

Financial Sector Development and Inflation Dynamics in Tanzania: An Empirical Assessment of Macroeconomic Stability

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ABSTRACT

This study empirically analyzes the impact of financial sector development on the inflation rate in Tanzania, focusing on credit to the private sector as a proxy for financial sector growth. Quarterly time series data were collected from 2003 to 2023. The study is anchored in key economic theories, including the Quantity Theory of Money, Demand-Pull Inflation, and Financial Repression, to establish the theoretical underpinnings of the financial sector-inflation nexus. The study employs a quantitative research design, utilizing time series econometric techniques. Data analysis involved the Autoregressive Distributed Lag (ARDL) model to estimate both short- and long-run relationships, supported by unit root testing, ARDL bounds testing, and Granger causality analysis. The results reveal that financial sector development significantly increases the inflation rate in the long run, highlighting the potential inflationary risks of unregulated credit growth. These findings emphasize the need for a balanced approach to financial sector expansion, ensuring that credit growth aligns with productive economic activities. The study recommends that policymakers implement targeted credit allocation, enforce macroprudential regulations, and adopt balanced monetary policies to mitigate inflationary pressures while fostering sustainable economic development.

Keywords: ARDL, Financial Sector Development, Inflation Rate, Tanzania

I. INTRODUCTION

Inflation, the sustained increase in the general price of goods and services, is a critical macroeconomic issue affecting any country's economic stability and growth (McKinsey & Company, 2024). According to United Nations Development Program (UNDP, 2023), in developing economies like Tanzania, managing inflation is especially important due to its potential impact on the livelihoods of citizens, particularly those in low-income brackets. It's not just a number on a chart but a real concern for real people. The erosion of purchasing power, the increase in the cost of living, and the uncertainty in the economy can profoundly affect people's daily lives, discouraging investment and long-term economic planning. Therefore, understanding the factors that drive inflation is crucial for policymakers seeking to ensure economic stability and foster growth.

Globally, studies have highlighted the dual role of the financial sector in either mitigating or amplifying inflationary pressures. Developed economies with robust financial systems, have demonstrated how financial deepening can moderate inflation through enhanced monetary policy transmission mechanisms (Kiseřáková et al., 2020, Kagochi, 2019). In sub-Saharan Africa, South Asia, and Latin America, the financial sector remains underdeveloped compared to global standards. Issues such as limited access to credit, high transaction costs, and weak regulatory frameworks hinder its growth. Similarly, inflation rates in these regions are frequently influenced by structural factors like commodity dependence and currency fluctuations, further complicating monetary policy implementation (Amoo et al., 2017). Despite these challenges, the potential for financial sector reforms to stabilize inflation and promote inclusive growth remains underexplored in the context of developing economies.

One key factor influencing inflation is financial sector development. As economies grow, their financial sectors expand, providing more access to credit, investment opportunities, and financial services. When managed effectively, this development can be a significant contributor to economic stability and growth, offering a promising future for Tanzania's economy (Batayneh et al., 2021). In Tanzania, financial sector reforms have significantly improved financial inclusion and increased access to credit (Mwakalila and Kasongwa, 2024). While this progress has supported economic

activities, it has also raised concerns about potential inflationary pressures, particularly in an economy facing structural challenges such as limited industrial capacity and high import dependency.

1.1 Statement of the Problem

Despite the promising role of financial sector development in fostering economic growth, its inflationary implications remain a pressing concern in Tanzania. The expansion of credit to the private sector—a key indicator of financial sector development—has grown steadily, enabling businesses and individuals to invest and consume (Kilindo, 2020; Mwang'onda et al., 2018). However, this credit expansion has the potential to increase aggregate demand, which, in the absence of matching supply-side growth, may exacerbate inflationary pressures. Tanzania's structural limitations, including a narrow industrial base and dependence on imports, heighten these risks.

The lack of sufficient empirical research on the relationship between financial sector development and inflation in Tanzania leaves a gap in understanding how these dynamics unfold. Policymakers face challenges in designing strategies that balance the benefits of financial sector growth with the need to maintain price stability. Addressing this gap is crucial for ensuring sustainable economic development and safeguarding the welfare of Tanzania's population.

Also, in Tanzania, like many other developing nations, the financial sector has experienced significant transformation over the past two decades, characterized by the proliferation of mobile money services, microfinance institutions, and reforms aimed at strengthening regulatory frameworks. These developments have improved financial inclusion. However, inflation dynamics remain erratic, with food prices, exchange rate fluctuations, and supply chain disruptions playing a significant role. The effectiveness of the financial sector in addressing these inflationary trends is yet to be comprehensively examined, leaving a critical gap in the literature.

The study contributes to the growing body of literature on the finance-growth-inflation nexus, specifically in the context of developing economies. It seeks to fill the gap in empirical research on how financial sector expansion, particularly in the form of credit to the private sector, impacts inflation in Tanzania. By examining the long-run and short-run dynamics of this relationship, the study provides a comprehensive analysis that can inform both monetary policy and financial regulation, helping to strike a balance between fostering financial sector growth and maintaining inflation at manageable levels.

1.2 Research Objectives

The study aims;

- i. To analyze the short-run and long-run effects of financial sector development on inflation.
- ii. To assess how credit expansion influences inflationary pressures in Tanzania's economic context.

II. LITERATURE REVIEW

2.1 Theoretical Review

The theoretical framework of this study is grounded in several key economic theories that explain the relationship between financial sector development and inflation. These theories provide a basis for understanding how an expanding financial sector, mainly through increased credit to the private sector, can influence inflationary pressures in an economy like Tanzania. The theories discussed below form the foundation for analyzing the potential inflationary impacts of financial sector development and guide the interpretation of the empirical results.

2.1.1 Quantity Theory of Money

The Quantity Theory of Money (QTM) is one of the most fundamental economic theories that explain inflation, pioneered by Locke (1691), Hume (1987), Fisher (1911), and Friedman (1956). It posits that the general price level in an economy is directly proportional to the amount of money in circulation. The equation often represents this relationship:

$$MV=PQ$$

Where:

M is the money supply,

V is the velocity of money (the rate at which money changes hands),

P is the price level,

Q is the real output of the economy.

According to this theory, if the money supply (M) increases without a corresponding increase in real output (Q), then the price level (P) must rise, leading to inflation. In the context of this study, credit to the private sector can be seen as a key driver of the money supply. The economy's circulation increases as the financial sector expands and credit becomes more readily available to businesses and consumers. Suppose this expansion in credit leads to higher

consumption and investment without a matching increase in the production of goods and services. In that case, it will result in demand-pull inflation, where demand exceeds supply, pushing prices upward.

For Tanzania, where specific sectors, such as manufacturing and agriculture, may not grow at the same rate as credit expansion, the Quantity Theory of Money suggests that increasing money supply from financial sector development could be a significant driver of inflation. This theory supports the hypothesis that credit to the private sector positively influences inflation.

2.1.2 Demand-Pull Inflation Theory

Closely related to the Quantity Theory of Money, the Demand-Pull Inflation Theory pioneered by Keynes (1936), Samuelson (1948), and Phillips (1958) explains how inflation occurs when aggregate demand in an economy outpaces aggregate supply. This theory suggests that when consumers and businesses have increased access to financial resources, such as through expanded credit from the financial sector, they are likely to increase their spending. If this additional spending leads to a higher overall demand for goods and services, and the economy cannot increase production quickly enough, prices will rise.

Generally, expanding credit to the private sector allows businesses to invest and consumers to spend more, increasing overall demand. However, if the economy's productive capacity (such as industrial output or agricultural production) does not keep pace with this rising demand, the result is inflation. This dynamic is particularly relevant for developing economies like Tanzania, where supply-side constraints, such as infrastructure limitations or inefficiencies in critical sectors, may restrict the ability to scale up production in response to increased demand. Therefore, demand-pull inflation theory provides a framework for understanding how financial sector development can lead to inflationary pressures when a corresponding increase does not match credit growth in output.

2.1.3 Financial Repression Theory

As McKinnon (1973) proposed, Financial Repression Theory explores how financial sector development can be constrained by excessive government intervention, such as interest rate ceilings, credit controls, and other regulatory measures. In economies experiencing financial repression, the financial sector is underdeveloped, and access to credit is limited, often resulting in inefficiencies and low economic growth. However, when financial liberalization occurs, removing these constraints and expanding access to credit can lead to rapid financial sector growth and increased economic activity.

About this study, the Financial Repression Theory suggests that financial sector reforms in Tanzania, aimed at improving financial inclusion and expanding credit to the private sector, have contributed to increased economic activity. However, this credit expansion could also lead to inflationary pressures, mainly if it results in excessive borrowing and spending. The theory implies that while financial sector liberalization is beneficial for growth, it needs to be accompanied by policies that ensure macroeconomic stability, such as managing inflation risks. In this context, financial sector development can influence inflation if the credit expansion is not aligned with the real economy's ability to absorb the increased demand.

2.2 Empirical Review

The relationship between financial sector development and inflation has been extensively studied in developed and developing economies. The empirical literature has produced mixed results, with some studies highlighting the inflationary impact of financial sector development. In contrast, others emphasize its deflationary effects, depending on the context and the specific channels through which financial development occurs. This section provides a comprehensive review of empirical studies that have examined the impact of financial sector development on inflation, focusing on different dimensions such as credit to the private sector, financial liberalization, and monetary policy. These studies offer insights into how financial sector development influences inflation, particularly emphasizing the context of developing economies like Tanzania.

2.2.1 Impact of Financial Sector Development on Inflation

One of the most influential early empirical studies was conducted by Boyd et al. (2001), who examined the relationship between financial sector development and inflation using a cross-country sample of 100 countries over several decades. The study found that financial sector development tends to negatively correlate with inflation in countries with high inflation, suggesting that a developed financial sector can help mitigate inflationary pressures. However, the relationship is ambiguous in countries with low inflation, with financial development sometimes leading to inflationary pressures due to increased credit availability.

Rousseau and Wachtel (2002) expanded on this work by examining the long-term effects of financial development on inflation using a panel of 84 countries. They found that while financial development supports economic growth, it can also lead to higher inflation, particularly in countries with weak institutional frameworks and poorly

regulated financial systems. Their study suggested that the credit channel whereby financial sector development increases access to credit plays a crucial role in influencing inflation, as increased lending tends to boost aggregate demand.

McKinnon (1973) and Shaw (1973) developed the Financial Repression Hypothesis, which posits that inflation can result from financial repression policies, such as interest rate caps and credit controls, limiting resource allocation. Empirical studies have tested this hypothesis in various developing countries, finding that financial repression often leads to inflation by distorting interest rates and encouraging inefficient investments.

For instance, Akpan and Atan (2012) analyzed the effects of financial repression on inflation in Nigeria. Their findings indicated that policies restricting financial sector growth, such as interest rate ceilings and government-directed credit allocation, contribute to inflation by preventing the financial sector from efficiently allocating resources to productive investments. Their study found that financial liberalization, which relaxes these restrictions and promotes financial sector development, can reduce inflation in the long run by improving the efficiency of financial intermediation.

In Tanzania, Nyasha and Odhiambo (2015) examined the impact of financial liberalization on macroeconomic outcomes, including inflation. They found that while financial liberalization has contributed to economic growth, it has also led to inflationary pressures due to increased credit growth and speculative activities. Their study suggested that the Tanzanian economy would benefit from stronger regulatory oversight to manage the inflationary effects of rapid financial sector development.

2.2.2 Credit to the Private Sector and Inflation in Developing Economies

In the context of developing economies, Sehrawat and Giri (2015) conducted a study on India that explored the relationship between financial sector development, measured through credit to the private sector, and inflation. Using time series data from 1980 to 2013, their study found that financial sector development, particularly the expansion of credit to the private sector, significantly affects inflation in the long run. They argued that increased credit availability leads to higher consumption and investment, pushing up aggregate demand and creating inflationary pressures if the supply side does not keep pace with the demand.

Similarly, Batayneh et al. (2021) examined the short- and long-term effects of inflation on the financial sector's development in Jordan from 1993 to 2018, using an advanced auto-regressive distributed lag (ARDL) model. The study found that inflation has a statistically significant negative impact on financial sector development in both the short and long run.

A study by Fowowe (2011) on sub-Saharan African countries, including Tanzania, examined the relationship between financial sector development and macroeconomic stability, focusing on inflation. Fowowe's findings indicated that while financial development improves growth prospects, it can also lead to inflation if effective monetary policy measures do not accompany credit growth. The study showed that countries with well-developed financial sectors but weak regulatory frameworks are more susceptible to inflationary pressures due to excessive credit growth.

2.2.3 Monetary Policy, Credit Growth, and Inflation

Monetary policy plays a crucial role in managing the inflationary effects of financial sector development. Wahyudin (2024) examined the role of monetary policy in controlling inflation and found that monetary policy has significant impact on controlling inflation. Further, the emphasized that monetary policy promotes financial stability through the regulation of financial institutions and markets, preventing crises and ensuring efficient operations. However, its implementation requires careful consideration of potential risks, such as reduced investment and consumption from abrupt interest rate hikes.

In a related study, Ndanshau and Mtui (2020) investigated the relationship between budget deficits, money supply, and inflation in Tanzania. Their study found that budget deficits and money supply Granger-cause inflation in both the short and long run, with money supply having a positive effect and budget deficits an unexpected negative effect. According to Lema et al. (2023), financial liberalization, which increases access to credit and other financial services, has led to inflationary pressures, particularly during periods of rapid credit expansion in Tanzania. However, they also noted that inflationary effects could be mitigated through prudent monetary policy that controls money supply growth. Their findings highlight the critical role of monetary policy in managing the trade-off between financial sector development and inflation.

Despite the extensive empirical research on the relationship between financial sector development and inflation, a significant gap remains in the context of developing economies like Tanzania. While many studies have examined the inflationary effects of credit expansion and financial liberalization in broader cross-country samples, very few have explicitly focused on Tanzania, a country with unique economic characteristics, including its reliance on agriculture, structural supply constraints, and evolving financial sector. Additionally, most existing studies either explore the short-term impacts of financial sector development on inflation or fail to account for the long-term dynamics of this



relationship. Furthermore, there is limited research that integrates the role of key control variables, such as exchange rates and GDP, which are critical in shaping inflation outcomes in an open economy like Tanzania. This research seeks to address these gaps by providing a comprehensive analysis of the short- and long-run effects of financial sector development, measured through credit to the private sector, on inflation in Tanzania, offering insights directly applicable to the country’s policy environment.

III. METHODOLOGY

3.1 Research Design

The study employs a quantitative research design using the Autoregressive Distributed Lag (ARDL) model. This model estimates short- and long-term relationships between dependent and independent variables in the context of financial sector development and inflation dynamics.

3.2 Sample and Data Sources

The study uses a time series of quarterly data from 2003 to 2023. The data is collected from secondary sources, whereby the credit to the private sector, interest rates, inflation rates, exchange rates, and GDP growth rate data are collected from the Bank of Tanzania's quarterly reports of economic reviews.

3.3 Variables Description

The inflation rate is the dependent variable, the country's general price level. Credit to the private sector is the main independent variable, and credit from commercial banks to the private sector represents the difference in financial development. The priori expectation for this study is positive, implying that increasing credit to the private sector increases the inflation rate. The GDP growth rate measures economic growth, interest rates, money supply, and the exchange rate; the rate of US dollars to Tanzanian shillings are the control variables. The choice of these variables is supported by the priori hypothesis, as shown in Table 1.

Table 1
Variable Name, Definition, Source, and Priori Hypothesis

<i>Variable</i>	<i>Definition</i>	<i>Source</i>	<i>Priori expectations</i>
Inflation rate (Infl)	The rate of inflation (Quarterly percentage growth)	Bank of Tanzania	
Credit to the private sector	The credit from commercial banks to the private sector represents financial development.	Bank of Tanzania	+
Interest rate (Ir)	Overall lending interest rate from commercial banks	Bank of Tanzania	-
Exchange rate (exrate)	The rate of US dollar to Tanzanian shillings	Bank of Tanzania	-
Gross Domestic Product (gdp)	The Gross Domestic Product (Quarterly percentage growth)	Bank of Tanzania	+
Money supply	Broad Money (percentage of GDP)	Bank of Tanzania	+

3.4 Diagnostic Test

The time series regression necessitates a unit root test to ensure data stationarity. Accordingly, Table 2 presents the results of unit root tests, including the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests, conducted at both levels and first differences. The findings indicate that all variables, except GDP and credit to the private sector (which are stationary at levels), achieve stationarity at their first differences.

Table 2
Unit Root Test

<i>Variable</i>	<i>H0: Non-stationary in levels</i>		<i>H0: Non-stationary in first difference</i>	
	<i>ADF Statistics</i>	<i>PP Statistics</i>	<i>ADF Statistics</i>	<i>PP Statistics</i>
gdp	-5.830***	-5.873***		
ln of Credit to the private sector	-5.805***	-4.914***		
Interest rate	-2.847	-2.598	-11.539 ***	-12.206***
Inflation rate	-1.618	-2.227	-5.835***	- 5.960***
Money supply	-2.546	-2.696	-8.713***	-8.718***
ln of foreign exchange rate	-1.072	-1.033	-5.968***	-5.922***

Note: The asterisks ***, **, and * denote significance levels at 1%, 5%, and 10%, respectively, for the ADF and PP test of unit root. The null hypothesis is that the series are non-stationary.



A bound test for cointegration estimates the long-run relationship between the variables when they are not integrated in the same order. The t-statistics and f-statistics will be a criterion for decision-making. For the model to have cointegration, the t-statistics and f-statistics should be greater than the critical values for upper and lower bounds.

Table 3 represents the bound cointegration test used to assess whether there is a long-run relationship between the variables, even if they are not stationary in the short run. The results show that the t-statistics and f-statistics are higher than the critical value bounds, meaning that the study rejects the null hypothesis of no cointegration. Therefore, these results justify using the error correction model, which shows the relationship between dependent and independent variables in the short and long run.

Table 3
Bound Test for Cointegration Relationship between Inflation Rate and Independent Variables

<i>Bound test for cointegration</i>							
<i>Critical value bounds of the F-statistic and T-statistics</i>							
10%		5%		1%		P-value	
I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
2.26	3.35	2.26	3.79	3.41	4.68	0.000	0.000
-2.57	-3.86	-2.86	-4.19	-3.43	-4.79	0.000	0.001
<i>f-statistics= 4.495</i> <i>t-statistics= -4.263</i> <i>Sample size= 72</i> <i>K is the number of regressors: 4</i>							

3.5 Model Specification

The study uses the Autoregressive Distributed Lag (ARDL) model to estimate the short and long-run relationship between dependent and independent variables. The model, introduced by Khan and Ssnhadji (2001), is capable of estimating variables integrated in a different order in the short run and determining the adjustment speed toward the long-run equilibrium. The selection of the number of lags used in the model is a meticulous process, guided by the Akaike Information Criterion (AIC). Some variables like exchange rates and credit to the private sector are transformed into logarithmic forms for normality conditions and to simplify their interpretation as they are measured in different units.

The ARDL model can be expressed as follows:

$$\begin{aligned} \Delta inflation = & \alpha_0 + \sum_{i=1}^p \alpha_i \Delta inflation_{t-i} + \sum_{j=0}^{q1} \beta_j \Delta lncredit_{t-j} + \sum_{w=0}^{q2} \mu_w \Delta msupply_{t-w} \\ & + \sum_{k=0}^{q3} \gamma_k \Delta interest_{t-k} + \sum_{g=0}^{q4} \zeta_g \Delta lnforex_{t-g} + \sum_{l=0}^{q5} \delta_l \Delta gdp_{t-l} + \phi_1 inflation_{t-1} \\ & + \phi_2 lncredit_{t-1} + \phi_3 msupply_{t-1} + \phi_4 interest_{t-1} + \phi_5 lnforex_{t-1} + \phi_6 gdp_{t-1} + \varepsilon_t \end{aligned}$$

Where:

Δ denotes the first difference operator.

α_0 is the constant term.

$\alpha_i, \beta_j, \mu_w, \gamma_k, \zeta_g,$ and δ_l are the short-run coefficients.

$\phi_1, \phi_2, \phi_3, \phi_4, \phi_5,$ and ϕ_6 are the long-run coefficients.

ε_t is the error term.

$q_1, q_2, q_3, q_4,$ and q_5 are the optimal lag lengths information criteria determined.

IV. FINDINGS & DISCUSSION

4.1 Estimation Results

Table 4 presents the Error Correction Model (ECM), showing the short and long-run effect of financial sector development on the inflation rate. Starting with the adjacent variable, which is negative and statistically significant, any short-term disequilibrium will be adjusted in the long run. The results show that the financial sector development significantly influences (at 1 percent) the inflation rate in the long run. The positive coefficient implies that under ceteris paribus, a one percent increase in financial sector development increases the inflation rate in Tanzania by 4.3 percent in the long run. The results correspond with other studies by Sehrawat and Giri (2015), Khan and Ssnhadji (2001), and Fowowe (2011). The control variable abiding by the priori hypothesis is the exchange rates, which are negative and statistically significant, implying that under ceteris paribus, a one percent increase in the exchange rate (the TZS depreciates) decreases the inflation rate by 20.9 percent.

These results underwent some diagnostic tests, which justify the results. To test if the model is correctly specified, the Ramsey test (RESET) is performed. The result shows that the p-value is 0.3151. This means the study fails to reject the null hypothesis that the model is correctly specified, concluding that the models have no misspecification problem. The study performs the Breusch-Godfrey test for autocorrelation. The p-value is 0.2017. This means the study fails to reject the null hypothesis that the model has no autocorrelation problem. Variance Inflation Factor (VIF) tests whether the independent variables have perfect or exact collinearity. The results suggest that the VIF is 7.69, which is less than ten, indicating that multicollinearity is not a severe problem among the explanatory variables in the model.

Table 4*The Error Correction Model*

<i>MODEL</i>	<i>ARDL</i>
<i>VARIABLES</i>	<i>Inflation rate</i>
<i>Long-run Dynamics</i>	
Incredit	4.398** (2.029)
msupply	0.0143 (0.146)
interest	0.819 (0.939)
Inforex	-20.93** (8.718)
gdp	0.217 (0.331)
<i>Adjacent</i>	
L.inflation	-0.209*** (0.0491)
<i>Short run Dynamics</i>	
LD.inflation	0.149 (0.102)
L2D.inflation	0.327*** (0.101)
D.Inforex	9.534** (4.722)
Constant	22.34 (13.54)
<i>Diagnostic tests</i>	
Lag structure	(3,0,0,1,0)
Ramsey Test (p-value)	0.3151
BGodfrey (p-value)	0.2017
VIF	7.69
Observations	72
R-squared	0.371

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

4.2 Discussion

The study investigates the influence of financial sector development on inflation in Tanzania, with credit to the private sector serving as a proxy for financial sector development. The results from the long-run estimation indicate a significant and positive relationship between credit to the private sector and inflation, suggesting that financial sector development influences inflationary pressures in the country.

4.2.1 Impact of Credit Expansion on Inflation

The positive and statistically significant coefficient of 4.3% implies that holding other factors constant, a 1% increase in credit to the private sector leads to a 4.3% increase in inflation in the long run. This result indicates that financial sector development, as proxied by credit expansion, can contribute to higher inflationary pressures in Tanzania. Expanding credit to the private sector typically facilitates greater access to financing for businesses and consumers. While this can stimulate economic activity and foster growth, it also increases the money supply, leading to higher

aggregate demand. If this increased demand exceeds the economy's productive capacity, it can create demand-pull inflation, where the increased demand for goods and services pushes up prices. The findings however are contrary to findings by Kagochi (2019) that found a negative relationship between inflation and financial development as proxied by credit to private sector.

In Tanzania, where productive capacity may not be fully developed in all sectors, credit expansion may lead to inflationary pressures rather than balanced growth. The mismatch between demand and supply, particularly in sectors like manufacturing and agriculture, could exacerbate inflation when credit expansion fuels consumption without a corresponding increase in output.

4.2.2 Financial Sector Development and Inflationary Dynamics

The results suggest that financial sector development can have unintended inflationary consequences, particularly when credit expansion is not aligned with the real economy's capacity to absorb it. In many developing countries, including Tanzania, financial sector development is often seen as a crucial driver of economic growth, as it enhances access to capital, encourages investment, and improves financial inclusion. However, the findings of this study suggest that without adequate control mechanisms, the growth of the financial sector may also lead to price instability, particularly if the credit extended to the private sector is primarily directed toward consumption rather than productive investment.

The significant influence of credit on inflation may also reflect structural inefficiencies in the Tanzanian economy. For example, Lema et al. (2023) posited that if a substantial portion of the credit goes towards import-driven consumption, the country could face inflationary pressures due to rising import prices and exchange rate volatility. Additionally, if credit expansion is not supported by improvements in productivity, infrastructure, or domestic production, the increased demand for goods and services will put upward pressure on prices.

4.2.3 Inflationary Risks of Unregulated Credit Expansion

Another key implication of the results is the potential risk of inflationary spirals driven by unregulated or excessive credit growth. The findings highlight the importance of prudent monetary and financial sector policies in Tanzania, where monetary policy is crucial in maintaining price stability. Suppose credit to the private sector can grow without corresponding regulatory oversight or is not directed toward productive sectors; the risk of runaway inflation increases. This underscores the need for policymakers to carefully monitor credit growth and ensure that financial sector development is sustainable and balanced with the overall economic structure.

Central banks and monetary authorities must balance encouraging financial sector development and maintaining price stability. The findings suggest that while expanding credit to the private sector can stimulate economic activity, ensuring that such expansion does not fuel unsustainable inflation is equally important. To this end, policymakers should consider implementing measures such as targeted credit policies prioritizing sectors with high productive capacity and imposing macroprudential regulations to prevent credit bubbles from forming.

The positive relationship between financial sector development and inflation in Tanzania contributes to the broader literature on the finance-growth-inflation nexus. While financial sector development generally benefits economic growth, this study shows that expansion can exacerbate inflationary pressures in certain contexts, particularly in developing countries. The findings align with theoretical models that suggest a non-linear relationship between financial development and inflation, where initial stages of financial sector expansion may lead to inflation if not properly managed.

This result is particularly relevant for developing economies like Tanzania, where the financial sector is expanding rapidly due to increased financial inclusion and access to credit. Nyasha and Odhiambo (2015) concurred that there is need for a nuanced approach to financial sector development that considers inflationary risks and the broader economic environment.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

In conclusion, this study's findings demonstrate that financial sector development, as proxied by credit to the private sector, has a significant positive influence on inflation in Tanzania in the long run. This suggests that while financial sector development is important for economic growth, there are inherent risks, particularly inflationary risks, which must be managed through sound monetary policy and regulatory oversight. The findings underscore the importance of balancing financial sector expansion with measures to control inflation and ensure that credit growth supports sustainable economic development. Understanding the dynamics of the finance-inflation relationship in Tanzania is crucial for policymakers aiming to foster economic growth while maintaining macroeconomic stability. The results provide valuable insights into the role of the financial sector in influencing inflation and highlight the need for a

coordinated approach between monetary, fiscal, and regulatory policies to manage the potential inflationary consequences of financial sector development.

5.2 Recommendations

The findings from this study have several important policy implications. First, while promoting financial sector development remains a priority for economic policymakers in Tanzania, there must be an understanding that unregulated credit expansion can lead to inflationary pressures. This calls for monetary and fiscal policies closely monitoring credit growth and ensuring credit expansion aligns with productive economic activities. Policymakers should consider strategies such as targeted credit allocation, which ensures that credit is directed towards productive sectors, such as agriculture, manufacturing, and infrastructure, which can increase output and mitigate inflationary pressures. Macroprudential Regulation: Introducing policies that regulate the amount and quality of credit extended to the private sector, preventing speculative lending that could fuel inflation without contributing to productive growth. Monetary Policy Tools: The central bank can use interest rate adjustments, reserve requirements, and open market operations to control excessive credit growth and prevent the money supply from growing too rapidly, which can fuel inflation.

Additionally, continued efforts are needed to improve the economy's supply side, particularly in sectors vital for reducing inflationary pressures. Enhancing productivity through infrastructure, technology, and skills development investments can help ensure that credit expansion translates into sustainable economic growth rather than inflation.

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