Globalization and Inflation Nexus in South Africa: An Empirical Investigation

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Abstract

The impact of globalization on inflation is investigated for South Africa using annual time series data from 1990 to 2022. The study was motivated by the need to establish if the notion that globalization leads to a decrease in prices in the domestic economy still holds water for South Africa. The study employs ARDL to explore the nature of the relationship between globalization and inflation. Using trade openness as a measure of globalization and the rate of change of the consumer price index as a measure of inflation, the study found globalization to worsen inflation pressures in South Africa irrespective of the timeframe considered. Thus, South African authorities need to put measures in place to reduce the impact of globalization on price levels. Policy implications are discussed.

Introduction

In the last two decades, most countries abandoned inward looking policies and embraced liberalization of economic sectors as a way of integrating into the global world. This was because of numerous advantages of globalization benefits that were widely observed. Most countries liberalized their trade and financial sector, and consequently witnessed growth compared to when economies were closed. In the recent past, organization like World Trade Organization (WTO) advocated for complete liberalization, marked by removal of restrictions on trade to fully benefit from trade. However, the outbreak of COVID-19 and external factors like the war in Ukraine and Russia were an eye opener on the consequences of accelerated globalization. Although most nations fully understood the impact of external factors on the domestic economies associated with external shock, the magnitude witnessed during COVID-19 and the war between Ukraine and Russia gave most policy makers a task to rethink accelerated globalization as a development drive. Some researchers argue that opening of the economy results in a reduction in prices as competition increase from the availability of domestic produced goods and foreign produced goods. Thus, globalization results in a fall in inflation rate. Based on this notion, this study investigates if globalization has resulted in a decrease in prices in South Africa and if it has compromised the effectiveness of monetary and fiscal policy tools.

Growing research has focused on the role of globalization measured through financial sector and trade openness on economic variables like living standards, economic growth, exchange rate and inflation. The findings of the study are divided between a positive impact on inflation (see, Mansouri

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et al., 2024); Feriansyah, Achsani and Anggraeni, 2022) and a negative impact on inflation (for example, Feriansyah, Achsani and Anggraeni, 2022). The variation in the results was found in different studies in different countries. The variations in the results suggest that stylized factors can play an important role on the impact of globalization on inflation. Some studies found the impact of globalization to vary depending on the inflation measure used (Andeep, 2017). This study departs from other studies by examining the impact of globalization, measured by trade openness on inflation. Captured by consumer price index (CPI) for South Africa.

This study employs ARDL approach to exam the nature of the relationship between globalization and inflation; and the relationship between globalization and selected fiscal and monetary policy tools. The approach has numerous advantages over other traditional approaches. The inflation rate is captured by CPI index, a measure normally used when calculating inflation in South Africa. The study focuses on globalization captured by trade in goods and services. Although the authors acknowledge the multidimensional nature of globalization, the study focuses on the impact of trade on inflation in South Africa. South Africa was selected as a case study mainly because the country has liberalised the trade sector and has engaged with numerous countries to facilitate trade. In Africa, South Africa is arguable one of the leading countries in trade within the continent. Thus, most countries in Africa, learn from the leading giant in international trade, hence findings from this study can inform policy in other African countries.

The study is organized as follows: Section 2 dwells on literature review broken down into county-based literature and empirical literature. Section 3 outlines the estimation techniques and Section 4 presents the results and discuss the findings. Section 5 concludes the study.

Literature review

Globalization and Inflation Dynamics
Globalization dynamics

Globalization is multidimensional including financial liberalization, trade openness and labour mobility (Mumtaz and Younas, 2021). This study focuses on trade openness as part of globalization. Prior to 1994, South Africa supported inward looking policies, were domestic production and expansion was supported versa import of goods from other countries (The Republic of South Africa, 1993). The lifting of sanctions and a turn around on import substitution saw the government embracing liberalization of the economy. This resulted in a gradual lifting of the inward-looking policies and paving a way for financial and trade liberalization among other policies (The Republic of South Africa, 1993). The opening up of the economy resulted in increase in imports and exports; and increase in South African assets held by international investors (Isaacs and Kaltenbrunner, 2018).

South Africa has pursued a trade policy that aims to reduce trade restrictions like tariffs and non-tariff barriers and reduce administrative restrictions. Although South Africa is still protective of its infant industries. Trade agreements that South Africa has entered have opened new markets for South African goods and services. South Africa recognizes trade as a driver for economic growth. The Department of Trade and Industry (the dti) formed in June 2019, a product of a merger between The Economic Development (EDD) and Trade and Industry (the dti) spear heard trade related elements in the country. Some of the goals of the department are development of a dynamic and globally competitive economy; industrial development, investment; and build mutually beneficial global and regional relationships (the dti, 2024a). The goals of the dti reflect the country's stance on liberalization of all sectors of the economy (the dti, 2024a). South Africa has entered bilateral and multilateral trade agreements that have made it possible for South Africa to extend the domestic market and benefit from imports from other countries and diffusion of technology. Some of the agreements include: the African Continental Free Trade Area (AfCFTA); SADC-EAC-COMESA Tripartie FTA; SACU-India PTA; Africa Growth and Opportunity Act; Generalised System of Preferences (GSP); Zimbabwe/South Africa bilateral trade agreement; EFTA-SACU Free Trade Agreement (FTA); Southern African Customs Union (SACU); Southern African Development Community (SADC) protocol of Trade in Goods and Services; and Economic Partnership Agreement between the SADC EPA States, and the European Union and its Member States and SACU-Southern Common Market (Mercosur) PTA (the dtic, 2024b). These agreements confirm the trade relationships South Africa has been pursuing to achieve the goals set by the dti department.

The opening up of the South African economy has led to a growth in exports and imports in the past decade.

Although the WTO has been advocating for free trade for nations to draw maximum benefit from trade, globalization has brought its own challenges to nations. Post COVID-19 has made some countries reconsider openness to inward looking policies, with most countries resorting to a middle way between the two. Globalization has brought its own vulnerabilities (Isaacs and Kaltenbrunner, 2018). Initially, globalization has been supported as an instrument of decrease in prices and improvement in local production; however, recent developments like the Russia-Ukraine war have exposed the weaknesses of globalization.

South Africa has enjoyed a consistent increase in trade openness from the 1990s that coincided with the time the government was liberalization trade and entering into strategic bilateral and multilateral agreements. Trade openness increase from 38% of GDP in 1990 to 46% of GDP in 2000 (World Bank, 2024). The growth has never disappointed over the years from 2000 to record 65% of GDP in 2022, the highest proportion that the country has ever reached (World Bank, 2024). The average trade in imports and exports as a percentage of GDP was 49% between 1990 and 2022 (World Bank, 2024). Although more can still be done to expand international trade, the extent to which the government balances the risk, and the benefits is increasingly becoming important. The trend in trade openness from 1990 to 2022 is reported in Figure 1.
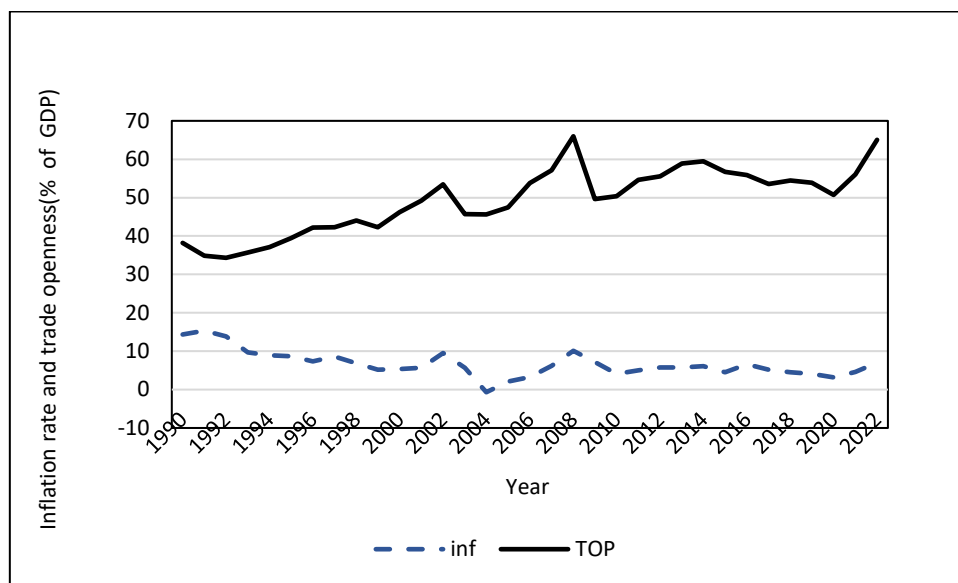

Figure 1: Trends in trade openness 1990 to 2022.
Source: World Bank (2024)

Figure 1 reports trends in trade openness and inflation during the study period with the two variables trending together from 2000 (World Bank, 2024). This suggests an increase in trade openness results in a surge in the inflation rate, while a decrease in exports and imports is associated with a decrease in inflation. The relationship exhibited by the two series suggest trade openness has a positive effect on inflation. This is contrary to the once held notion that trade reduces domestic prices.

Inflation dynamics

The South African Reserve Bank (SARB) was created through the Currency and Banking Act No 31 of 1920 which was later replaced by the South African Reserve Bank Act of 1944 that lasted until 1989 before being replaced again by South African Reserve Bank Act of 1989. Section 224 of the South African constitution provides the mandate of the SARB as to protect the value of the currency to ensure sustainable and balanced growth; and spells the SARB independence to perform its mandate (SARB, 2024a). In 2000, The SARB adopted inflation targeting where inflation would be kept between 3% to 6%. Price stability entails always maintain inflation within the target range. To attain the mandate of the bank, the SARB has a strategy articulated through five focus areas namely, maintaining headline inflation within the range of 3% to 6%; protect and enhance financial stability; enhance the safety, soundness of the financial institutions and infrastructure; enhance South Africa resilience to external shocks; ensure integrity of the currency (SARB, 2024a). Inflation targeting brings transparency to the SARB policy and allows businesses to plan and grow accordingly. Inflation targeting has been working as expected and enabled the SARB to kept inflation within the range.

However, after COVID-19, inflation increased, a reflection of aggressive demand management intervention that was implemented by the South Africa government to alleviate COVID-19 impact. The increase in inflation was also a reflection of global events, such as, the Russia- Ukraine war, that saw prices of wheat and oil soar as the war interrupted trade. The war negatively impacted most countries with trade ties with Russia and Ukraine, South Africa inclusive. This brought some doubt on the benefits of accelerated globalization.

During the study period, inflation in the first three years as measured by rate of change of consumer price index, was in double digits, at 14,3% in 1990 and increase the following year by 1% before taking a downward trend to 2007 where a surge was recorded (World Bank, 2024). The surge in inflation from 2007 to 2009 can be associated with the financial crisis in 2008 and the aftermath. However, the SARB has managed to keep inflation within the 3% to 6% range and in years where a slight deviation upwards or downwards was recorded, inflation was successfully brought to the acceptable range (World Bank, 2024). The average inflation rate during the study period was 6,7% (World Bank, 2024). In 2022, South Africa, like most countries that trade with Ukraine and Russia, faced strong external forces pushing inflation further from the COVID-19 recovery position.
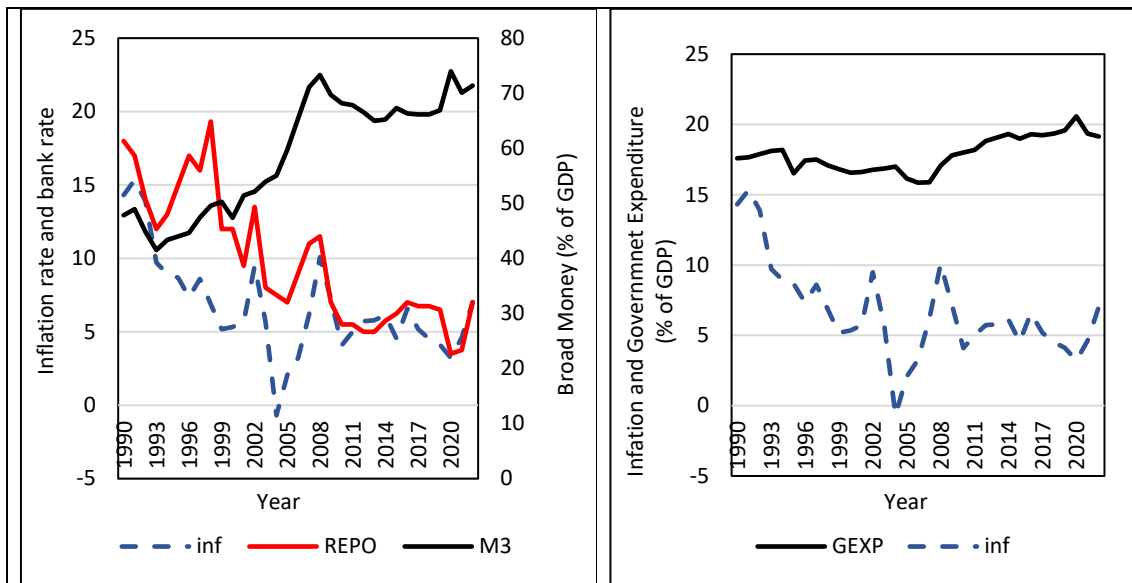

Figure 2: Trends in Inflation, M3, Government Expenditure and Average Bank Rate 1990-2022
Source: World Bank, 2024) and SARB, (2024b)

Figure 2 gives a snapshot of the relationship between inflation and demand management tools used in South Africa: bank rate, broad money and government expenditure. Figure 2a reports inflation and monetary policy variables: broad money and bank rate. The bank rate has been trending together with inflation, reflecting the monetary policy stance. When inflation decrease, the bank rate also decreases and the opposite if true when inflation increases. The average inflation for the study period was 6.65% and the bank rate is 9.8% (World Bank, 2024; SARB, 2024b). However, the growth in broad money seems to have no relationship with inflation rate. This suggest that following financial liberalization, the growth in broad money has taken several factors into account apart from inflation rate.

Empirical literature review

Globalization generally refers to economic interdependence brought about by cross border transaction in goods and services, diffusion of technology and international factor flow (Wagner, 2001). In the past, globalization has been hailed for the negative effects that it has on inflation through reduction in cost of goods and services enabled by imports ad resulting competition. In the recent past, this link has continuously been questioned due to external factors that have put pressure on domestic inflation; for example, the Ukraine and Russia causing shortages and inflation in trading partners' economies. This tends to provide evidence contrary to once held assumption that

globalization leads to reduction in prices in the domestic economy. The link between globalization and the demand management policies ultimately affecting inflation rate is obtained through the once held channel, in this case the nature of the relationship is uncertain. Structural changes associated with globalization increase uncertainty on the monetary policy transmission mechanism and other macroeconomic data in an economy. This consequently has a bearing in the demand management policies implementation and effectiveness in managing inflation and the output gap in an economy. In this study, studies on the impact of globalization are revealed with more attention to the impact of trade openness on inflation or effectiveness of demand management policies in reducing inflation. Stephane and Noumba (2024) examined the impact of globalization on happiness in Africa. Using a dynamic panel data model on 34 African countries over the period 2006–2019, the study found the effects of globalization to be positive in high-human development countries while these effects remain negative in low-human development countries. Mansouri et al. (2024), studied the factors influencing overall food inflation in Morocco. Using quarterly data from The Central Bank of Morocco (BAM) and the Food and Agriculture Organization of the United Nations (FAO) and quantile regression analysis the study found exchange rate to exert positive and statistically significant effects on overall food inflation. Oil prices were found to negatively affect food inflation implying our results show that inflation in Morocco is predominantly imported. Subagyo et al. (2024), examined the impact of the inflow and outflow of foreign portfolio investments and the monetary policies reflected in the 7-day repo rate of Bank Indonesia on the Indonesian stock market using data from 2016 to 2022. Employing Non-Linear Autoregressive Distributed Lag and the Markov Switching Regression (MSR) model the study found that foreign investor portfolio flows influence the Jakarta Composite Index. There is a tendency for domestic investors to analyse the habits of foreign investors. The study also found that monetary policy is not proven to affect the Jakarta Composite Index, while the USD/ IDR exchange rate has an impact on the Indonesian stock market. Benarbia and Aiboud (2023) studied the impact of financial liberalization on monetary policy in Algeria using data from 1970 to 2021. Employing ARDL approach, and the exchange rate and financial asset channel, the study found both channels to be effective in transferring monetary policy into the real sector compared to interest rate and bank lending. The study confirms financial liberalization aligned to loans granted to the private sector positively affect effectiveness of monetary policy. Feriansyah, Achsani and Anggraeni (2022) in a study on effects of fiscal and monetary policy under globalization using a sample of 79 countries and data from 1998 to 2018, using NARDL found that globalization has distorted the role of expansionary fiscal policy on the real sector, while role of monetary policy has remained reliable in developing countries not in developed countries. Andeep (2017) in a study on developing and emerging economies, incorporating domestic and foreign output gap, found mixed results depending on the measure of inflation. When GDP deflator was used, a significant change in output-inflation was found, while CPI inflation suggest the opposite results. Alex and Karen (2008) in the synthesis of the impact of globalization on inflation pointed to the impact of globalization being determined by the extent to which household and businesses anticipate the consequences of changes in import prices - extent shock, coupled with the response of monetary authorities. If import prices changes are sudden, household and business may not fully adjust to the impact causing a temporary change in inflation.

Although the literature on the impact of globalization on inflation is limited, when globalization is measured by exports and imports, the studies reviewed point to mixed results. Some studies identify trade openness as instrumental in reduction in inflation, some found a positive impact of trade openness on inflation whilst other point to conditions in the domestic economy that determine reaction of prices from external shocks in imports (see Feriansyah, Achsani and Anggraeni (2022). The inconclusive results make generalization of results in appropriate necessitating another study on South Africa.

Estimation Techniques

Autoregressive distributed lag (ARDL) approach was used to exam the impact of globalization on inflation in South Africa. The ARDL approach was selected because of several advantages against traditional methods. For example, the approach allows interpretation of results in short run and long run which is important when policy is tied to time; and allows variables of different order of integrations in the same model. The approach also provides unbiased long-run estimates and valid t-statistics even when some of the regressors are endogenous (see Odhiambo, 2008). Apart from non-imposition of the restrictive assumption that all the variables under study must be integrated of the

same order, the ARDL also possesses superior small sample properties, making it a suitable technique even when the sample size is small.

Variables

The key variables in this study are inflation rate (INFL) captured by the rate of change of consumer price index; globalization (GB) captured by trade openness. Other control variables included in the study are monetary policy tools – broad money (M3), exchange rate (nominal exchange rate) (NXR) and bank rate – average annual rate (RR); and fiscal policy tool - government expenditure captured by central government expenditure as a percentage of GDP (GXP). These variables were included to minimise omission of variable bias.

Model Specification

The general model specification is given in Equation 1.

$$\textbf{INF = f (GB, M3, NXR, RR, GXP)} \dots\dots\dots\dots\dots\dots\dots\dots\dots \textbf{(1)}$$

Where:

INF = inflation
GB= globalization
M3 = broad money
NXR = nominal exchange rate
RR=bank rate
GXP= government expenditure

Equation 2 reports the ARDL specification for Equation 1.

$$\Delta INF_t = \alpha_0 + \sum_{i=1}^{n} \alpha_{1i} \Delta INF_{t-i} + \sum_{i=0}^{n} \alpha_{2i} \Delta GB_{t-i} + \sum_{i=0}^{n} \alpha_{3i} \Delta M3_{t-i} + \sum_{i=0}^{n} \alpha_{4i} \Delta NXR_{t-i}$$
$$+ \sum_{i=0}^{n} \alpha_{5i} \Delta RR_{t-i} + \sum_{i=0}^{n} \alpha_{6i} \Delta GXP_{t-i} + \theta_1 INF_{t-1} + \theta_2 GB_{t-1} + \theta_3 M3_{t-1}$$
$$+ \theta_4 NXR_{t-1} + \theta_5 RR_{t-1} + \theta_6 GXP_{t-1}$$
$$+ \gamma_{1t} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (2)$$

Where:

α_0 = a constant,
$\alpha_{i1} - \alpha_{6i}$ = short run coefficients
$\theta_1 - \theta_6$ c long run coefficients
η_{1t} = error term.

All the other variables remain the same as defined in Equation 1.

Error Correction Model Specification

$$\Delta INF_t = \alpha_0 + \sum_{i=1}^{n} \alpha_{1i} \Delta INF_{t-i} + \sum_{i=1}^{n} \alpha_{2i} \Delta GB_{t-i} + \sum_{i=1}^{n} \alpha_{3i} \Delta M3_{t-i} + \sum_{i=1}^{n} \alpha_{4i} \Delta NXR_{t-i}$$
$$+ \sum_{i=1}^{n} \alpha_{5i} \Delta RR_{t-i} + \sum_{i=1}^{n} \alpha_{6i} \Delta GXP_{t-i} + \rho_1 ECM_{t-1}$$
$$+ \gamma_{1t} \dots\dots\dots\dots\dots\dots\dots\dots\dots (3)$$

Where ECM is the error correction term; γ_1 is the coefficient of the ECM.

Data Sources

The impact of globalization on inflation is examined using data from 1990 to 2022 for South Africa. Data for inflation (INF), broad money (M3), exchange rate (EXR), globalization (GB) were extracted from the World Bank Development Indicators, the repo rate was retrieved from the South African Reserve Bank (SARB) website.

Data Analysis and Discussion of Results

Although it is not a requirement to perform stationarity test on variables included in the study when using the ARDL approach, stationarity test was done to ascertain variables in the model are integrated of order zero or one. The results of the unit root test are presented in Table 1.

Table 1: Unit Root Test Results

Dickey-Fuller Generalised Least Squares (DF-GLS) and Phillip-Perron Tests				
Variable	Dickey-Fuller Generalised Least Square (DF-GLS)		Phillips-Perron (PP)	
	Level	Δ	Level	Δ
INF	0.424	-4.684***	-2.543	-5.176***
TOP	-1.022	-5.727***	-1.356	-5.833***
M3	-0.281	-4.636***	-0.719	-5.548***
EXH	-0.505	-6.540***	-0.761	-6.456***
RR	-1.438	-5.139***	-2.126	-6.548***
GXP	-1.133	-5.885***	-1.112	-5.787***

Note: *, ** and *** denote stationarity at 10%, 5% and 1% significance levels respectively.

All the variables in the model are stationary at first difference, at 1% as indicated by three asterisks. The ARDL approach is applicable to variables stationary at levels or first difference. Given all variables are stationary at first difference, the ARDL can be used. The next step is to test a long run relationship among the variables in the model. The cointegration results are presented in Table 2.

Table 2: Cointegration Results

Dependent variable	Function		F-statistic		Cointegration Status	
INF	F(INF|TOP, M3, EXR, RR, GXP)		8.100***		Cointegrated	
Critical values	**1%**		**5%**		**10%**	
	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
	4.134	5.761	2.910	4.193	2.407	3.517

Note: *, ** and *** denote stationarity at 10%, 5% and 1% significance levels respectively.

To test for cointegration, the calculated F-statistic is compared to the upper and lower bounds critical values provided by Pesaran, Shin and Smith (2001). If the F-statistic is greater than the upper bound, cointegration is confirmed. If the F-statistic is below the lower bound, then no cointegration is confirmed. However, if the F-statistic falls between the upper and lower bound, the results are inconclusive.

The next step in the estimation process is selection of a parsimonious model with optimal lags. The Schwarz Bayesian Criteria (SBC) was used to select optimal lag and a parsimonious model. The model lag selection was (1, 0, 0, 0, 0,0) for inflation, globalization, broad money, nominal exchange rate, bank rate and government expenditure, respectively. The long run and short run results are reported in Table 3.

Table 3: Long-run and short-run Results

Regressors	Coefficient	T-ratio[p-value]
Panel A – Long run Results		
C	-1.2711	0.7432[0.74320
GB	0.0591**	2.3643[0.0265]
LM3	-0.6782	-0.7784[0.4439]
LEXC	-0.7228**	-2.7504[0.0111]
LRR	0.7132**	2.3538[0.0271]
GEXP	0.1594**	2.1048[0.0460]
Panel B – Short-Run Coefficients		
ΔLINF	-0.5874***	4.2652[0.0003]
ΔGB	0.0347***	3.0248[0.0060]
ΔLM3	-0.3983	-0.7799[0.4434]
ΔLEXC	0.5385*	3.1443[0.0148]
ΔRR	-0.4189**	-2.4107[0.0243]
ΔGEXP	0.0937*	1.8234[0.0813]
ECM (-1)	-0.5874***	-8.1141[0.0000]

R-squared – 0.6939
S.E of Regression – 0.1963
Akaike Info Criterion – -0.2173
R-Bar Squared – 0.6140
F-Stat (---) – 8.6897[0.000]
Schwarz Bayesian Criterion – -0.1096

Note: *, ** and *** denote stationarity at 10%, 5% and 1% significance levels respectively.

Results presented in Table 3 confirmed that past inflation figures have a negative impact on the current inflation experienced in South Africa at 1% level of significance. This shows the importance of consistent inflation management to disrupt the impetus of inflation from the past period to impact current inflation rate. The opposite is true in the case of a lower inflation rate in the past period, then authorities will find it much easier to harness inflation. The study also found a positive impact of globalization on inflation in the long run at 5% and in the short run as indicated by the p-value at 5%. The result confirms recent arguments on the once held notion that globalization has a negative impact of inflation. According to the findings of the study, globalization leads to an increase in inflation in the short run and in the long run in South Africa. This could be part of the explanation why most trading partners with Ukraine and Russia experience elevated inflation rates after the outbreak of the war. These results are not unique to South Africa alone, Mansouri et al. (2024) in a study on Morocco and Feriansyah, Achsani and Anggraeni (2022) in a study on 79 developed and developing countries, when fiscal policy was concerned, found the same results. However, in the same study by Feriansyah, Achsani and Anggraeni (2022) globalization was found to have no impact on monetary policy. This is contrary to the findings of this study where globalization was found to have a positive impact on inflation. According to Alex and Karen (2008), on a synthesis of current literature, found that anticipated external changes in prices by businesses and households has less impact on inflation. Thus, in South Africa, the South Africa Reserve Bank has managed to manage inflation expectation using the inflation targeting; however, it can be argued that businesses and household are not able to fully predict inflation expectation emanating from external resulting in the positive relationship between inflation and globalization.

Other results reported in Table 3 confirm a positive impact of exchange rate on inflation in the short run and a negative impact in the long run. The results confirm the impact of exchange rate is only felt with a time lag in South Africa. In the short run, exchange rate movements cause inflation to surge. The study also found the repo rate to have a negative effect on inflation in the short run but not in the long run. Thus, the monetary authorities need a suit of monetary policy tools and tie their effectiveness to timeframes when setting monetary targets that are linked to a certain level of inflation. Among the monetary policy tools, broad money supply was found to be insignificant in influencing inflation in South Africa, irrespective of the time considered.

Government expenditure, one of the fiscal policy tools, was found to worsen inflation irrespective of the time considered. This finding confirms the theory on the impact of increased government expenditure on inflation. In South Africa, this has a huge impact of inflation and the call by government to cut on expenditure is valid in reducing inflation pressures. The model is a good fit with an explanatory power of 69%. The error correction term (ECM) has the expected sign and the rate of adjustment to the equilibrium after a disturbance in the variables is 58%, significant at 1%. This implies that is takes slightly below 2 years to reach the equilibrium. Diagnostic and stability results are reported in Table 4 and Figure 2, respectively.

Table 4: Diagnostic Results

LM Test Statistic	Results
Serial Correlation	0.364 [0.699]
Normality	0.872 [0.647]
Functional Form	1.117 [0.300]
Heteroscedasticity	0.392 [0.877]

The results reported in Table 4 show that the model is free from heteroscedasticity and serial correlation. The model also passed normality test and functional form. Using the CUSUM and CUSUMQ test, the model passed the stability test at 5% level of significance as exhibited in Figure 3.
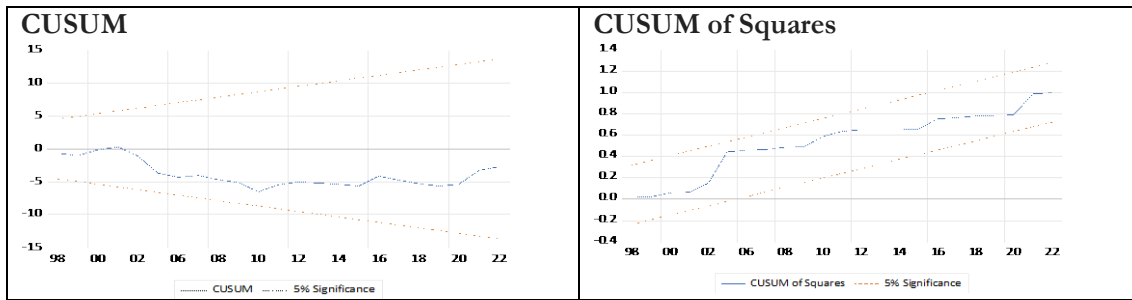
Figure 3: Stability Tests
Note: 5% level of significance

Conclusion

The impact of globalization on inflation was investigated for South Africa using annual data from 1990 to 2022. The study was motivated the on-going arguments on the once held notion that globalization brings positive development and lowers inflation for countries that have opened their economics. The developments contrary to the held notion on the inflation front motivated this study for South Africa. The study employed autoregressive distributed lag (ARDL) to investigate the nature of the relationship. Globalization was measured by trade openness and inflation was captured by the rate of change in the Consumer price index (CPI). The results found globalization to worsen inflation in South Africa irrespective of the time frame considered. It can be concluded that globalization when measured by trade openness results in high inflation rates in South Africa. Based on the findings of the study, South Africa policy makers need to take careful consideration on the extent to which the country opens for trade with other countries, to reduce the impact of external shock on the monetary and fiscal policy effectiveness in reducing inflation. The government and the SARB are encouraged to continue working hand in hand to reduce inflation and put measures that do only consider local economic conditions, but also external developments to fully harness inflation pressures. The government is encouraged to cut on expenditure to reduce inflationary pressures. However, a balance needs to be made on supporting economic activities and social safety nets to reducing inflation. Diversification of trading partners and inward-looking approach (de-globalization) can be adopted to minimize external pressures on the domestic economy. This study examined the impact of globalization on inflation measured by consumer price index (CPI), future studies can benefit from using GDP deflator as a measure of inflation. According to a study by Andeep (2017), the results from the two measures of inflation varied. Further, the study focused on globalization measured by trade openness, an examination on financial liberalization can shed new light on another dimension of globalization.

All effort has been made to ensure scientific rigor of the study; however, several limitations can be identified. Firstly, the study used one measure of globalization related to trade, another study can benefit from exploring financial liberalizations as a measure of globalization. Secondly, the use of GDP deflator as a measure of inflation may give different results.

References

Alex, B., & Karen, M. (2008). Globalization, import prices and inflation: How reliable are the 'tailwinds'? *Bank of England Quarterly Bulletin*, Q3.

Andeep, M. (2017). The impact of globalization on inflation in developing countries. *Journal of Economic Development, 42*(3), 41-60.

Benarbia, R., & Aiboud, K. (2023). The impact of financial liberation on the monetary policy in Algeria. *Management Dynamics in the Knowledge Economy, 11*(1), 63-83. https://doi.org/10.2478/mdke-2023-0005

Disyatat, P., & Rungcharoenkitkul, P. (2016). Financial globalization and monetary independence. *BIS Paper No 88*. https://www.bis.org/publ/bppdf/bispap88k.pdf

Feriansyah, F., Achsani, N. A., & Anggraeni, L. (2022). The impact of fiscal and monetary policy. *Emerging Markets Finance and Trade, 58*(4), 1103-1124. https://doi.org/10.1080/1540496X.2021.1949281

Isaacs, G., & Kaltenbrunner, A. (2018). Financialisation and liberalization: South Africa's new forms of external vulnerabilities. *Competition and Change, 22*(4), 437-463.

Keho, Y. (2017). The impact of trade openness on economic growth: The case of Cote d'Ivoire. *Cogent Economics & Finance, 5*(1), 1332820. https://doi.org/10.1080/1332820

Mansouri, Z., Liouaeddine, M., & Laamire, J. (2024). The analysis of the link between the exchange rate and inflation: Evidence from a quantile regression. *SSRN*. https://doi.org/10.2139/ssrn.4707059

Mohanty, M. S. (2012). Fiscal policy, public debt and monetary policy in emerging market economies. *BIS Paper No 67*. https://www.bis.org/publ/bppdf/bispap67.pdf

Mumtaz, S., & Younas, M. Z. (2021). Impact of globalization on major macroeconomic variables: Empirical evidence from Pakistan. *Journal of Quantitative Methods, 5*(1), 18-50. https://doi.org/10.29145/2021/jqm/050102

Papademos, L. (2010). The effects of globalization on inflation, liquidity and monetary policy. In Gali, J., & Gertler, M. J. (Eds.), *International Dimensions of Monetary Policy* (pp. 593-608). University of Chicago Press. http://www.nber.org/chapters/c0531

Pesaran, M. H., Shin, Y., & Smith, R. (2001). Bounds testing approaches to the analysis of level relationship. *Journal of Applied Econometrics, 16*(3), 174-189.

SARB. (2024a). About us. *South African Reserve Bank*. https://www.resbank.co.za/en/home/about-us

SARB. (2024b). Online statistical query. *South African Reserve Bank*. https://www.resbank.co.za/en/home/what-we-do/statistics/releases/online-statistical-query

Stéphane, M. N., & Noumba, I. (2024). Does being globalized matter for happiness in African countries? *Journal of Happiness Studies, 25*, 27. https://doi.org/10.1007/s10902-024-00738-7

The dti. (2024a). Overview. *Department of Trade, Industry and Competition*. https://nationalgovernment.co.za/units/view/46/department-of-trade-industry-and-competition-the-dtic

The dti. (2024b). Trade agreements. *Department of Trade, Industry and Competition*. http://www.thedtic.gov.za/sectors-and-services-2/1-4-2-trade-and-export/market-access/trade-agreements

The Republic of South Africa. (1993). Trade policy review mechanism. *World Trade Organization*. https://docs.wto.org/gattdocs/q/GG/CRM/G37.PDF

Wagner, H. (2001). Implications of globalization for monetary policy. *International Monetary Fund*. https://www.imf.org/external/pubs/ft/wp/2001/wp01184.pdf

World Bank. (2024). World development indicators. *World Bank*. https://databank.worldbank.org/source/world-development-indicators

Odhiambo, N. M. (2008). Financial depth, savings and economic growth in Kenya: A dynamic causal linkage. *Economic Modelling, 25*(4), 704-713.

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