

Effect of Monetary Policy on Foreign Direct Investment (FDI) inflows in East African Countries: The Moderating Impact of Institutional Quality

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ABSTRACT

The majority of developing countries have heavily relied on foreign direct investment (FDI) inflows over the past years due to the gap between domestic savings and investment. Studies on the interactive effect of monetary policy and institutional quality (IQ) on FDI inflows are still scanty in East African countries. This study examined the effect of monetary policy (monetary policy rate (MPR), exchange rate (ER), reserve requirements (RR)) on FDI inflows in East African Countries with a special focus on the moderating impact of institutional quality. A fixed effect model was applied to analyse panel data spanning from 2003 to 2022. The results showed that incorporating institutional quality into the relationship between monetary policy and FDI inflows marginally improves the model's explanatory power from 56 percent to 57 percent with the interaction of IQ and monetary policy variables suggesting that institutional factors contribute to understanding FDI dynamics. The findings revealed a positive relationship between, IQ and MPR-IQ interaction and FDI inflows, though it was not strong. The results further showed a negative but weak relationship between ER-IQ interaction and FDI inflows. Thus, it is concluded that IQ slightly mitigates the negative impact of MPR on FDI, suggesting that strong institutions create a stable environment that offsets the deterrent effect of higher interest rates. Additionally, though IQ enhances stability, exchange rate fluctuations continue to undermine investor confidence. It is therefore recommended that Policymakers consider a holistic approach, focusing on structural reforms and stable macroeconomic policies to boost investor confidence and attract FDI.

Keywords: Foreign direct Investment inflows, Monetary policy, Institutional quality, East Africa (EA)

INTRODUCTION

Foreign direct investment (FDI) is widely recognized as a critical driver of economic growth, particularly in developing regions like East Africa. FDI contributes to the transfer of technology, the creation of jobs, and the enhancement of productivity, ultimately fostering sustainable development [1]. Despite the acknowledged benefits, East African countries have faced

persistent challenges in attracting and retaining FDI inflows. A number of variables have been mentioned as obstacles, including as governance concerns, restrictive monetary policies, and macroeconomic volatility. Nonetheless, there is still a dearth of thorough knowledge regarding how institutional quality and monetary policy mechanisms interact to affect FDI inflows into the region.

The economic climate for investment is greatly influenced by monetary policy, including instruments like adjustment interest rates, inflation targeting, and exchange rate management. For instance, high interest rates aimed at curbing inflation may inadvertently increase the cost of capital, deterring foreign investors. Similarly, exchange rate volatility often undermines investor confidence by introducing unpredictability in returns [2]. East African economies, characterized by varying degrees of monetary policy effectiveness, exhibit inconsistent patterns of FDI inflows. This discrepancy calls into question the effectiveness and capacity of current monetary policy frameworks to create an atmosphere that is favorable to foreign investments. Institutional quality, encompassing factors such as governance, regulatory efficiency, and corruption control, has emerged as a moderating variable in the relationship between monetary policy and FDI. According to empirical research, robust institutions can protect investor rights, ensure transparency, and lessen bureaucratic bottlenecks to lessen the negative consequences of restrictive monetary policies [3]. Conversely, inadequate institutional frameworks heighten economic uncertainty, reduce the efficiency of monetary policy, and deter prospective investors. East African countries, which exhibit significant heterogeneity in institutional quality, provide a compelling context to examine these dynamics. The interplay between monetary policy and institutional quality is particularly critical in the East African context, where economic integration efforts, such as the East African Community (EAC), aim to harmonize policies and attract regional and global investments. However, disparities in institutional performance among member states pose challenges to achieving this goal. For instance, while Rwanda is often lauded for its robust governance structures, countries like Burundi and South Sudan struggle with institutional weaknesses, creating uneven opportunities for FDI inflows [4]. This study seeks to address the gap in the literature by examining the combined effect of monetary policy and institutional quality on FDI inflows in East African countries. Existing research has predominantly focused on these variables in isolation, neglecting the potential synergistic effects that arise from their interaction.

By exploring these dynamics, the study aims to provide nuanced insights that can inform policy recommendations tailored to East African nations' unique economic and institutional contexts. Furthermore, the study aims to contribute to the broader discourse on sustainable development by highlighting governance's role in enhancing macroeconomic policy efficacy. To establish a stable, open, and alluring investment environment, East African policymakers must simultaneously develop institutional frameworks and conduct efficient monetary policies. To realize the region's economic potential and accomplish long-term development goals, this dual challenge must be addressed. In summary, the persistent difficulties in luring foreign direct investment to East Africa call for a deeper understanding of how institutional quality and monetary policy interact to affect investment inflows. This research is particularly timely given the increasing emphasis on regional economic integration and the urgent need for evidence-based policy interventions to accelerate development in East African countries.

Objectives of the Study

- i. To investigate the effect of monetary policy (monetary policy rate, exchange rate, and reserve requirements) on FDI inflows in East African countries.
- ii. To evaluate the moderating effect of institutional quality and monetary policy (monetary policy rate, exchange rate, and reserve requirements) on FDI inflows in East African countries.

Research Hypotheses

- H_{01} : Monetary policy does not significantly affect foreign direct investment inflow in East African countries.
- H_{02} : There is no significant effect of monetary policy with the moderation of institutional quality on foreign direct investment inflows in East African countries.

LITERATURE REVIEW

Empirical Literature Review

[5] examined how money supply and GDP influence FDI in Pakistan from 1970 to 2013, utilizing the Generalized Method of Moments (GMM) with data from the World Bank, IMF, and local statistical bulletins. Their findings indicate that money supply (M1) and GDP significantly and positively impact FDI. Conversely, inflation and interest rates negatively affect FDI, with higher inflation and interest rates deterring investment inflows. Equally, [6] investigated the effect of interest rates on FDI in Sierra Leone using multiple regression analysis with time-series data from 1985 to 2012. The study found that trade openness and exchange rates significantly and positively influenced FDI, while inflation, GDP, and interest rates were insignificant in explaining FDI variability. They recommended enhancing trade openness, combating corruption, improving infrastructure, and stabilizing exchange rates to attract foreign investment. Conversely, [7] found that interest rates significantly affected FDI inflows from 1990 to 2016, highlighting their relevance for policymaking.

[8] explored key factors influencing FDI attraction in Rwanda by surveying 30 foreign investors across various sectors, including manufacturing, ICT, banking, and agriculture. Using SPSS for data analysis, the study identified constitutional and legal FDI protections, free capital transfer, resource availability, strategic location, security, investor-friendly tax policies, market demand, and reasonable competition as major drivers of FDI in Rwanda. Similarly, [9] analyzed the impact of institutional, governance, and economic factors on FDI inflows in eight East African countries from 1996 to 2010 using panel data and a fixed-effects model. Their findings highlighted that factors such as corruption control, political stability, rule of law, and infrastructure significantly influenced FDI inflows in the region.

[10] investigated the effect of exchange rates on FDI in Somalia using 41 years of time-series data (1970–2010) from the World Bank and SESRIC. Applying location theory and multiple regression models under the OLS method, the study found a significant negative relationship between exchange rates and FDI. Inflation and domestic investment showed a positive significant effect on FDI, while lack of government had a negative but insignificant impact. The study recommended stabilizing exchange rates through strict monetary and fiscal policies and enhancing central bank efforts to effectively manage monetary policies to attract FDI.

In the same way, [11] analysed the effect of real interest rates, exchange rate, inflation and competitiveness on FDI in Kenya. The study analysed the annual time series data for the period 1970-2016 and findings revealed that real interest rates and exchange rates have negative and significant influence on FDI inflows into Kenya. However, inflation was found to have insignificant influence on FDI. Equally, [12] investigated the impact of monetary policy (proxy by money supply and interest rate) and tax revenue on FDI in Jordan employing time series data period from 1991 to 2017. The study's findings revealed that while tax income has a negative effect on FDI, the money supply has a positive and statistically significant impact on FDI. Additionally, FDI was found to be statistically unaffected by interest rates.

On the other hand, [13] analyzed macroeconomic factors affecting FDI in VISEGRAD group countries following the 2004 EU enlargement, using time-series and panel data approaches. Bayesian generalized ridge regressions revealed that perceived corruption influenced FDI across the group. In Hungary, despite high corruption perception, investors prioritized human resource quality and export potential. A panel ARDL model found a significant long-term relationship between FDI, the corruption index, and a highly educated labor force. Also, [14] examined the link between FDI, foreign portfolio investment (FPI), and institutional quality in nine African countries from 2009 to 2016 using OLS analysis. The study found that institutional quality significantly influenced FDI and FPI inflows in the absence of natural resources and developed financial markets. Additionally, the findings revealed a positive relationship between FDI and FPI, consistent with theoretical and prior empirical research.

Similarly, [15] explored the impact of institutional quality on economic growth, focusing on its role in enhancing FDI-induced growth. Using GMM estimation on a dynamic panel dataset of 104 countries, the study found that both institutional quality and FDI inflows significantly promote economic growth. However, FDI-led growth was observed only in low- and middle-income countries, where strong institutional quality further amplified this effect. In high-income countries, FDI was found to hinder economic growth, highlighting differing impacts based on income levels. Also, [16] analyzed the institutional factors influencing FDI in 24 emerging markets, including China, India, Indonesia, and Turkey, using GMM dynamic estimation on data from 2003 to 2015. Drawing from sources such as the World Bank and UNCTAD, the study identified key determinants of FDI, including infrastructure quality, trade costs (tariff and non-tariff barriers), and institutional quality, measured through the effective rule of law, political stability, regulatory quality, and corruption control.

Theoretical Framework of Monetary Policy and Foreign Direct Investment

Monetary policy and Foreign Direct Investment (FDI) are two central elements of economic growth and stability, with their interrelation influencing economic outcomes globally. This theoretical framework, which included recent research and pertinent economic equations, examined how monetary policy affects FDI inflows and how FDI can affect the efficacy of monetary policy.

Monetary policy refers to the actions undertaken by a nation's central bank to control the money supply, manage inflation, stabilize the currency, and foster favorable economic conditions [17]. Central banks typically achieve these objectives through tools such as interest rate adjustments, open market operations, and reserve requirements. The effectiveness of

monetary policy is often measured by the degree to which it controls inflation and stabilizes economic fluctuations. Hence, the goals of monetary policy include inflation targeting and interest control. Controlling inflation rates ensures price stability, often through interest rate adjustments. On the other hand, manipulating the interest rates influences aggregate demand and investment decisions in the economy.

One of the key equations used to set the central bank's policy rate is the Taylor Rule, which balances inflation control with economic output:

$$i_t = r_t^* + \pi_t + 0.5(\pi_t - \pi^*) + 0.5(y_t - y^*) \quad (1)$$

Where: i_t = nominal interest rate set by the central bank, r_t^* = real neutral interest rate, π_t = current inflation rate, π^* = target inflation rate, y_t = actual output, and y^* = potential output. Equation (1) highlights how central banks adjust nominal interest rates in response to deviations in inflation and output.

Foreign Direct Investment involves capital flows from foreign investors into a domestic market, typically in the form of long-term investments such as building new infrastructure, acquiring assets, or expanding production capacities. FDI is considered a driver of economic development, as it not only brings in capital but also advanced technology, managerial expertise, and access to global markets [18, 19]. Neoclassical Theory of FDI theory suggests that FDI occurs because investors seek to maximize their returns by exploiting market imperfections [20]. According to this view, countries with higher returns on investment (due to factors like lower wages or superior infrastructure) tend to attract more FDI.

Monetary policy impacts FDI through its influence on exchange rates, interest rates, and inflation. A stable monetary policy regime can encourage foreign investors to commit capital by reducing uncertainty regarding the future economic environment [21]. Higher interest rates, typically part of contractionary monetary policy, may reduce domestic investment and borrowing, making it more attractive for foreign investors who can exploit higher returns [22, 23]. Investors channel their investments from low-interest rate areas to high-interest rate areas purposely to attain the golden goal of profit maximization [19]. A stable or predictably fluctuating exchange rate reduces the risk of foreign investment, especially in countries with volatile currencies [24]. FDI flows tend to increase when the central bank's policy reduces exchange rate volatility. In addition, countries with low inflation rates are perceived as having a stable economic environment, which attracts FDI. On the other hand, high inflation discourages investment as it erodes the value of returns on investment.

On the other hand, FDI can also influence the effectiveness of monetary policy in the recipient country. Monetary policy measures may have less of an impact in nations with substantial levels of foreign direct investment, particularly if foreign investors use foreign currency holdings or profit repatriation as a hedge against inflation [25]. Furthermore, FDI can improve the effective operation of monetary policy by advancing technology, which can increase the economy's responsiveness to shocks from the outside world [26].

The determinants of FDI can be modeled using the following function:

$$FDI = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \varepsilon \quad (2)$$

Where:

FDI = Foreign Direct Investment inflow, X_1 = Interest rates, X_2 = Inflation rate, X_3 = Exchange rate stability, ε = Error term, and $\alpha_0, \alpha_1, \alpha_2, \alpha_3$ = Parameters to be estimated.

Equation (2) models how key macroeconomic variables like interest rates, inflation, and exchange rate stability influence the volume of FDI inflows into a country.

METHODOLOGY

This study employed an *ex-post facto* research design to determine the effect of monetary policy on foreign direct investment inflows in East African countries. The study focused on quantitative approach where secondary data was extracted from reliable sources of the World Bank such as World Development Indicators (WDI) and World Government Indicators (WGI) for a period of 20 years spanning from 2003 to 2022. The population of this study was countries located in the East Africa and the seven most recipient countries of foreign direct investment inflows in 2022 and with available data were selected namely Comoros, Kenya, Mauritius, Rwanda, Seychelles, Tanzania, and Uganda.

Variables and Theoretical Foundations

Central banks influence macroeconomic variables such as interest rates, inflation, and exchange rates through monetary policy. For this study, monetary policy was proxy by monetary policy rate (real interest rate), exchange rate (Official exchange rate (LCU) per US\$), and reserve requirements (Bank liquid reserves to bank assets ratio in %). It is assumed that more stable monetary policy environments, characterized by low inflation and stable exchange rates, attract more FDI [12, 23]. The study also included in the model the control variables of real GDP (in current US\$) and broad money supply (as a % of GDP). Foreign direct investment inflows (as % of GDP) is the dependent variable, influenced by factors such as interest rates, inflation, exchange rate stability, and institutional quality [12]. Institutional quality is a moderating variable, influencing how effectively monetary policy can shape economic outcomes, including FDI inflows. A more favorable investment climate generally results from higher institutional quality, which makes FDI inflows more responsive to monetary policy [27].

Model Specification

Models (3) and (4) examine the relationship between monetary policy and foreign direct investment (FDI), with institutional quality acting as a moderator (Model 4). The fundamental assumption is that monetary policy has a direct impact on foreign direct investment inflows, although the host country's institutional quality modifies this effect. The influence of monetary policy on FDI decisions may be amplified or diminished depending on institutional quality, which encompasses elements such as governance, legal frameworks, regulatory effectiveness, and political stability. [21, 28]. Furthermore, [27] and [15] suggested that in countries with better institutions, where enforcement mechanisms and policy predictability are more dependable, the link between monetary policy and foreign direct investment may be stronger. The model (4) hypothesizes that stronger institutions enhance the positive effects of monetary policy on FDI inflows.

The model (3) was adopted to depict the effect of monetary policy on FDI inflows without interaction with institutional quality as follows:

$$FDI_{it} = \beta_0 + \beta_1 MPR_{it} + \beta_2 ER_{it} + \beta_3 RR_{it} + \beta_4 RGDP_{it} + \beta_5 BMS_{it} + \mu_{it} \quad (3)$$

Where: FDI = Foreign Direct Investment inflows, MPR = Monetary Policy Rate, ER = Exchange Rate, RGDP= Real gross domestic product, MBS= Broad money supply, β_0 = Intercept (constant term), $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Coefficients for the direct effect of monetary policy on FDI, μ = error term, t = regular point in time, and i = cross-section identifier

The model to depict the effect of monetary policy on FDI inflows with the interaction of institutional quality was adopted as follows:

$$FDI_{it} = \sigma_0 + \sigma_1 MPR_{it} + \sigma_2 ER_{it} + \sigma_3 RR_{it} + \sigma_4 \log RGDP_{it} + \sigma_5 BMS_{it} + \sigma_6 IQ_{it} + \sigma_7 MPR * IQ_{it} + \sigma_8 ER * IQ_{it} + \sigma_9 RR * IQ_{it} + \mu_{it} \quad (4)$$

Where: MPR*IQ= Interacting term MPR and IQ, ER*IQ= Interacting term ER and IQ, RR*IQ= Interacting term RR and IQ, and $\sigma_7, \sigma_8, \sigma_9$ = the coefficients of the interactive terms of MP and IQ.

To achieve the study objectives, the study employed an econometric panel data approach. The investigation of the effect of monetary policy on FDI inflows was conducted through the random effect model (REM) and the Hausman specification test was performed to justify the choice of the model.

PRESENTATION OF THE RESULTS AND DISCUSSION

Pre-estimations Tests

Table 1: Correlation Matrix Results

	MPR	ER	RR	LOGRGDP	BMS	IQ
MPR	1					
ER	0.23014	1				
RR	0.05264	0.08253	1			
LOGRGDP	0.00630	-0.09372	-0.58793	1		
BMS	-0.09251	-0.51655	-0.37336	0.35605	1	
IQ	0.08985	-0.10906	0.03926	0.06975	0.0992	1

Source: Researchers' computations (2024)

Table 1 provided insight into the potential multicollinearity problem between pairs of independent variables in this study. As seen in table 1, the correlation coefficients between explanatory variables are below the 0.80 threshold for potential multicollinearity [29], and as such, we concluded that our data does not suffer from multicollinearity. Table 2 presents the results of the Augmented Dickey-Fuller (ADF) unit root test, which checks for stationarity in time series data. Stationarity is critical for econometric analysis because non-stationary data can lead to spurious results.

Table 2: Unit Root Test Results

Augmented Dickey Fuller (ADF) unit root test					
	At level		At first difference		
Variable	Statistic	P-value**	Statistic	p-value**	Status
FDI	25.0680	0.0339	-	-	I (0)
MPR	23.9282	0.0467	-	-	I (0)
ER	16.4299	0.2878	36.0116	0.0010	I (1)
RR	26.2110	0.0243	-	-	I (0)
LOGRGDP	19.6387	0.1419	38.5371	0.0004	I (1)
BMS	13.2610	0.5061	52.9483	0.0000	I (1)
IQ	24.0879	0.0447	-	-	I (0)

** denotes the rejection of the null hypothesis of unit root @ 5%

Source: Researcher's computation (2024)

Results in Table 2 above showed that variables FDI, MPR, RR, IQ are stationary at level (I (0)). ER, LOGRGDP, BMS are non-stationary at level but become stationary after first differencing (I (1)). This mixed order of integration (I (0) and I (1)) suggests that the dataset may require appropriate methods (e.g., Fixed or Random effects modeling) for econometric analysis.

Table 3: Hausman Tests Results for models 3.3 and 3.4

	Model 3.3	Model 3.4
Chi-Sq. Statistic	8.051851	11.070841
P-value	0.1534	0.2709

Source: Researchers' computation (2024)

The Hausman test determines whether a fixed or random-effects model is more appropriate for panel data analysis. The test compares the consistency and efficiency of the two models by evaluating the null hypothesis:

- **Hypothesis (H₀):** The random-effects model is appropriate (the difference in coefficients is not systematic).

For both models (3) and (4), the **random-effects model** is preferred over the fixed-effects model, as the p-values for the Hausman test are greater than the 0.05 significance level.

Regression Analysis Results

Table 4: REM Regression Results of the Effect of Monetary policy on FDI inflows in East African countries with and without the moderating effect of Institutional Quality

Explanatory Variables	Model 3	Model 4
C	-18.5832(-0.8316)	5.7080(0.1925)
MPR	-0.0566(-1.0308)	-0.0543(-0.9561)
ER	-0.0017(-1.4820)	-0.0007(-0.4380)
RR	0.0083(0.2186)	0.0100(0.2520)
LOGRGDP	2.9496(1.2799)	0.5176(0.1733)
BMS	-0.1198***(-3.6440)	-0.1430***(-3.7340)
IQ		0.5053(0.8566)
MPR*IQ		0.0239(0.6121)
ER*IQ		-9.71E-05(-0.2866)

RR*IQ		-0.0152(-1.0378)
R-squared	0.5610	0.5702
Adjusted R-squared	0.5233	0.5182
F-statistic	14.872	10.9678
Prob(F-statistic)	0.0000	0.0000

Source: Researchers' computation (2024)

Note: (i) The endogenous variable is FDI inflows (ii) absolute t statistics are in parenthesis (iii)*** denotes significant at 1 % level; ** denotes significant at 5 % level; * denotes significant at 10% level.

Effect of Monetary Policy and Foreign Direct Investment (FDI) in East African Countries without the Moderating Effect of Institutional Quality

Table 4 column 2 presents the results of the effect of monetary policy and foreign direct investment (FDI) in selected East African countries without the moderating effect of institutional quality. Coefficient of determination (R^2) of about 56.10% implies that the variation in the dependent variable is explained by the independent variables in the model. This suggests that the model has a moderate level of explanatory power. While it captures a significant portion of the variance, 43.90% (100% - 56.10%) of the variance remains unexplained, which could be due to factors not included in the model or random noise.

Specifically, the coefficient suggests that a 1-unit increase in the monetary policy rate is associated with a decrease in FDI by 0.0566 units, holding other factors constant. This inverse relationship implies that as the central bank raises interest rates, FDI inflows may decline, likely because higher interest rates increase the cost of borrowing and reduce returns on investment, making the country less attractive to foreign investors [30]. The t-statistic evaluates whether the relationship is statistically significant. With a t-value of -1.0308, the coefficient is not statistically significant at common significance levels (e.g., 0.05 or 0.01). This therefore implies that the observed negative relationship between MPR and FDI might be due to random variations rather than a true underlying effect [29]. Although the negative coefficient aligns with theoretical expectations (i.e., higher interest rates deter investment), the lack of statistical significance suggests that monetary policy rate changes may not strongly influence FDI in this context. Policymakers should be cautious when relying solely on MPR adjustments to attract FDI, as other factors (e.g., political stability, market size, and infrastructure quality) likely play a more critical role [31].

The coefficient and t-statistic for the exchange rate in relation to FDI inflows provide insights into their relationship. This magnitude of the coefficient suggests that for every one-unit increase in the exchange rate, FDI decreases by 0.0017 units, assuming other factors remain constant. The negative sign indicates an inverse relationship between the exchange rate and FDI. A depreciation of the host country's currency (an increase in the exchange rate) makes assets cheaper for foreign investors, potentially increasing FDI. However, the negative coefficient here suggests that in this context, a higher exchange rate (depreciation) is associated with a slight decrease in FDI inflows. This could be due to increased exchange rate volatility or perceived economic instability deterring investors. Empirical studies have shown mixed results; for instance, [32] found that exchange rate movements can influence FDI flows, but the direction and magnitude depend on various factors.

The coefficient and t-statistic for the reserve requirement in relation to foreign direct investment (FDI) provide insights into their relationship. This coefficient suggests that for every one-unit increase in the reserve requirement, FDI increases by 0.0083 units, assuming other factors remain constant. The positive sign indicates a direct relationship between the reserve requirement and FDI. Traditionally, higher reserve requirements can lead to reduced lending capacity for banks, potentially increasing the cost of capital and deterring investment. However, a positive coefficient in this context may imply that higher reserve requirements are perceived as indicators of a stable and prudent banking environment, thereby enhancing investor confidence and attracting FDI. This aligns with findings that macroeconomic stability and sound financial regulation can be significant determinants of FDI inflows [26]. While the positive coefficient suggests a potential favorable view of higher reserve requirements in terms of attracting FDI, the lack of statistical significance indicates that this relationship is weak in the given context. Consequently, reserve requirement adjustments should not be viewed as a primary driver of FDI decisions in this scenario.

The coefficient and t-statistic for real Gross Domestic Product (GDP) in relation to FDI inflows provide insights into their relationship. This coefficient suggests that for every one-unit increase in real GDP, FDI inflows increase by approximately 2.9496 units, assuming other factors remain constant. The positive sign indicates a direct relationship between GDP and FDI. A higher GDP reflects a larger and potentially more prosperous economy, which can attract foreign investors seeking profitable opportunities. This positive association aligns with findings that economic growth can enhance a country's attractiveness to foreign investors [33]. In this context, the lack of statistical significance suggests that this association is weak, even though the positive coefficient points to a possibly positive view of higher GDP in terms of attracting FDI.

An understanding of the relationship between the broad money supply and FDI inflows can be derived from the coefficient and t-statistic. According to this coefficient, FDI falls by roughly 0.1198 units for every unit rise in the broad money supply, providing all other variables stay the same. The negative sign indicates an inverse relationship between broad money supply and FDI. Increased liquidity in the economy can be reflected in an expanding broad money supply, which, if not matched by economic activity, may cause inflationary pressures. Excessive inflation can reduce the value of investment returns and reduce the host country's appeal to international investors. The idea that excessive money supply expansion may discourage FDI because of worries about macroeconomic instability is thus supported by the negative coefficient. This perspective is supported by the study of [34] indicating that inflation and money supply growth can negatively impact FDI inflows. The negative and statistically significant coefficient suggests that an increase in the broad money supply is associated with a decrease in FDI inflows. This relationship emphasizes how crucial prudent monetary policy is in preserving economic conditions conducive to drawing in foreign investment.

Effect of Monetary Policy and FDI Inflows in East African Countries with the Moderating Effect of Institutional Quality

In a regression model, the coefficient of determination (R^2) quantifies the percentage of the dependent variable's variance that can be accounted for by the independent variables. The outcome demonstrated that the independent variables in the model account for roughly 57.02%

of the variability in the dependent variable. The remaining 42.98% of the variability in the dependent variable is due to factors not included in the model or random noise. The regression results indicate that the coefficient of Broad Money Supply (BMS) is -0.1430, and the t-statistic is -3.7340. The negative coefficient (-0.1430) suggests that as the Broad Money Supply increases by 1 unit, FDI inflows decrease by 0.143 units, holding other factors constant. Practically, this implies that an increase in money supply might lead to inflationary pressures, currency depreciation, or macroeconomic instability, all of which could deter foreign investors. The t-statistic (-3.7340) is statistically significant at the commonly used 5% significance level, as it is greater than the critical value for large samples. This suggests strong evidence to reject the null hypothesis that BMS does not affect FDI inflows.

The positive coefficient of 0.5053 between institutional quality and FDI inflows suggests that as institutional quality improves by one-unit, foreign direct investment increases by 0.5053 units, holding other factors constant. This implies that strong institutions, such as efficient legal frameworks, transparent governance, and reduced corruption, encourage foreign investors to commit resources due to reduced risks and greater predictability. The positive but weak relationship between MPR-IQ Interaction and FDI inflows (0.0239) suggests that the combined effect of MPR and IQ on FDI inflows is marginally positive. Specifically, as MPR and IQ jointly improve by one unit, FDI inflows is expected to increase by 0.0239 units, holding other factors constant. This indicates that institutional quality may slightly moderate the potential negative effects of higher monetary policy rates on FDI inflows, as strong institutions can create a more stable investment climate. However, the effect is not strong.

The negative but weak relationship between ER-IQ interaction and FDI suggests that a combined increase in exchange rate fluctuations and institutional quality marginally reduces FDI inflows. Specifically, for every one-unit increase in the interaction term, FDI decreases by 0.0000971 units, holding other factors constant. This indicates that despite institutional quality improvements, the adverse effects of exchange rate volatility on FDI may persist. Unstable exchange rates, even with strong institutions, could erode investor confidence, particularly in sectors sensitive to currency risk. The negative relationship between RR-IQ interaction and FDI (-0.0152) suggests that as the interaction between RR and IQ increases, FDI decreases by 0.0152 units, holding other factors constant. This indicates that higher reserve requirements, even in the presence of strong institutions, may limit FDI inflows. Reserve requirements could restrict credit availability, reduce financial liquidity, and increase borrowing costs, indirectly discouraging foreign investors.

CONCLUSION

The study found that incorporating institutional quality into the relationship between monetary policy and foreign direct investment marginally improves the model's explanatory power, suggesting that institutional factors contribute to understanding FDI dynamics. The moderating effect of institutional quality emphasizes the adverse impact of excessive liquidity on FDI inflows, potentially due to inflation and macroeconomic instability. Institutional quality slightly mitigates the negative impact of MPR on FDI inflows, suggesting that strong institutions create a stable environment that offsets the deterrent effect of higher interest rates. While institutional quality enhances stability, exchange rate fluctuations continue to undermine investor confidence. The inclusion of institutional quality also highlights the restrictive nature

of reserve requirements on FDI, as they may limit credit availability. Additionally, institutional quality enhances FDI attraction, potentially complementing economic growth factors. Institutional quality improves the model's explanatory power and introduces a more nuanced understanding of the relationships between monetary policy, exchange rates, and reserve requirements with FDI inflows. While strong institutions mitigate some negative effects (e.g., of MPR), challenges like exchange rate volatility and restrictive reserve requirements persist. Policymakers should prioritize improving institutional frameworks to enhance FDI while managing macroeconomic stability effectively.

Based on the findings, the study has recommended the following:

- While there is evidence of a negative relationship between MPR and FDI, it is statistically weak. Policymakers should consider a holistic approach, focusing on structural reforms and stable macroeconomic policies to boost investor confidence and attract FDI.
- While the negative coefficient aligns with some theoretical expectations that currency depreciation could deter FDI due to increased costs or perceived risks, the lack of statistical significance suggests that this relationship is weak in the given context. Consequently, exchange rate fluctuations should not be viewed as a primary driver of FDI decisions in this scenario.
- Institutional quality alone may not suffice to drive FDI. Policymakers might need to focus on a combination of factors, such as improving infrastructure, ensuring macroeconomic stability, and offering competitive incentives to attract investors.

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