



# FORCE

FOCUS ON RESEARCH IN CONTEMPORARY ECONOMICS

---

## MACROECONOMIC IMPACTS OF FDI INFLOWS: AN EMPIRICAL ANALYSIS FROM SOUTH AFRICA

Ahmed Oluwatobi Adekunle\* |

To cite this article: A.O.Adekunle, (2024). Macroeconomic Impacts of FDI Inflows: An Empirical Analysis from South Africa, *Focus on Research in Contemporary Economics (FORCE)*, 5(2), 780- 793.

To link to this article: <https://www.forcejournal.org/index.php/force/article/view/119/88>



©2020 The Author(s). This open access article is distributed under a Creative Commons Attribution-NonCommercial-NoDerivatives (CC-BY-NC-ND) 4.0 license.



---

Published online: 1 December 2024

---



---

Submit your article to this journal

Full terms & conditions of access, and use can be found out

<http://forcejournal.org/index.php/force/about>

# MACROECONOMIC IMPACTS OF FDI INFLOWS: AN EMPIRICAL ANALYSIS FROM SOUTH AFRICA

Ahmed Oluwatobi Adekunle\*

## ABSTRACT

This study evaluates macroeconomic impacts of FDI inflows on South Africa (SA) economy. The study employed Johansen cointegration test, block exogeneity test and Vector Error Correction Model (VECM) to evaluate the variables spanning over 1986-2021. It has been demonstrated that there is a unidirectional causal relationship between export and economic growth, an increase in exports (EXP) causes a rise in SA's economic growth. Economic growth and REXR were found to be causally related, indicating that higher Real Exchange Rate (REXR) values correspond to higher economic growth. Moreover, there is no correlation between FDI inflows and economic expansion. On the other hand, looking at the non-significant levels between External debt (EXTD) and CGDP indicates that the stock of external debt does not drive growth in SA. The study recommends a standardized export agency should be established to oversee the exportable units, their quality, and the standardization of goods and services, necessitating the implementation of an efficient export policies.

## KEY WORDS:

*Foreign Direct Investment (FDI), Economic Growth, Exports*

---

\*Correspondence concerning this article should be addressed to Ahmed Oluwatobi Adekunle. Department of Accounting Sciences, Walter Sisulu University, South Africa Slovenia. E-mail: [adekunle@wsu.ac.za](mailto:adekunle@wsu.ac.za)

## 1. INTRODUCTION

As financial and economic cooperation between rich and developing nations has grown, foreign direct investment (FDI) has become more and more significant in global industry. Since FDI flows are thought to have a favorable effect on a number of macroeconomic factors, including exports and GDP, they are a preferred type of foreign investment for developing nations over foreign portfolio investments. However, a spike or reversal in FDI inflow can make managing the macroeconomic system or an economy's foundations more difficult. Additionally, this could create economic and financial problems for the host nation (Al-Delawi et al., 2023; Dang & Nguyen, 2021; Joo & Shawl, 2023; Mohanty et al., 2024; Sunde, 2023; Khan & Wyrwa, 2025; Moreau & Aligishiev, 2024). A spike may cause the currency rate to rise or fall and/or reduce the competitiveness of the domestic market, which could have long-term consequences (with major negative implications in case of a quick reversal).

Research on developing nations demonstrates that foreign direct investment (FDI) is essential to the nation's long-term economic growth because it increases the availability of capital, fortifies infrastructure, transfers technology, and creates new job opportunities, all of which increase productivity and the competitiveness of the home economy. (Bhasin & Gupta, 2017; Iwasaki & Tokunaga, 2014; Alfaro et al., 2004; Balasubramanyam et al., 1996; Basu et al., 2003; Bhasin, 2012; Bhasin, 2016; Chowdhury & Mavrotas, 2005; Hansen & Rand, 2006; Jajri, 2009; Kumar & Pradhan, 2002; Makki & Somwaru, 2004; Nair-Reichert & Weinhold, 2001; Zhang, 2001). In the meanwhile, there is a chance that it will degrade local capabilities, take advantage of the resources of host countries, or even behave in a neutral manner. ((Chenaf-Nicet & Rougier, 2016) Carkovic & Levine, 2002; De Mello, 1999; De Mello & Fukasaku, 2000; Haddad & Harrison, 1993; Johnson, 2006).

While the host country's FDI drivers are now widely recognized, little research has been done on the country's macroeconomic features. Even though this issue is undoubtedly of great relevance for developing nations whose external balance of trade and financing of growth substantially rely on foreign capital inflows, there has not been much research done on how sensitive foreign direct investment (FDI) is to uncertainty in the source country. Numerous studies have attempted to use aggregate indices of global instability to explain aggregate FDI inflows or outflows (Albuquerque et al., 2005; (Bhasin & Gupta, 2017; Méon & Sekkat, 2012; Awad, 2020; Cahyadin & Sarmidi, 2019; Skare & Cvek, 2020).

However, the macroeconomic features of the source nation, which could influence FDI, cannot be addressed by employing such aggregate measurements. In fact, relatively few studies have attempted to discuss how the macroeconomic circumstances of the source nation affect bilateral flows. By calculating a gravity model of bilateral foreign direct investment flows between OECD countries from 1985 to 2007. According to Cavallari and D'Addona (2013), FDI has a tendency to rise in source countries with higher production volatility. With an emphasis on North-South FDI, Lysandrou et al. (2016) estimated a gravity model and discovered that FDI originating in the US and Europe tended to be countercyclical with regard to the cycles of interest rates and output in the source nation. The authors claim that the tendency of FDI outflows and local investment to shift in opposing directions during cycles in the US and Europe can be explained by investor arbitrage among various investment possibilities. It is evident that FDI sensitivity to the business cycle and production instability of a source country are two crucial factors for anyone wishing to comprehend FDI instability. As far as we are aware, there has never been any testing done on the conditioning effect of trade integration on the link between macroeconomic volatility and foreign direct investment.

Given the perceived significance of foreign direct investment (FDI) inflows to emerging economies such as South Africa, it is even more critical to determine whether the increasing FDI inflows are genuinely given stated apriori expectation on key macroeconomic indicators such as rate of change in gross domestic product (CGDP), export (EXP) and real exchange rate (REXR). In this research, the study employed robust vector error correction model (VECM) technique to revisit the link amid significant macroeconomic indicators, including CGDP, EXP, REXR, and the inflows of FDI into SA throughout the period of 1986-2021."

## 2. LITERATURE REVIEW

The effects and factors that influence economic investments are discussed in a number of theoretical models. Nevertheless, there are not many theoretical underpinnings that debate how FDI affects economic expansion. Wang and Swain (1997) investigated the connection between China's export performance and foreign direct investment. The findings demonstrated that FDI benefited China's exports, especially when it came to export volume and product variety. According to the study, FDI was essential to China's industrial structure modernization and increased export competitiveness. Using panel data on manufacturing exports, Pain and Wakelin (1998) investigated the impact of foreign direct investment (FDI) on export performance across 11 OECD nations between 1971 and 1992. The findings showed that inward foreign direct

investment (FDI) improves export performance, but outbound FDI reduces export market share. Bengoa and Sanchez-Robles (2003) examined the effect of foreign direct investment (FDI) on export performance in a sample of 69 developing nations. The study discovered a strong and favorable correlation between export growth and FDI inflows. The results showed that FDI fosters knowledge spillovers, human capital development, and technological advancement, all of which support export growth.

Researchers have discovered that FDI inflows tend to increase significantly in countries with robust legal systems, superior governance infrastructure, and high rankings on a variety of macroeconomic metrics. Some of these investigations are discussed in depth (Globerman et al., 2002). examined how governance affected foreign direct investment in 144 developed and developing countries between 1995 and 1997. They came to the conclusion that the governance infrastructure—which includes political, legal, and economic growth—has a major impact on FDI inflows and outflows (Jakobsen et al., 2006). studied the impact of democracy on foreign direct investment inflows into a sample of 98 developing countries between 1984 and 2004.

Okechukwu et al. (2018) investigated the long-term effects of foreign direct investment (FDI) on Nigerian exports using the autoregressive distributed lag (ARDL) model. The findings demonstrated that, over time, FDI significantly boosts total exports. An autoregressive distributed lag limits cointegration test was estimated by Mukhtarov et al. (2019) to investigate the effect of foreign direct investment on exports in Jordan between 1980 and 2018. According to the study, FDI and export have a strong, positive long-term link. The findings indicated that exports improve by 0.13% for every 1% increase in FDI. Basilgan and Akman (2019) used the ARDL technique to examine how foreign direct investment (FDI) affected Turkey's exports between 2005 and 2019. The findings demonstrated that FDI had a positive and statistically significant impact on exports, with a 1% increase in FDI leading to a 39% long-term increase in exports. Many research, including Prasanna (2010), Njong and Tichakounté (2011), and Haq (2012), also showed evidence of a positive association between FDI and export growth. These studies revealed that FDI had a beneficial impact on export performance in their respective countries. However, a generalized method strategy was used in a previous work by Carkovic and Levine (2002) to analyze the link between FDI and export from 1960 to 1995. According to the study, FDI has a detrimental impact on growth. Studies like Saqib et al. (2013) in Pakistan reported similar results, while Nguyen et al. (2012) concluded that FDI had no effect on export performance. Using an autoregressive distributed lag (ARDL) technique, Musti and Mallum (2020)

investigated the link between foreign direct investment (FDI) and export performance in Nigeria and discovered that FDI has no discernible direct impact on exports.

An ARDL model was generated in a recent work by Gebremariam and Ying (2022) to investigate the empirical relationship between FDI and Ethiopia's export performance from 1992 to 2018. The findings showed that there was no significant correlation between FDI and export success. The nonlinear autoregressive distributed lag was used in a recent study by Matekenya and Moyo (2023) to investigate how foreign direct divestments (FDD) affected South Africa's growth from 1991 to 2019. The findings showed that overseas divestitures have a negative impact on economic development and growth. Additionally, the results showed that overseas investments have more beneficial spillover effects than foreign divestitures. It is important to remember that the results showing a negative impact of FDI on growth and exports are incompatible with economic theory because FDI is supposed to bring new technologies, business know-how or skills transfer, and improved production techniques, all of which would boost output growth and eventually exports.

### 3. METHODS

This report includes the most important factors that are impacted by inflows of foreign direct investment and affect foreign investors' choices to participate in South African markets. Consequently, the study examines the relationship between FDI inflows, CGDP, EXP, EXTD, and REXR between 1986 and 2021. The variables utilized were sourced from the World Development Indicator Database (WDI, 2021). The study examines the link between variables using the more recent and trustworthy VECM and the Granger Causality Test. Johansen and Juselius (1990) employed the conventional cointegration approach, which computes long-term relationships within the context of an equation system.

The VECM technique uses a single reduced form of the problem. Determining whether the underlying regressors are pure  $I(0)$ , pure  $I(1)$ , or a combination of the two is also essential because this approach includes pre-testing variables. When using VECM, care must be taken because variables of type  $I(2)$  should not be utilized as this could lead to inaccurate results.

Additionally, the VECM model removes the need for extensive specification on the number of exogenous and endogenous variables (if any), the handling of deterministic elements, and the optimal order in which to use lags. More importantly, it has been demonstrated that the VECM approach produces more reliable and consistent results when utilizing predictable sample sizes.

$$CGDP = f(EXTD, EXP, FDI, REXR) \quad (1)$$

Where

CGDP	=	Change in gross domestic product
EXTD	=	External debt stocks, total (DOD, current US\$)
EXP	=	Export
FDI	=	Foreign direct investment net inflow
REXR	=	Real exchange rate

The econometric specification of the model is specified below:

$$CGDP = EXTD + EXP + FDI + REXR \quad (2)$$

$$CGDP = \beta_0 + \beta_1 EXTD + \beta_2 EXP + \beta_3 FDI + \beta_4 REXR \quad (3)$$

$$CGDP = \beta_0 + \beta_1 EXTD + \beta_2 EXP + \beta_3 FDI + \beta_4 REXR + \kappa \quad (4)$$

$$CGDP = \beta_0 + \beta_1 EXTD + \beta_2 EXP + \beta_3 FDI + \beta_4 REXR + \hat{e} \quad (5)$$

CGDP is the endogenous variable while REXR, FDI, EXP and EXTD are the exogenous variables. Equation (5) is modelled to show the connection amid CGDP and other specified variables in South Africa (SA).  $\beta_0 - \beta_4$  are the parameters to be estimated in the model..

### 3.2. Findings and Discussion

I Table 1 below presents the unit root test which denotes  $I(0)$  and  $I(1)$  which serve as indicator for applicability of VECM for the study; the Schwarz information criteria is used to determine the optimal lag selection, which is based at 2 (see Table 2).

**Table 1: Unit root**

		DF Null ( $H_0$ ): Non-stationary				ADF Null ( $H_0$ ): Non-stationary			
$z_{t-1}$		$\tau_{\mu}$	1%	5%	Prob.	$\tau_{\tau}$	1%	5%	Prob.
Intercept without Time Trend	<i>CGDP</i>	3.65	2.63	1.95	0.00	4.26	3.63	2.94	0.00
	<i>EXP</i>	1.97	2.63	1.95	0.00	2.02	3.63	2.95	0.27
	<i>EXTD</i>	1.40	2.63	1.95	0.17	1.37	3.63	2.95	0.99
	<i>RER</i>	2.20	2.63	1.95	0.03	4.15	3.63	2.95	0.00
	<i>FDI</i>	2.64	2.63	1.95	0.00	2.41	3.64	2.95	0.14
	$\Delta CGDP$	4.08	3.77	3.19	0.00	10.92	3.63	2.95	0.00
	$\Delta EXP$	2.22	3.77	3.19	0.00	6.66	3.63	2.95	0.00
	$\Delta EXTD$	0.42	3.77	3.19	0.67	4.38	3.63	2.95	0.00
	$\Delta RER$	1.40	2.63	1.95	0.16	7.09	3.63	2.95	0.00
	$\Delta FDI$	7.60	2.64	1.95	0.00	7.88	3.66	2.96	0.00
Intercept	<i>CGDP</i>	9.31	2.63	1.95	0.00	4.21	4.24	3.54	0.00
	<i>EXP</i>	4.54	2.63	1.95	0.00	1.86	4.24	3.54	0.65



<i>EXTD</i>	4.02	2.63	1.95	0.00	0.29	4.24	3.54	0.99
<i>RER</i>	3.05	3.77	3.19	0.00	4.08	4.24	3.54	0.01
<i>FDI</i>	2.98	3.77	1.95	0.00	2.58	4.61	3.71	0.29
$\Delta CGDP$	10.83	3.77	3.19	0.00	10.81	4.25	3.54	0.00
$\Delta EXP$	6.25	3.77	3.19	0.00	6.91	4.25	3.54	0.00
$\Delta EXTD$	4.74	3.77	3.19	0.00	4.94	4.25	3.54	0.00
$\Delta RER$	4.55	3.77	3.19	0.00	6.86	4.25	3.54	0.00
$\Delta FDI$	8.05	3.77	3.19	0.00	7.98	4.25	3.54	0.00

Source: Author' s Compilation,2024

**Table 2:** Lags Determination

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-428.5006	NA	402119.1	27.09379	27.32281	27.16970
1	-349.6976	128.0548*	14245.05*	23.73110*	25.10523*	24.18659*
2	-325.8637	31.28207	17335.00	23.80398	26.32321	24.63903
3	-301.9155	23.94821	26196.81	23.86972	27.53406	25.08434
4	-280.2746	14.87808	72385.56	24.07966	28.88911	25.67386

Source: Author' s Compilation,2024

### 3.3. Cointegration Test

Johansen Cointegration Test (JCT) is used in the analysis to assess the long-term association amid the variables. The JCT (1999) technique is simple to register for such frameworks and provides the best likelihood of robust application of VECM. Table 3 shows the JCT resultst.

**Table 3:** Test of Unrestricted Cointegration (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.688897	79.77153	69.81889	0.0065
At most 1*	0.542505	40.07206	47.85613	0.0199
At most 2	0.191770	13.48445	29.79707	0.8682
At most 3	0.096152	6.245566	15.49471	0.6665
At most 4	0.079279	2.808356	3.841466	0.0938

\* Indicates cointegration among the variables

Source: Autho' s Compilation,2024

The short-run relationship that is, to check whether the variables have a meaningful relationship in the short run which can be found using the Error Correction Model (ECM). However, the long-run adjustment shows whether the model can adapt to a long-run equilibrium following a shock. To find a relationship between the cointegrated variables, the VECM has been used in the study.

The fact that the ECM is negative and significant indicates that a long-term adjustment will be feasible. The rate of adjustment towards equilibrium is shown



by the coefficient of ECM, which is 0.32 (Table 5). This indicates a 32% speed of adjustment. The long-term link between the variables in this study was determined by using the VECM to determine the significance of the error correction term and the coefficients of each independent variable.

**Table 5:** Vector Error Correction Model (VECM)

Cointegrating Eq:	CointEq1				
CGDP(-1)	1.000000				
EXP01(-1)	-0.717089 (0.11038) [-6.49641]				
EXTD(-1)	0.037781 (0.13051) [ 0.28948]				
FDI(-1)	-3.031760 (0.34086) [-8.89448]				
REXR(-1)	0.015696 (0.01947) [ 0.80608]				
C	3.002918				
Error Correction:	D(CGDP)	D(EXP01)	D(EXTD)	D(FDI)	D(REXR)
CointEq1	-0.322869 (0.41447) [-0.77899]	0.914348 (1.14372) [ 0.79945]	0.103314 (0.22445) [ 0.46029]	0.882422 (0.24310) [ 3.62984]	-0.054028 (1.20456) [-0.04485]
D(CGDP(-1))	0.050841 (0.49131) [ 0.10348]	0.100355 (1.35578) [ 0.07402]	-0.386748 (0.26607) [-1.45356]	-0.868007 (0.28817) [-3.01209]	0.959593 (1.42789) [ 0.67203]
D(CGDP(-2))	0.857417 (0.47429) [ 1.80780]	1.002699 (1.30879) [ 0.76613]	-0.322823 (0.25685) [-1.25686]	0.271557 (0.27819) [ 0.97616]	-0.628489 (1.37841) [-0.45595]
D(EXP(-1))	-0.233955 (0.25531) [-0.91636]	-0.414000 (0.70452) [-0.58763]	0.069357 (0.13826) [ 0.50164]	0.468599 (0.14975) [ 3.12924]	-0.644042 (0.74200) [-0.86799]
D(EXP(-2))	-0.306929 (0.16836) [-1.82309]	-0.463597 (0.46458) [-0.99789]	0.020357 (0.09117) [ 0.22328]	0.060818 (0.09875) [ 0.61589]	-0.111816 (0.48929) [-0.22853]
D(EXTD(-1))	1.367823 (0.43827) [ 3.12094]	2.402688 (1.20941) [ 1.98666]	0.014728 (0.23735) [ 0.06205]	0.510146 (0.25706) [ 1.98451]	1.103288 (1.27374) [ 0.86618]
D(EXTD(-2))	-0.170269 (0.46959) [-0.36259]	-0.238341 (1.29583) [-0.18393]	0.022442 (0.25431) [ 0.08825]	0.322359 (0.27543) [ 1.17037]	-0.513630 (1.36476) [-0.37635]

D(FDI(-1))	-1.460700 (0.99684) [-1.46533]	0.571400 (2.75077) [ 0.20772]	0.497503 (0.53983) [ 0.92158]	0.826540 (0.58468) [ 1.41365]	-2.095152 (2.89709) [-0.72319]
D(FDI(-2))	-1.326772 (0.59713) [-2.22190]	-0.552327 (1.64778) [-0.33519]	0.261911 (0.32338) [ 0.80993]	-0.068528 (0.35024) [-0.19566]	0.774270 (1.73543) [ 0.44615]
D(REXR(-1))	-0.061118 (0.08613) [-0.70964]	0.044890 (0.23766) [ 0.18888]	-0.035167 (0.04664) [-0.75399]	-0.228914 (0.05052) [-4.53153]	0.235865 (0.25030) [ 0.94232]
D(REXR(-2))	0.189414 (0.10262) [ 1.84576]	0.184574 (0.28318) [ 0.65178]	-0.017448 (0.05557) [-0.31396]	-0.042471 (0.06019) [-0.70559]	0.046900 (0.29825) [ 0.15725]
C	0.229831 (0.43484) [ 0.52854]	0.238141 (1.19994) [ 0.19846]	-0.070865 (0.23549) [-0.30093]	0.013976 (0.25505) [ 0.05480]	-0.921360 (1.26377) [-0.72906]
R-squared	0.557463	0.573450	0.470371	0.725613	0.517786
Adj. R-squared	0.325658	0.350019	0.192946	0.581886	0.265198
Sum sq. resids	112.4358	856.1711	32.97425	38.68093	949.6781
S.E. equation	2.313889	6.385143	1.253077	1.357184	6.724788
F-statistic	2.404879	2.566563	1.695487	5.048566	2.049920
Log likelihood	-67.05190	-100.5484	-46.81209	-49.44582	-102.2586
Akaike AIC	4.791024	6.821112	3.564369	3.723989	6.924765
Schwarz SC	5.335209	7.365297	4.108554	4.268173	7.468950
Mean dependent	0.091327	0.027871	0.039411	0.288654	-1.301455
S.D. dependent	2.817750	7.919910	1.394847	2.098900	7.845006

Source: Author's Compilation, 2024

### 3.4. Granger Causality Test

The relationship between the macroeconomic effects of FDI and economic growth in South Africa, as well as the direction of causality, are investigated in this paper using the block exogeneity test. All the factors used in this investigation are shown in the results in Table 6. Given that the probability is negligible at 11%, the null hypothesis which holds that there is no causal connection amid exogenous variables and SA economic growth cannot be rejected at 5%. The hypothesis is directed from the stock of external debt to economic growth. Additionally, it is possible to reject the null hypothesis that there is no causal association between REXR and CGDP at 5%, with a negligible likelihood of 17%. For the time span covered by the analysis, there is essentially a unidirectional causal relationship between EXP and economic growth, going from export to growth. This means that when exports rise, the GDP grows and attracts more foreign direct investment into the country. Given that the likelihood is negligible at 18%, the null hypothesis which states that there is no causal association between FDI inflows and economic growth cannot be rejected at 5%. Furthermore, the likelihood of 9%, which is marginally significant, means

that the null hypothesis that there is no causal association between CGDP and EXP cannot be rejected at 5%. As a result, the CGDP and EXP have no causal link.

Given that the likelihood is extremely small at 8%, the null hypothesis that there is no causal association between EXTD and CGDP cannot be rejected at 5%. Furthermore, the probability accounting for 6%, which is marginally significant, means that the null hypothesis that there is no causal association between FDI and CGDP cannot be rejected at 5%. Therefore, there is no causal connection between the CGDP and FDI inflows. On the other hand, based on the relevant levels, which span from REXR to CGDP, it can be concluded that South Africa's growth rate is determined by the real exchange rate. It is considered that there is a unidirectional causal relationship between REXR and CGDP. Essentially, there are unidirectional causalities among the variables.

**Table 6:** Block Exogeneity Test

Dependent variable: D(CGDP)			
Excluded	Chi-sq	df	Prob.
D(EXP)	4.379088	2	0.1120
D(EXTD)	11.70992	2	0.0029
D(FDI)	5.209997	2	0.0739
D(REXR)	4.873877	2	0.0874
All	17.75062	8	0.0232
Dependent variable: D(EXP)			
Excluded	Chi-sq	df	Prob.
D(CGDP)	0.750154	2	0.6872
D(EXTD)	4.844922	2	0.0887
D(FDI)	0.743186	2	0.6896
D(REXR)	0.425513	2	0.8084
All	7.433482	8	0.4907
Dependent variable: D(EXTD)			
Excluded	Chi-sq	df	Prob.
D(CGDP)	2.426770	2	0.2972
D(EXP01)	0.362842	2	0.8341
D(FDI)	0.863837	2	0.6493
D(REXR)	0.585143	2	0.7463
All	8.548862	8	0.3818
Dependent variable: D(FDI)			
Excluded	Chi-sq	df	Prob.
D(CGDP)	18.64706	2	0.0001

D(EXP01)	21.67758	2	0.0000
D(EXTD)	10.26307	2	0.0059
D(REXR)	20.73280	2	0.0000

All	40.61355	8	0.0000
-----	----------	---	--------

Dependent variable: D(REXR)

Excluded	Chi-sq	df	Prob.
D(CGDP)	1.399132	2	0.4968
D(EXP01)	1.483979	2	0.4762
D(EXTD)	0.755193	2	0.6855
D(FDI)	3.447974	2	0.1784

All	8.673046	8	0.3706
-----	----------	---	--------

Source: Author's Compilation, 2024

#### 4. CONCLUSION

Several inferences about the connection among the macroeconomic effects of FDI inflows and the economy of South Africa may be made based on the research findings. First, stationarity is tested using the ADF and DF unit root test before the approaches are selected. It was determined that the variables were integrated of orders  $I(1)$  and  $I(0)$ . The study used the Akaike Information Criterion (AIC) to determine the best lag selection. The Johansen cointegration test was used to examine the long-term connection between the variables, while the VECM helped to determine the short-term association.

To determine whether there is a causal relationship between the variables, the block exogeneity test was employed. It has been demonstrated that there is a unidirectional causal relationship between export and economic growth, i.e., an increase in EXP causes a rise in SA's CGDP. Economic growth and REXR were found to be causally related, indicating that higher REXR values correspond to higher economic growth. Moreover, there is no correlation between FDI inflows and economic expansion. On the other hand, looking at the non-significant levels between EXTD and CGDP indicates that the stock of external debt does not drive growth in SA. The results of this work validate some of the previous research on the macroeconomic effects of foreign direct investment inflows and economic growth (Bhasin et al. 2017; Alfaro et al. 2004; Bhasin et al. 2012). Therefore, it can be concluded that EXTD increase is not the major macroeconomic factors of SA economic growth and development.

Numerous empirical data indicate that there is a noteworthy and causal connection among EXP and CGDP. Export growth is positively impacted by export promotion, supporting the benefits of an ELG strategy for South Africa. On the other hand, export growth has been sluggish over time. A standardized

institution regulating exports should be established to oversee the exportable units, the standardization of commodities, necessitating the implementation of an efficient export policy.

The industries that make up a sizable portion of the export basket should have their FDI restrictions raised, according to policymakers. To sum up, to reap the intended benefits of FDI inflows, SA must create a framework for FDI policies that is open, permissive, and effective while also bolstering institutional and human resources.

## DISCLOSURE OF CONFLICT

The author declare that no conflicts of interest exist

## AUTHOR(S) DETAILS

Ahmed Adekunle

Department of Accounting Science,

Walter Sisulu University, Mthatha, South Africa

E-mail: [aadekunle@wsu.ac.za](mailto:aadekunle@wsu.ac.za)

ORCID ID:

## REFERENCES

Al-Delawi, A. S., Shah, S. S. H., Harjan, S. A., Karim, F., Mehran, M., & Ahmad, S. (2023). The impact of foreign direct investment on stock market growth: Evidence from Pakistan. *International Journal of Management and Sustainability*, 12(3). <https://doi.org/10.18488/11.v12i3.34267>

Bhasin, N., & Gupta, A. (2017). Macroeconomic impact of FDI inflows: an ARDL approach for the case of India. *Transnational Corporations Review*, 9(3), 150–168. <https://doi.org/10.1080/19186444.2017.1362860>

Chenaf-Nicet, D., & Rougier, E. (2016). The effect of macroeconomic instability on FDI flows: A gravity estimation of the impact of regional integration in the case of Euro-Mediterranean agreements. *International Economics*, 145, 66–91. <https://doi.org/10.1016/j.inteco.2015.10.002>

Dang, V. C., & Nguyen, Q. K. (2021). Determinants of FDI attractiveness: Evidence from ASEAN-7 countries. *Cogent Social Sciences*, 7(1). <https://doi.org/10.1080/23311886.2021.2004676>

Iwasaki, I., & Tokunaga, M. (2014). Macroeconomic Impacts of FDI in Transition Economies: A Meta-Analysis. *World Development*, 61, 53–69. <https://doi.org/10.1016/j.worlddev.2014.03.022>

Joo, B. A., & Shawl, S. (2023). Understanding the Relationship Between Foreign Direct

Investment and Economic Growth in BRICS: Panel ARDL Approach. *Vikalpa*, 48(2).  
<https://doi.org/10.1177/02560909231180078>

Khan, A. M., & Wyrwa, A. (2025). Integrating machine learning and econometric models to uncover macroeconomic determinants of renewable energy production in the selected European countries. *Energy*, 333, 137266. <https://doi.org/10.1016/j.energy.2025.137266>

Mohanty, S., Sethi, N., & Dash, D. P. (2024). What determines outward FDI in developing blocs? A new empirical comparative macroeconomic perspective of post 1990s. *Heliyon*, 10(23), e40320. <https://doi.org/10.1016/j.heliyon.2024.e40320>

Moreau, F., & Aligishiev, Z. (2024). Diversification in sight? A macroeconomic assessment of Saudi Arabia's vision 2030. *International Economics*, 180, 100538. <https://doi.org/10.1016/j.inteco.2024.100538>

Sunde, T. (2023). The impact of foreign direct investment on Namibia's economic growth: A time series investigation. In *Cogent Economics and Finance* (Vol. 11, Issue 1). <https://doi.org/10.1080/23322039.2023.2210857>