IS EXTERNAL DEBT A DETERMINANT OF PRIVATE INVESTMENT? EVIDENCE FROM SOUTH AFRICA.

DiŞ BORÇ ÖZEL YATIRIMIN BELİRLEYİCİSİ MİDİR? GÜNEY AFRİKA'DAN KANIT.

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Öz

Bu makale, borç ve yatırım arasında teorik olarak çıkarsanan ilişkiyi ampirik olarak doğrulamak amacıyla, finansal gelişme, ticaret, tasarruflar ve ekonomik büyümeyi aralıklı faktörler olarak dikkate alarak Güney Afrika'da 1976'dan 2021'e kadar dış borç ve yatırım arasındaki ilişkiyi incelemektedir. Makalede analiz için otoregresif dağıtılmış gecikme (ARDL) sınır testi stratejisi kullanılmaktadır. Çalışma bulguları, hem kısa vadede hem de uzun vadede dış borcun Güney Afrika'daki özel yatırımlar üzerinde zararlı bir etkiye sahip olduğunu göstermektedir. Ek bulgular, ekonomik büyüme, finansal gelişme ve gayri safi yurt içi tasarruf gibi faktörlerin Güney Afrika'daki özel yatırım seviyelerindeki dalgalanmaları açıklamada önemli bir rol oynamadığını gösteriyor. Bu durum, bu değişkenlerin hem kısa hem de uzun vadede özel yatırımı teşvik etmek için politika araçları olarak etkili bir şekilde kullanılamayacağını göstermektedir. Ayrıca analiz, ticari açıklık ile özel yatırım arasında olumlu bir korelasyon olduğunu öne sürüyor. Politika ve strateji açısından bakıldığında, ticari açıklığı teşvik eden politikalar uygulanırken dış borcun azaltılmasına odaklanılmalıdır.

Abstract

This article examines the relationship between external debt and investment in South Africa from 1976 to 2021, considering financial development, trade, savings, and economic growth as intermittent factors, in order to empirically verify the theoretically deduced relationship between debt and investment. The paper utilizes an autoregressive distributed lag (ARDL) bounds testing strategy for analysis. The study findings indicate that, in both the short term and the long run, external debt has a detrimental impact on private investment in South Africa. Additional findings indicate that factors such as economic growth, financial development, and gross domestic saving do not play a significant role in explaining fluctuations in private investment levels in South Africa. This suggests that these variables cannot be effectively utilized as policy tools to stimulate private investment, both in the short and long run. Additionally, the analysis suggests that there is a favorable correlation between trade openness and private investment. From a policy and strategy standpoint, the focus should be on reducing external debt while implementing policies that encourage trade openness.

1. Introduction

Economic growth remains a critical macroeconomic objective for all countries, irrespective of the economic development status. The fundamental Keynesian expenditure-output model and all its derivatives that followed in response to changing economic theories and developments indicate the interaction of different factors in determining economic growth or output. Gross domestic savings, trade, gross capital formation (private investment) and consumption are identified as the traditional factors determining economic growth (Keynes, 1936). Macroeconomic policy formulation, adoption and implementation should be preceded by an analysis examining the determination of these factors whose interaction determines economic growth. Misunderstanding the determination of these variables may result in fragile and unsustainable economic growth or even result in total policy failure.

Romer (1990) posits that private investment in physical and human capital is a significant factor determining economic growth and further asserts that increased capital stock enhances productivity and efficiency in the country. Without undermining the other factors determining economic growth, this study focuses on investigating the determination of private investment and intends to perform this analysis for the South African economy. As with economic growth, private investment is also determined through a complex process. Several economic theories offer insights into understanding how private investment is determined. Nevertheless, these ideas do not contradict each other, because the significance of the factors that influence private investment might fluctuate in various economic situations. Other factors, such as financial development, trade, external debt, and private savings, determine private investment. These factors must be considered when formulating policies. King and Levine (1993) assert that a well-functioning financial system supports economic growth by facilitating investment and capital allocation. Financial Constraint Theory posits that financial factors, such as credit availability, can significantly determine private investment (Fazzari, Hubbard & Petersen, 1988).

Financial intermediaries are crucial in channelling funds from savers to investors and facilitating private investment (Adrian & Ashcraft, 2016). In addition, the institutional theory highlights the significance of institutions in influencing financial development and private investment (Ruiz, 2018). This assertion suggests that financial development is critical in determining private investment. Flassbeck (2012) asserts that general economic savings determine private investment. Other studies, such as Batu (2016), suggest that trade liberalization determines the level of private investment in the economy. Another factor that is found to be vital in determining private investment is external debt. The relationship between external debt and private investment relatively attracts most policy concerns, such as debt overhang and the effect of private investment crowding out (Tuffour, 2012). The debt overhang theory argues that excessive external debt can hinder economic growth as resources are diverted to debt servicing, limiting investment (Kharusi & Ada, 2018).

No study explicitly examines the relationship between external debt and private investment in South Africa. Previous research, such as Senadza, Fiagbe and Quartey (2017), have explored the impact of external debt on economic growth in sub-Saharan nations, which is similar in scope to the current study. The paucity of research on the subject matter is also apparent in other geographical contexts. The majority of the research has focused on examining the impact of external debt on economic growth. Acquah and Ibrahim (2020) investigated the correlation between foreign direct investment, economic growth, and financial sector development in Africa. While their study also explores financial development, it does not address private investment and external debt, which are the specific focus of the current study.

Researchers and policymakers consider combining these theories to understand and promote private investment in an economy. Understanding how investment is determined is critical in policy formulation and application. Governments play a pivotal role in shaping the relationship between external debt and private investment through policy decisions. Prudent debt management strategies, transparent fiscal policies, and efforts to attract foreign investment can positively influence this relationship. Governments must adopt prudent fiscal policies, prioritize debt sustainability, and create an investor-friendly climate to foster private sector growth. By understanding and addressing the dynamics between external debt and private investment, countries can pave the way for sustainable economic development.
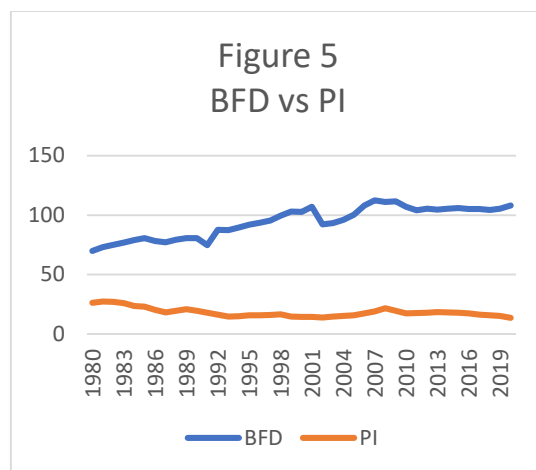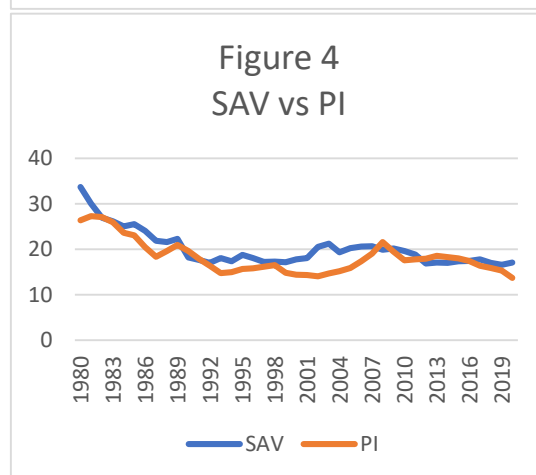
The rest of this study is structured as follows: The section following this section presents literature, which will be immediately followed by the methodology, the results and finally, conclusions and recommendations.

2. Overview of the Economy and Private Investment in South Africa

During the apartheid era (1944-1994), South Africa faced international sanctions and isolation due to the discriminatory ruling policies it adopted. This affected its activity level in all forms of international markets (Freund & Padayachee, 2021). Despite these challenges, the country still accumulated external debt, often at higher interest rates, to finance its development projects and sustain private investment and economic growth. Following the termination of apartheid and the formation

of a democratic administration in 1994, South Africa was reintegrated into the worldwide economy. It was at this point that the country engaged in debt restructuring. South Africa's external debt levels have fluctuated over the years, influenced by commodity prices, exchange rates, and global economic conditions. Like many developing countries, South Africa faces the challenge of balancing the need for external financing with the sustainability of its debt level. The country has a well-diversified economy, and trade is crucial to economic growth. It is a WTO member and has trade agreements with several African countries and the Southern African region. (International Trade Center, 2024, https://www.intracen.org/).

Trend of Economic Variables in South Africa

Figure 1
PI vs GDP

Figure 2
PI vs TRD

Figure 3
PI vs EDT

Figure 4
SAV vs PI
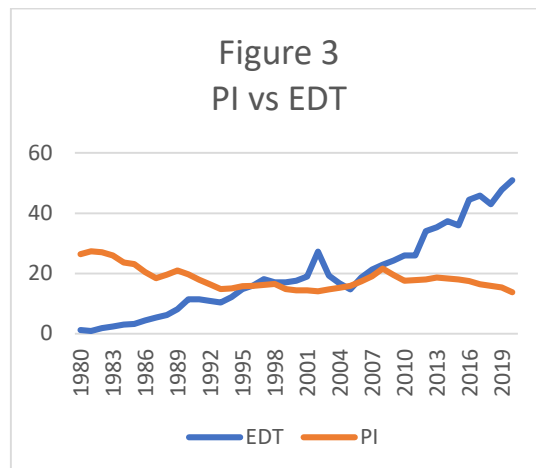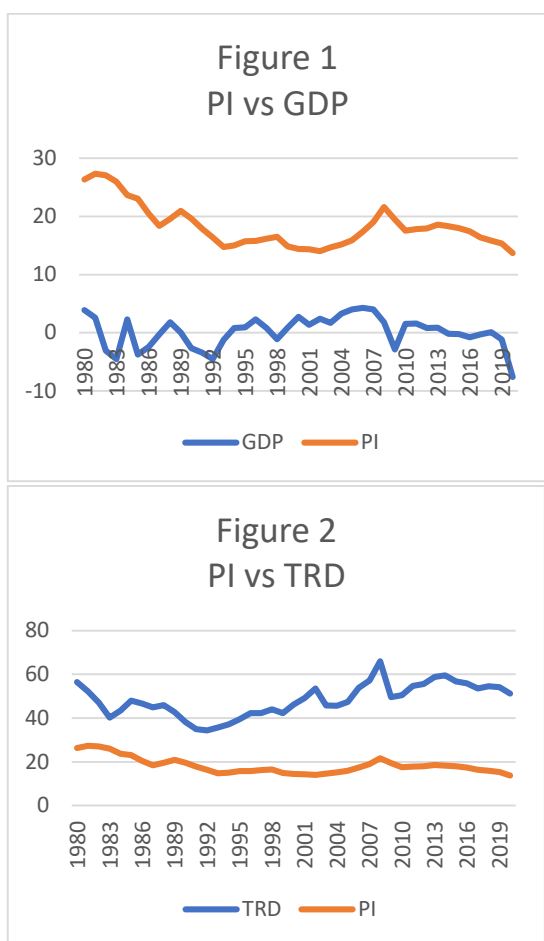
Figure 5
BFD vs PI

Source: Own computations from World Bank WDI data (2024) *NB: PI-Private Investment, GDP-Gross Domestic Product, TRD – Trade, EDT-External Debt, SAV-Savings, BFD – Bank-based Financial Development.*

Figures 1-5 above indicate that private investment (PI) has declined since 1980. Figure 1 shows that GDP has been almost constant, with slide inclines and declines throughout the entire period of observation. Figure 2 indicates that trade followed a constant growth pattern but experienced a surge around 1992 that persisted until

2007, then experienced a sharp decline. Figure 3 indicates that external debt has been on a surge from the study's inception point to the end of the observation period. Figure 4 shows that domestic private savings has been declining throughout the entire period of the study. Figure 5 shows that the level of financial development has been increasing since 1980 but has remained almost stable for the last five years of the study. Figures 1, 2 and 4 indicate a slide synchronized movement between economic growth, trade openness, gross domestic savings, and private investment. Figures 3 and 5 show an unsynchronized movement between external debt, financial development and private investment respectively.

3. Literature review

As already indicated, more research needs to be done to examine the factors that determine private investment in South Africa. There is evidence that this topic has been researched in other settings. Paramount and topical is the relationship between external debt and private investment. Reinhart and Rogoff (2010) highlight the negative correlation between high external debt levels and economic growth. These findings suggest that as external debt rises, private investment may be constrained by the burden of servicing debt, reducing the capital available for private enterprises. Scholars like Easterly and Kraay (2000) emphasize that high levels of external debt may deter foreign investors, impacting the overall investment climate. Akomolafe, Bosede, Emmanuel and Mark. (2015) using time series data from 1980-2010 indicate that domestic debt crowds out domestic investment in both the short and long run. However, the result indicates that external debt crowds domestic investment in the long run. The result suggests that the government should make efforts to decrease its debt burden by enhancing its sources of income through economic diversification. Additionally, any future borrowing should be used wisely and for its intended purpose.

Tuffour (2012) used data from 1970- 2009 to examine external debt's effect on Ghana's private investment. With the aid of Least Square estimation techniques and multiple regression analysis, the study uncovered that debt overhang existed in the country and that external debt was crowding out private investment. The study further suggests that colossal debt and debt service raised future tax expectations and discouraged the private sector from undertaking investment projects. While the accelerator effect was present, the cost of investment goods negatively influenced private investment demand. Additional research has demonstrated a detrimental correlation. between external debt and private investment are Turan and Yanıkkaya (2021), using data from developing countries, and Olaoye (2019), using data from Nigeria and a combination of

Granger causality, Johansen cointegration and Error correction mechanism.

Financial development also plays a crucial role in facilitating private investment by providing a well-functioning financial system that efficiently allocates resources from the deficit to surplus units in the economy. Ekpo (2016) conducted a study to examine the determinants of private investment in Nigeria. Among others, the study identifies the proper mobilization of investible funds in the economy by the banking sector in the country as one of the critical determinants of private investment in the country. Misati and Nyamongo (2011) also conducted a study investigating the effect of financial development using data from Sub-Saharan countries. The study found that the credit to the private sector and the turnover ratio significantly affect private investment in the country. The study additionally discovers that the informal financial sector has a favorable impact on private investment. It further suggests that institutional determinants are significant in influencing the quantity of private investment in Africa.

Financial development and gross domestic savings are two variables that are closely linked to each other. Savings rides on the platform facilitated by financial development to effect private investment. Orji, Ogbuabor and Anthony-Orji (2015) conducted a study examining the relationship between private investment and savings in Nigeria using the linear regression model, granger causality model and the dummy regression model. The study finds that previous savings significantly positively affect private investment. Tehranchian and Behravesh (2011) examined the relationship between savings and investments in Iran using the ARDL method. The results of the study have shown that there is a long-run direct relationship between savings and investment. The study established that savings and investment are aligned and that the hypothesis of complete capital immobility cannot be rejected in the case of Iran.

Increased international trade can provide businesses with expanded market opportunities. When companies can access larger markets through trade agreements and reduced barriers, it may encourage private investment as businesses seek to capitalize on those opportunities. Rodrik (1991) asserts that the political economy of trade policies and their stability can influence private investment decisions. Political stability and a favorable trade environment can encourage businesses to invest. In their study, Musila and Yiheyis (2015) examined the impact of trade openness on investment levels and economic growth rates in Kenya. They utilized annual time series data for their analysis. The analysis reveals a favorable correlation between trade openness and the degree of private investment in Kenya.

4. Methodology

Consistent with the previously mentioned empirical studies on the investment-external debt modelling, the study adopts the following general model:

$$I_t = \rho_0 + \rho_1 D_t + \rho_2 B_t + \rho_3 T_t + \rho_4 ED_t + \rho_5 S_t + \varepsilon_t \ldots\ldots\ldots\ldots..1$$

Where: I is the gross fixed capital formation (an indicator of the extent of private investment), D is the growth rate of real per capita GDP (an indicator of the rate of growth of the desired level of real output), B is the index for bank-based financial development, T is trade, ED is the external debt, S is the gross domestic savings, and ε is the error term.

The model hypothesizes a direct relationship between external debt and investment.

The link between private investment and its determinants has been examined using the autoregressive distributed lag (ARDL) cointegration approach. This test has various advantages over the usually used residual-based and maximum likelihood-based approaches. The applicability of this test, irrespective of whether the variables are I(0) or I(1), is significant. Applying OLS to ARDL with an acceptable lag length yields short- and long-run parameters with asymptotic inferences. The ARDL representation of the cointegration test equation to be tested for is provided as:

$$\Delta I_t = \propto_0 + \sum_{i=0}^{n} \propto_{1i} \Delta D_{t-i} + \sum_{i=0}^{n} \propto_{2i} \Delta B_{t-i} + \sum_{i=0}^{n} \propto_{3i} \Delta T_{t-i}$$
$$+ \sum_{i=0}^{n} \propto_{4i} \Delta ED_{t-i} + \sum_{i=0}^{n} \propto_{5i} \Delta S_{t-i}$$
$$+ \sum_{i=1}^{n} \propto_{6i} \Delta I_{t-i} + \sigma_1 D_{t-1} + \sigma_2 B_{t-1} + \sigma_3 T_{t-1}$$
$$+ \sigma_4 ED_{t-1} + \sigma_5 S_{t-1} + \sigma_6 I_{t-1} + \mu_{1t}$$

$$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.2$$

Assuming all other variables remain unchanged except for the Δ, which is the difference operator, $\propto_0$, $\propto_{i,1} - \propto_{i,6}$ and $\sigma_{i,1} - \sigma_{i,6}$, are the corresponding coefficients, and μ_{1t}- is the error term.

The model above is estimated under the assumption that there is a cointegration connection, which serves as the null hypothesis. That is:

$$H_0: \sigma_{i,1} = \sigma_{i,2} = \sigma_{i,3} = \sigma_{i,4} = \sigma_{i,5} = \sigma_{i,6} = 0 \ldots\ldots\ldots\ldots.3$$

Evaluated against the alternative hypothesis that a cointegration connection exists:

$$H_1: \sigma_{i,1} \neq \sigma_{i,2} \neq \sigma_{i,3} \neq \sigma_{i,4} \neq \sigma_{i,5} \neq \sigma_{i,6} \neq 0 \ldots\ldots\ldots\ldots.4$$

The null hypothesis suggests that there is no long-term link present. The estimated F-statistic is compared to the lower and upper bound critical values provided by Pesaran et al. (2001:300) to determine its validity. If the estimated F-statistic falls within the specified range, the test result is inconclusive. If the value exceeds the upper limit, the null hypothesis that there is no effect at that level is rejected. If the value falls below the lower threshold, it is not possible to reject the null hypothesis that there is no effect at that level.

Once the variables contained in the ARDL representations are determined to be cointegrated, an error correction model is computed.

:

$$\Delta I_t = \propto_0 + \sum_{i=0}^{n} \propto_{1i} \Delta D_{t-i} + \sum_{i=0}^{n} \propto_{2i} \Delta B_{t-i} + \sum_{i=0}^{n} \propto_{3i} \Delta MG_{t-i}$$
$$+ \sum_{i=0}^{n} \propto_{4i} \Delta ED_{t-i} + \sum_{i=0}^{n} \propto_{5i} \Delta S_{t-i}$$
$$+ \sum_{i=1}^{n} \propto_{6i} \Delta I_{t-i} + \xi_1 ECM_{t-1} + \mu_t$$

$$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.5$$

Where all other variables are as defined, ECM is the error correction term that is delayed by one time period and μ_t is the residual term.

The speed of adjustment parameter, represented by the lagged error-correction component (ξ_1), is anticipated to have a statistically significant and negative value. This will provide more evidence to support the presence of a cointegration connection. The study utilized data from South Africa spanning from 1976 to 2021. The primary data source utilized was the World Development Indicators, specifically obtained from the World Bank in the year 2024(World Bank, 2024).

5. Empirical Results

Augmented Dickey-Fuller Generalized Least Square, Perron (1997) PPURoot, and Ng-Perron Modified unit root tests were used to test integration levels for all variables in the estimated model. The ARDL limits test requires all variables to test integrated to one or fewer. Table 1a and Table 1b show that all variables are at most integrated of order 1.

Table 1a**: Unit Root Tests Results**

Dickey-Fuller Generalised Least Square (DF-GLS)

Variable	Levels		First Differences	67
	No trend	Trend included	No trend	Trend included
ED	1.358872	-1.88316	-6.94221***	-7.42006***
D	-2.67615***	-2.84599	-5.98693***	-6.45077***
S	-0.76922	-1.82687	-2.05942**	-5.22072***
F	-0.54912	-2.34019	-6.32505***	-6.78101***
T	-1.76862*	-2.38794	-5.4046***	-6.21305***
I	-1.14212	-2.20858	-3.79354***	-3.95204***
Perron (1997) Unit Root Test (PPURoot)				
Variable	No trend		No trend	
	No trend	Trend included	No trend	Trend included
ED	-3.82197	-7.13524***	-7.92411***	-8.62453***
D	-4.12072	-4.68325	-6.0203***	-5.54139*
S	-4.95714*	-3.97341	-6.93126***	-7.22953***
F	-3.93169	-3.86095	-5.08156*	-7.50534
T	-3.85775	-3.62407	-7.4541***	-7.29617***
I	-4.23515	-3.22876	-5.74145**	-5.69909**
Associated Breakpoints Perron (1997) Unit Root Test (PPURoot)				
Variable	Levels		First Differences	
	No trend	Trend included	No trend	Trend included
ED	2011	2002	2002	2002
D	1994	2009	1992	1994
S	2001	2000	1992	2004
zF	1991	1991	1991	2002
T	1999	2008	2008	2008
I	2005	2005	2008	2008

Note: The symbols *, **, and *** indicate stationarity at the significance levels of 10%, 5%, and 1% correspondingly.

Table 1b: **Ng-Perron Modified Unit Root**

	Test			
	MZa			
Variable	**Levels**		**First Differences**	
	No trend	Trend included	No trend	Trend included
ED	2.47124	-6.97119	-19.1298***	-18.8348**
D	-12.4784**	-12.3272	-19.4863***	-19.2183**
S	-0.10935	-2.60092	-6.36692*	-18.1309**
F	-0.37832	-8.64805	-19.4415***	-19.2732**
T	-5.16173	-7.07885	-19.0223***	-19.3487**
I	-2.64539	-7.03316	-15.5875***	-15.9007*
	MZt			
Variable	**Levels**		**First Differences**	
	No trend	Trend included	No trend	Trend included
ED	1.74499	-1.65441	-3.06765***	-3.0665**
D	-2.04456**	-2.26681	-2.96578***	-2.94741**
S	-0.08002	-1.07454	-1.68985*	-3.00926**
F	-0.22057	-2.0219	-3.11589***	-3.08918**
T	-1.60627	-1.87934	-3.08172***	-3.08256**
I	-0.93817	-1.87522	-2.7129***	-2.78624*
	MSB			
Variable	**Levels**		**First Differences**	
	No trend	Trend included	No trend	Trend included
ED	0.70612	0.23732	0.16036***	0.16281**
D	0.16385***	0.18389*	0.1522***	0.15336**
S	0.73176	0.41314	0.26541*	0.16597**
F	0.58302	0.2338	0.16027***	0.16028**
T	0.31119	0.26549	0.16201***	0.15932***
I	0.35464	0.26663	0.17404**	0.17523*
	MPT			
Variable	**Levels**		**First Differences**	
	No trend	Trend included	No trend	Trend included
ED	48.0904	13.3024	1.37023***	4.85194**
D	3.56917*	8.51558	1.79864**	5.64303*
S	32.2674	32.6933	4.15462*	5.03582**
F	21.7287	10.734	1.26704***	4.81942**
T	4.7471	12.8756	1.29621***	4.87742**
I	8.44767	12.9565	1.86426**	5.92884*

Note: The symbols *, **, and *** indicate stationarity at the significance levels of 10%, 5%, and 1% correspondingly.

Table 1a and Table 1b provide confirmation that the ARDL bounds testing approach is suitable for the data and, as a result, it is utilized. The ARDL bounds testing approach is used to assess the presence of cointegration between variables, indicating the existence of a long-term link. The ARDL limits tests for cointegration have been conducted and the empirical findings are presented in Table 2. Once it has been confirmed that the order of integration is at most 1, the next step is to assess the potential for cointegration among the variables by employing the ARDL limits testing approach. The ARDL limits tests for cointegration have been conducted and the empirical findings are presented in Table 3.

Table 2; Bounds F-Test for Cointegration

	Dependent Variable	Function		F-Statistic		Cointegration Status
South Africa	I	F (I| D, B, ED, S,T)		4.1131**		Cointegrated
Asymptotic Critical Values						
	1%		5%		10%	
Pesaran et al., 2001: 300 Table CI(iii) case III	I (0)	I (1)	I (0)	I (1)	I (0)	I (1)
	3.41	4.68	2.62	3.79	2.26	3.35
Narayan (2004: 26-28) Table A1-3 Case II	I (0)	I (1)	I (0)	I (1)	I (0)	I (1)
	3.67	5.01	2.69	3.83	2.28	3.30

Note: The symbols *, **, and *** indicate statistical significance at the 10%, 5%, and 1% significance levels, respectively.

The results suggest that the calculated F-statistic exceeds the upper critical threshold at a significance level of 5%. This indicates that there is a relationship of long-term equilibrium between the series, and it verifies that investment, economic growth, financial development based on banks, external debt and savings are integrated across the entire time of study. After confirming cointegration, the best lag chosen using the Schwarz Bayesian Criterion (SIC) is ARDL (1,1,1,0,0,1). The long-run and short-run coefficients for both calculated ARDL models can be found in Table 3. The left side of Table 3 presents the outcomes in the long run, whereas the right side presents the outcomes in the short run.
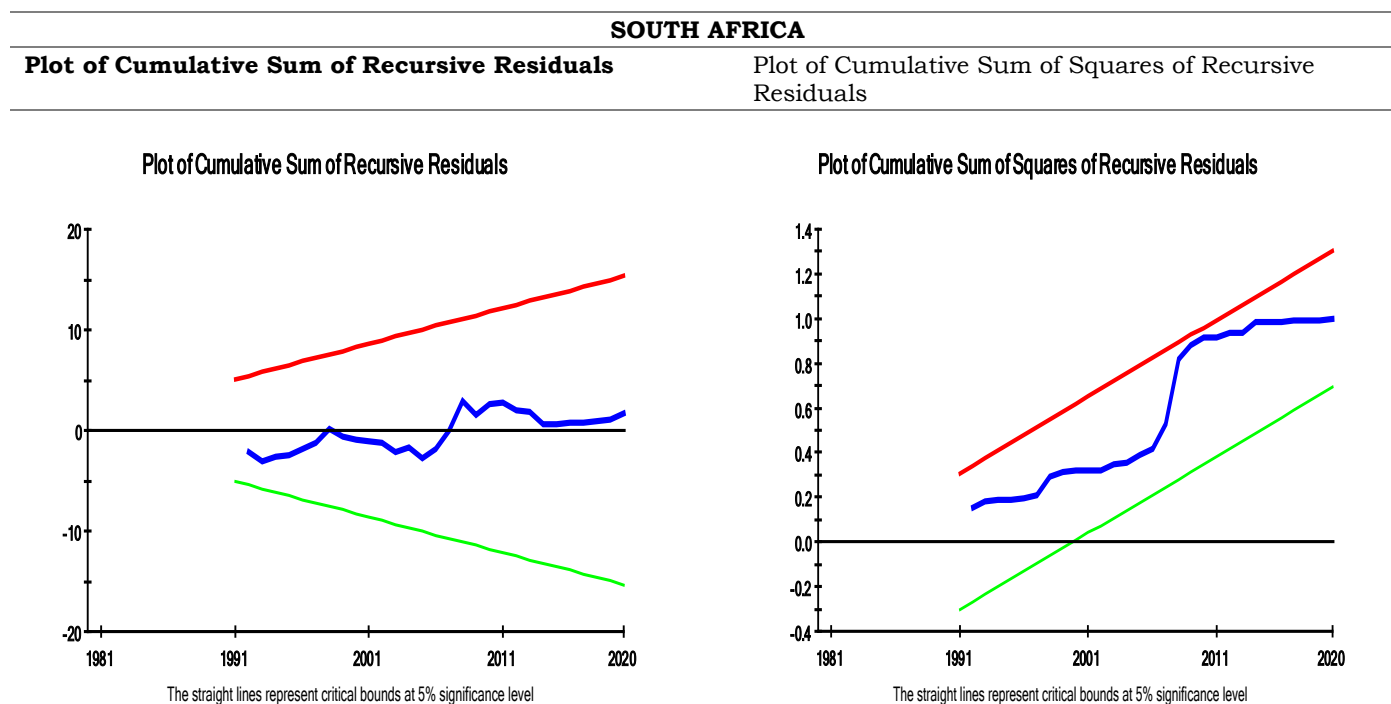
Table 3: Estimated Long Run and Short Run coefficients

SOUTH AFRICA							
ARDL (1,1,1,0,0,1) selected based on Schwarz Bayesian Criterion							
Estimated Long-Run Coefficients				Estimated Short-Run Coefficients			
Dependent variable is I				Dependent variable is dI			
Regressor	Coefficient	T-Ratio	Prob. Values	Regressor	Coefficient	T-Ratio	Prob. Values
D	0.17760	0.45042	0.655	dD	0.042120	0.50073	0.620
B	-0.076271	-0.73645	0.467	dB	-0.018089	-0.72631	0.473
T	0.58111**	2.6389	0.013	dT	0.13782***	3.1294	0.004
ED	-0.23680*	-1.9513	0.060	dED	-0.05616**	-2.1576	0.038
S	0.12664	0.30260	0.764	dS	0.030034	0.29017	0.773
C	-1.3966	-0.12195	0.904	ecm(-1)	-0.23717***	-2.8723	0.007
R-Squared	0.97433	R-Bar-Squared	0.96663	DW-statistic	1.8126		

Note: The symbols *, **, and *** indicate statistical significance at the 10%, 5%, and 1% significance levels, respectively.

Table 4; ARDL – VECM Diagnostics Tests

Test Statistics	SOUTH AFRICA	
	LM Version	F Version
A: Serial Correlation	0.57182[0.450]	0.42059[0.522]
B: Functional Form	0.34868[0.555]	0.25502[0.617]
C: Normality	1.4036[0.496]	Not applicable
D: Heteroscedasticity	2.7027[0.100]	2.7536[0.105]

Table 5; Plot of CUSUM and CUSUMQ

SOUTH AFRICA	
Plot of Cumulative Sum of Recursive Residuals	Plot of Cumulative Sum of Squares of Recursive Residuals

Plot of Cumulative Sum of Recursive Residuals

The straight lines represent critical bounds at 5% significance level

Plot of Cumulative Sum of Squares of Recursive Residuals

The straight lines represent critical bounds at 5% significance level

The results of this study show that for both the short-run and the long-run equations, the coefficient of economic growth rate is positive but insignificant. The finding suggests that the level of economic growth in South Africa is optional for bolstering domestic private investment in both the long and the short run. The coefficient of the financial development variable is also insignificant in the short- and long-run equations, indicating that private investment does not respond to changes in financial development in the country. Likewise, the gross domestic savings variable is also found insignificant in the short and the long-run equations, indicating that domestic savings in the country are irrelevant in determining the level of domestic private investment. Kasuga (2004) suggests that a lack of association and a negative association between domestic savings and investment is possible in developing countries due to the imperfection in the capital markets and inefficiency of the financial system resulting from agency problems.

In both the long-run and the short-run equations, the coefficient of the trade openness variable is significant and positive. Therefore, trade openness is a significantly consequential factor in determining investment in South Africa. This finding is consistent with Musila and Yiheyis (2015) study investigating the effects of trade openness on the level of investment and the rate of economic growth in Kenya. The coefficient for the external debt is significant and negative in the long-run and short-run equations; there is evidence that external debt is not beneficial in promoting domestic private investment, pointing to external debt overhang and external debt crowding-out effect.

As anticipated, the error correction term (ECM(-1)) displays a negative and statistically significant value. The estimated models successfully passed all diagnostic tests conducted for serial correlation, functional form, normalcy, and heteroscedasticity, as shown in Table 4.

The diagnostic tests employed in this study included the Lagrange multiplier test for residual serial correlation, Ramsey's RESET test utilizing the square of the fitted values, a normality test based on skewness and kurtosis of residuals, and a heteroscedasticity test based on the regression of squared residuals on squared fitted values. The stability of the model is further confirmed by the CUSUM and CUSUMQ tests at the 5% level of significance (see table 5).

6. Conclusions.

The study has demonstrated that economic growth does not have a crucial role in influencing the level of private investment in South Africa. While the majority of evidence indicates that private investment plays a crucial role in driving economic growth, it is important to note that this relationship is not unidirectional. Enhancing economic growth is expected to bolster investors' confidence. The rise in economic growth is expected to lead to a surge in demand for products and services, thus driving up private investments due to increased profits and incomes, among other factors. This does not appear to be true in South Africa. If the objective is to enhance private investment, authorities should not primarily focus on economic growth as a crucial determinant of driving private investment.

Financial development improves the efficiency of the financial market in transferring savings and capital into investment. The study has indicated that private investment in South Africa is not significantly influenced by factors such as economic growth, financial development, and private savings. Therefore, savings and financial development are not effective tools for a strategy that seeks to stimulate private investment in South Africa.

The analysis has revealed a negative relationship between the external debt variable and private investment. This suggests that the country has over the required level for external debt to stimulate private investment. However, the study results show that it is essential to implement a policy that encourages trade openness, as it is a crucial factor in stimulating private investment. The policymakers should implement policies that promote the decrease of foreign borrowing and prioritize tactics that stimulate domestic funding as the main source of financing to enhance domestic investment within the country.

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