% and 55%, respectively. This signifies that the exogenous variables included in the model account for 55% of the variation observed in the dependent variable. The error correction term registers a substantial value of 85%, signifying its statistical significance at the 1% level. This implies that in the presence of any long-term disequilibrium, approximately 85% of the deviation from the long-term equilibrium is rectified.

Having presented the ARDL results, we focus on diagnostic tests to prove the adequacy and the robustness of our results. The results are presented in Table 4 to Table 6, and Figure 1 below.

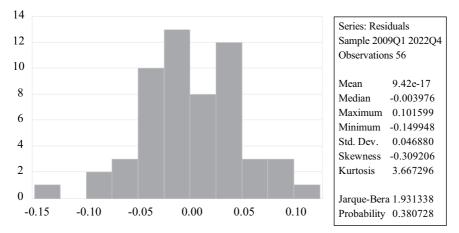
**Table 5:** Wald Test estimations

Test Statistic	Value	Df	Probability		
F-statistic	5.176414	(6, 50)	0.0003***		
Chi-square	31.05848	6	0.0000***		
Null Hypothesis: C(1)=C(2)=C(3)=C(4)=C(5)=C(6)=0					
Null Hypothesis Summary:					

Normalized Restriction (= 0)	Value	Std. Err.	
C(1)	0.391308	0.132365	
C(2)	0.006270	0.005160	
C(3)	-0.018922	0.025229	
C(4)	0.074301	0.042761	
C(5)	-0.044152		
C(5)	0.023	001	
C(6)	-0.002581	0.003284	
Restrictions are linear in coefficients.			

Source: Authors' survey

The Wald Test is performed to test the joint significance of our model. The Wald test results shown in Table 4 indicate that the null hypothesis of no joint significance is rejected and, therefore, conclude that the exogenous variables in the model are jointly significant in explaining the variations on the dependent variable.



**Figure 1:** Normality test Source: Authors' survey

The Normality Test is performed to prove that the residuals are normally distributed around the mean. Figure 1 above depicts the normality test results. The Jarque-Bera test statistics is computed based on the sample skewness and kurtosis of the data. The results show p value of 0.38 and therefore we fail to reject the null hypothesis and conclude that the data is following a normal distribution.

Table 6: Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:					
Null hypothesis: No serial correlation at up to 2 lags					
F-statistic	1.394865	Prob. F(2,39)	0.2600		
Obs*R-squared	3.738357	Prob. Chi-Square(2)	0.1543		

The results of serial correlation test are presented in Table 5 above. The results give evidence of no serial correlation in the series.

Source: Authors' survey

**Table 7:** Heteroscedasticity Test

Heteroscedasticity Test: Breusch-Pagan-Godfrey						
Null hypothesis: Homoscedasticity						
F-statistic	0.813447	Prob. F(14,41)	0.6505			
Obs*R-squared	12.17339	Prob. Chi-Square(14)	0.5924			
Scaled explained SS	8.702505	Prob. Chi-Square(14)	0.8496			

The results of heteroscedasticity test are presented in Table 6 above. The results show evidence that the series are homoscedastic. Based on the above diagnostic tests, it can be conformed that the model used in the analysis of the data is adequate.

Source: Authors' survey

#### 5. DISCUSSIONS OF THE RESULTS

The long-term estimations indicate that the dependent variable, namely youth entrepreneurship, possesses the capacity to elucidate its own behavior over an extended period. The association between youth entrepreneurship and its preceding values exhibits a positive correlation up to the third preceding value, after which it becomes negative on the fourth lag. Importantly, this relationship demonstrates statistical significance at the 5% level during both first and fourth lags. Consequently, we reject the null hypothesis and affirm the presence of a relationship between youth entrepreneurship and its lagged values. This implies that the trajectory of youth entrepreneurship can be accounted for by its past values. It is noteworthy that, although economic growth, as represented by GDP in this study, exhibits a positive association with entrepreneurship, this relationship lacks statistical significance. However, it is essential to underscore that this outcome should not be misconstrued implying that economic growth is not a crucial determinant of entrepreneurship success. Economic growth is expected to enhance youth entrepreneurship by creating demand and market expansion. This is supported by Stam & Van Stel (2011), who found a positive relationship between economic growth and entrepreneurship, and by Wennekers & Thurik (1999), who highlighted that economic growth fosters an environment conducive to entrepreneurial opportunity recognition.

Investing in human capital exhibits a positively and statistically significant relationship, at the 5% level of significance, with youth entrepreneurship. This implies that educational investment plays a noteworthy role in fostering long-term youth entrepreneurship. Young individuals who have undergone formal education are more likely to succeed as entrepreneurs due to their exposure to various entrepreneurship theories and techniques. The importance of human capital in fostering entrepreneurship is well-documented. For instance, Van der Sluis, Van Praag, & Vijverberg (2008) found that education significantly enhances entrepreneurial capabilities, while İlhan Ertuna & Gurel (2011) emphasised the role of higher education in increasing entrepreneurial success rates.

Interest rates exert a dampening effect on the economy by increasing the cost of borrowing. The findings of this research reveal a negative and statistically significant relationship with youth entrepreneurship at the 10% level of significance, during the third lag. This suggests that elevated interest rates hinder entrepreneurship in South Africa over the long term. High interest rates negatively impact entrepreneurship by raising the cost of borrowing, as shown by Angeletos & Panousi (2011). Similarly, Somoye (2013) highlighted that high

borrowing costs limit access to finance, especially in developing economies, thereby reducing entrepreneurial activity.

Gross fixed capital formation, representing infrastructure development, demonstrates a positive but statistically insignificant association with entrepreneurship in the long run. Despite its lack of statistical significance, we posit that infrastructure plays a supportive role in facilitating youth entrepreneurship. Infrastructure development plays a critical role in supporting entrepreneurship. Yaluner et al. (2019) demonstrated that improvements in physical capital and connectivity boost entrepreneurial activities. This aligns with Van de Ven's (1993) findings, which highlight how infrastructure lowers barriers to entry and operational costs for entrepreneurs.

It is worth noting that youth unemployment exhibits a positive relationship with youth entrepreneurship, albeit lacking statistical significance. This implies that as the youth unemployment rate increases, some young individuals may turn to entrepreneurship in the long run. In this context, youth unemployment serves as a catalyst for fostering entrepreneurship. Youth unemployment often drives necessity-driven entrepreneurship. Mahadea & Kaseeram (2018) found a positive relationship between unemployment and entrepreneurial activities in South Africa. Similarly, Faria, Cuestas, & Gil-Alana (2009) reported that high unemployment rates encourage individuals to pursue entrepreneurship as a source of income.

The short-term estimations corroborate the findings of the long-term analysis, demonstrating that youth entrepreneurship maintains a positive and statistically significant association with its prior values in the second and third lag, evident at both 5% and 10% significance levels in the short term. It is noteworthy that the negative relationship observed between human capital investment and youth entrepreneurship in the second lag, significant at the 1% level, is not unexpected. This outcome can be attributed to the gradual and time-dependent nature of the impact of skills development on the economy. Interest rates exhibit a positive relationship with youth entrepreneurship after a single lag in the short term, reaching statistical significance at the 5% level. However, it is only in the long term that interest rates negatively impact youth entrepreneurship.

#### 6. CONCLUSIONS AND RECOMMENDATIONS

Youth entrepreneurship development is a priority for youth policies in South Africa, particularly due to the high levels of unemployment among young people. This study concludes that the macroeconomic environment influences

youth entrepreneurship. Accordingly, South Africa's macroeconomic policies should prioritise youth entrepreneurship in order to support strategies aimed at enhancing young people's entrepreneurial activities. Notably, there is a positive relationship between youth unemployment and entrepreneurship, indicating that as unemployment rises, some young people turn to starting businesses. The importance of education and skills development is crucial, necessitating that educational institutions focus on equipping young people with essential entrepreneurial knowledge and capabilities. This education should extend beyond the classroom to include mentorship and shadowing of experienced entrepreneurs in relevant fields. Supporting youth entrepreneurial activities also requires appropriate infrastructure, such as business premises, electricity, and internet access. Without adequate infrastructure, the potential benefits of youth entrepreneurship are diminished. On the other hand, high commercial lending rates pose a significant risk to youth entrepreneurship, as many young people lack the resources to endure a high-interest-rate environment. Therefore, alternative business funding support, including grants and guarantee schemes, is crucial. Ultimately, high economic growth is vital for the success of young entrepreneurs, as low growth stifles demand and market expansion. Economic policies must intentionally support growth in sectors where youth entrepreneurship is prevalent and stimulate interest in sectors where it is underrepresented.

### LIMITATIONS OF THE STUDY

The study did not isolate the specific impact of COVID-19 on youth entrepreneurship in South Africa by using dummy variables in the econometric model.

#### **Conflict of interests**

Authors declare there is no conflict of interest.

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## ЕФЕКТИ МАКРОЕКОНОМСКИХ ФАКТОРА У ЈУЖНОАФРИЧКОЈ РЕПУБЛИЦИ НА ПРЕДУЗЕТНИШТВО МЛАДИХ

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#### САЖЕТАК

Ова студија истражује ефекте макроекономских фактора Јужноафричке Републике на предузетништво младих користећи модел ауторегресивног дистрибуираног заостајања, са кварталним подацима: од првог квартала 2008. године до четвртог квартала 2022. године. Анализа открива да макроекономске варијабле, укључујући БДП, људски капитал, каматне стопе, бруто инвестиције у фиксни капитал и незапосленост младих, утичу на предузетништво младих и на кратки и на дуги рок. Треба истаћи да људски капитал и каматне стопе показују значајну међусобну повезаност, при чему образовање подстиче предузетништво, док га високе каматне стопе ограничавају. Иако БДП и незапосленост имају позитивне асоцијације са предузетништвом, њихови ефекти нису статистички значајни. Налази истичу потребу за политикама које дају приоритет омладинском предузетништву кроз побољшано образовање, инфраструктуру подршке и алтернативне механизме финансирања. Такве интервенције би могле да унаприједе предузетничке активности вођене младима, смање незапосленост и промовишу одржив економски раст. Студија наглашава важност циљаних

макроекономских стратегија за оснаживање младих предузетника у Јужноафричкој Републици и бави се празнинама у постојећој литератури о економским детерминантама предузетништва.

**Кључне ријечи:** предузетништво младих, модел ауторегресивног дистрибуираног заостајања, *макроекономија, Јужноафричка Република*.