

Financial Globalization, Entrepreneurship Development and Economic Growth in Africa

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Abstract

This study sought to examine the impact of financial globalization and entrepreneurship development on economic growth in Africa. It addresses four main research questions concerning effects of financial globalization and entrepreneurship development on economic growth, as well as the moderating role of institutional quality. Utilizing data from thirty African countries spanning the period 2011 to 2020, the study employs Generalized Method of Moments (GMM) Estimation technique for analysis. The findings reveal a significant positive effect of entrepreneurship development on economic growth, highlighting the importance of fostering an entrepreneurial ecosystem in Africa. However, the study indicates the insignificance of financial globalization in driving economic growth in the continent, suggesting a need for reassessment of integration strategies. Despite the presence of strong institutions, the moderating effect of institutional quality on financial globalization appears to be negligible. Conversely, institutional quality significantly but negatively moderates the effect of entrepreneurship development on economic growth, suggesting that as institutional quality improves, the positive impact of entrepreneurship development on economic growth diminishes. Policy recommendations based on these findings emphasize the importance of prioritizing initiatives to support entrepreneurship, including access to finance, business training, and regulatory reforms. Policymakers are urged to reassess strategies for financial globalization, considering prudent regulations and prioritizing domestic economic development. Strengthening institutions remains crucial, although the study suggests that institutional reforms alone may not fully unlock the benefits of financial globalization. Additionally, efforts to enhance institutional quality should focus on addressing issues such as corruption and bureaucratic red tape to create an enabling environment for entrepreneurship and economic growth in Africa.

1. Introduction

In recent years, the dynamics of economic growth have taken center stage in applied economics. Existing literature has underscored the significant role played by financial globalization and entrepreneurship development in shaping economic progress across both developing and developed economies (Kazar & Kazar, 2016; Bhanumurthy & Kumawat, 2020; Farouq et al., 2020). Financial globalization, particularly since the 1980s, has become a defining feature of the

global economic landscape, driven by policies promoting trade and investment liberalization alongside advancements in financial instruments and technologies (Pasricha & Nier, 2022). The benefits of financial globalization on economic growth have been widely documented, including efficient capital allocation, risk sharing, financial market development, institutional enhancement, and improved macroeconomic policies (Yahya, 2023; Gaies & Jahmane, 2022).

However, the impact of financial globalization on economic growth in Africa remains underexplored, despite the continent's increasing integration into the global financial system. African nations have undertaken measures to strengthen regulatory frameworks and financial institutions, leading to a notable surge in foreign direct investment (FDI) in recent years (IMF, 2019; UNCTAD, 2021). This underscores the need to investigate the relationship between financial globalization and economic growth within African economies.

Similarly, entrepreneurship has been recognized as a key driver of economic development, contributing to growth, employment creation, productivity, and social welfare through innovation and knowledge spillovers (Ghura et al., 2020; Al-Sahaf & Al-Tahoo, 2021; Harraf et al., 2021; Vatavu et al., 2022; Ughulu, 2022). Despite its critical role, entrepreneurship remains under-researched, partly due to difficulties in quantification and understanding the motivations behind entrepreneurial endeavors (Dvouletý et al., 2018; Kim et al., 2022). Nonetheless, studies have highlighted the positive relationship between entrepreneurship and economic performance, emphasizing the role of innovation creation, diffusion, and competition (Wennekers & Thurik, 1999). Moreover, the concept of entrepreneurship capital has been proposed as an additional component in models of economic growth, highlighting its role in fostering innovation, competition, and diversity (Audretsch & Keilbach, 2004).

In Africa, the entrepreneurial landscape varies significantly among nations, with some countries experiencing rapid growth in entrepreneurship while others face challenges due to political instability, inadequate infrastructure, and limited access to finance (World Bank, 2019; UNCTAD, 2023). Furthermore, women and young entrepreneurs encounter barriers such as limited access to funding and training opportunities, highlighting the need for supportive policies and initiatives (Ayyagari et al., 2011; Pece et al., 2015).

The infusion of capital from global sources offers opportunities for African entrepreneurs to initiate and expand their ventures, fostering innovation and competitiveness in the global market (Quartey et al., 2017; Ezenekwe et al., 2020). However, the influence of financial globalization on economic growth in Africa remains subject to debate, with arguments both for and against its impact (Ajide et al., 2021; Prasad et al., 2005).

Moreover, the role of governance institutions in moderating the relationship between financial globalization, entrepreneurship, and economic growth has been largely overlooked in the literature, particularly in the African context. High-quality institutions are crucial for supporting innovative entrepreneurship, human capital development, and productive capabilities, ultimately driving economic performance (AFDB, 2020). However, African economies have generally exhibited poor institutional quality performance, as evidenced by indicators such as control of

corruption, government effectiveness, regulatory quality, rule of law, political stability, and voice and accountability (World Bank, 2023).

The study aimed to ascertain the impact of financial globalization and entrepreneurship development on economic growth in Africa. Additionally, it sought to explore the moderating influence of institutional quality on the relationship between financial globalization and economic growth. Furthermore, it evaluated the moderating effect of institutional quality on the relationship between entrepreneurship development and economic growth in Africa. In view of the foregoing, the following null hypotheses were tested:

H01: Financial globalization has no significant effect on economic growth in Africa

H02: Entrepreneurship development has no significant effect on economic growth in Africa.

H03: Institutional quality does not moderate the effect of financial globalization on economic growth in Africa.

H04: Institutional quality does not moderate the effect of entrepreneurship development on economic growth in Africa.

2. Literature Review

2.1 Conceptual Framework

Financial Globalization

Financial globalization is a multifaceted concept encompassing the increasing interconnectedness of global financial systems, driven by cross-border trade, capital flows, and technological advancements. Scholars offer various perspectives on its nature and implications, highlighting its role in economic integration and market convergence (Gao, 2000). Key definitions by Stiglitz and others emphasize the movement of goods, services, capital, and labor across borders, facilitated by deregulation and advancements in technology (Stiglitz, 2006; Haddad and Pancaro, 2010).

Benefits of financial globalization include access to larger pools of capital, fostering economic growth, and facilitating knowledge and technology transfer between nations. However, challenges such as financial market volatility, inequality, and susceptibility to financial crises underscore the need for careful management and regulation in the global financial system (Forbes, 2008; Rodrik, 2011; Edoumiekumo and Opukri, 2013). Financial globalization is often synonymous with terms like 'financial openness' and 'financial integration,' with metrics like the Chinn-Ito index used to measure countries' degrees of capital account openness. This study will utilize such indices to assess the impact and extent of financial globalization (Chinn and Ito, 2006, 2008).

Entrepreneurship Development

Entrepreneurship development involves the process through which individuals initiate, nurture, and expand ventures, contributing to economic growth, innovation, and societal progress. Scholars define entrepreneurship as a transformative process driven by innovative ideas and a willingness to take risks. Entrepreneurs play a crucial role in reshaping industries, fostering competition, and addressing societal challenges through creativity and determination (Kirchhoff, 1994; Guerrero and Urbano, 2019).

Initiatives to support entrepreneurship include access to funding, training programs, and national development plans aimed at creating an enabling environment for entrepreneurial activities. Measures of entrepreneurship development often incorporate indicators of innovation, such as the

Global Innovation Index, reflecting the transformative impact of entrepreneurship on economies and societies (Adeyemi and Akinwale, 2019; Godin, Clemens, & Veldhuis, 2008).

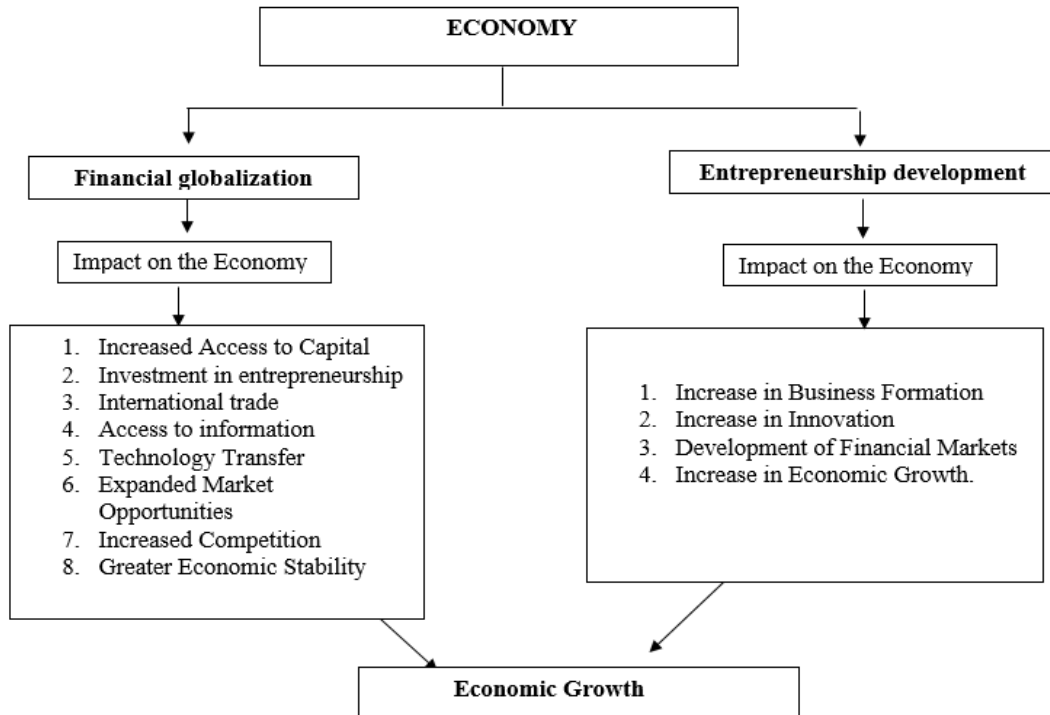
Economic Growth

Economic growth signifies the progressive increase in a nation's overall market value of goods and services, measured through metrics like real GDP or GDP per capita. It serves as a vital indicator of economic vitality, influencing living standards, employment, and global competitiveness. Economic growth is driven by factors like investment, technology, trade, and policies, offering insights into a nation's development trajectory and future strategies (Argyrous, Forstater and Mongiovi, 2004). Sustainable economic growth refers to a growth rate that can be maintained over time without imposing significant economic burdens. Metrics like real GDP and GDP per capita provide valuable insights into economic productivity and individual prosperity, guiding efforts towards sustainable development and improved living standards. This study will utilize gross domestic product as a measure of economic growth (Dynan and Sheiner, 2018).

2.1.4 Linkage between the concepts

Figure 2.1 illustrates the interconnection between financial globalization and entrepreneurship, showcasing their significant impact on economic development. Financial globalization enables entrepreneurs to access diverse funding sources, fosters investment in entrepreneurship through foreign direct investment (FDI), facilitates international trade, promotes technology transfer, and expands access to information. This synergy creates a conducive environment for entrepreneurial growth and economic advancement.

Figure 2.1 Conceptual framework



Source: Author's computation

2.2 Theoretical Framework

The theoretical framework for this study can be grounded in the Endogenous Growth Theory (Romer, 2011). This theory, which represents a significant evolution from previous models, emphasizes the role of technology as a key driver of economic growth. Unlike earlier theories that treated technology as exogenous, the Endogenous Growth Theory focuses on understanding the determinants of technological progress within an economic system. At its core, the theory posits that economic growth is primarily propelled by advancements in technology. These advancements enable firms to utilize their productive resources more efficiently over time, leading to increased productivity and output. The capacity to innovate and adopt new technologies becomes a crucial factor in sustaining long-term economic growth.

Entrepreneurship plays a pivotal role in the Endogenous Growth Theory by acting as a catalyst for technological innovation and diffusion (Howitt, 2010). Entrepreneurs are often at the forefront of identifying and capitalizing on new business opportunities, driving the process of creative destruction that spurs technological progress. Moreover, entrepreneurial activity fosters competition, which incentivizes firms to invest in research and development (R&D) efforts aimed at enhancing productivity and competitiveness.

Financial globalization, meanwhile, intersects with entrepreneurship and technological advancement in several ways. Firstly, it provides entrepreneurs with access to diverse sources of funding, including venture capital and foreign direct investment (FDI), which can fuel innovation

and business expansion. Secondly, globalization facilitates the international exchange of ideas, knowledge, and technologies, enabling entrepreneurs to tap into global markets and collaborate with partners worldwide. Additionally, financial globalization can enhance the efficiency of capital allocation, channeling resources towards productive entrepreneurial ventures that drive technological progress and economic growth.

2.3 Empirical Literature

Several studies have explored the relationship between financing small and medium enterprises (SMEs) and economic growth across different contexts. Onakoya, Fasanya, and Abdulrahman (2013) investigated the impact of financing small-scale enterprises on economic growth in Nigeria using quarterly time series data from 1992 to 2009. Their findings emphasized the positive influence of loans on economic performance, despite the negative effect of interest rates. They concluded that while access to capital was crucial, addressing managerial capacity was equally vital for SME success.

Similarly, Ilegbinosa and Jumbo (2015) examined the influence of SMEs on economic growth in Nigeria from 1970 to 2012. Their empirical study revealed a positive relationship between finance available to SMEs and economic growth, with interest rates negatively affecting growth. They recommended policy measures such as organizing national enterprise forums and maintaining low lending rates to support SME contributions to economic development.

Zubair (2014) focused on Nigeria's SME financing impact on economic growth and development from 1992 to 2013. Utilizing secondary data and the ARIMA model, the study highlighted the positive influence of commercial and microfinance bank financing on economic growth, particularly in sectors like transportation and manufacturing. They suggested government policies to enhance SME financing, especially in agriculture and manufacturing, for improved productivity and economic development.

Other studies examined the relationship between financial development and economic growth across different regions. Bist (2018) analyzed 16 low-income countries from 1995 to 2014, finding a significant positive impact of financial development on economic growth. The study emphasized the need for policies supporting private sector growth.

Solomon and Eka's 2013 research ventured into an empirical exploration of the relationship between Foreign Direct Investment (FDI) and economic growth in Nigeria, covering the period from 1981 to 2009. The Ordinary Least Squares (OLS) method was utilized for regression analysis. The outcomes revealed that while FDI had a positive coefficient during the study period, emphasizing a positive but relatively weak connection, however, this association between FDI and Nigerian economy was statistically insignificant.

Olagbaju and Akinlo (2018) explored the role of financial development in the relationship between foreign direct investment (FDI) and economic growth in Sub-Saharan Africa from 1989 to 2013. Their findings suggested that while FDI alone didn't directly impact growth, financial system development enhanced FDI's influence on economic growth, indicating the importance of developing domestic financial systems alongside attracting foreign capital.

Egbetunde and Akinlo (2014) investigated financial integration and economic growth in Sub-Saharan Africa, revealing a negative impact of financial integration on economic growth. They

stressed the importance of tailored macroeconomic policies and institutions to harness the benefits of financial integration for sustained economic development in the region.

Feki and Mnif (2016) examined the relationship between entrepreneurship and economic growth in developing countries from 2004 to 2011. Their study highlighted a significant positive correlation between new business density and growth, although short-term technological innovation showed a negative impact on growth, emphasizing the importance of long-term innovation strategies.

3. Methodology

3.1 Model Specification

To determine the relationship between financial globalization and economic growth; entrepreneurship development and economic growth; the moderating role of institutional quality on both financial globalization and entrepreneurship development towards influencing economic growth in Africa, the model below is specified:

$$GDPG = (FOP, LEI, INTQ * FOP, INTQ * LEI, BRE, LACRT, LTOP, LPOP, INTQ) \text{ --- 3.1}$$

Re-specifying Eq. (3.1) in a panel data and econometric form, gives:

$$GDPG_{it} = \beta_0 + \beta_1 FOP_{it} + \beta_2 LEI_{it} + \beta_3 INTQ * FOP_{it} + \beta_4 INTQ * LEI_{it} + \beta_5 BRE_{it} + \beta_6 LACRT_{it} + \beta_7 LTOP_{it} + \beta_8 LPOP_{it} + \beta_9 INTQ_{it} + \varepsilon_{it} + \lambda_i + \mu_t + \mu_{it} \text{ -----3.2}$$

Where $GDPG$ is GDP Growth (a proxy of economic growth), FOP is financial openness (a measure of Financial globalization), LEI is the log of entrepreneurial innovation (a proxy of entrepreneurship development), $LACRT$ is the log of Access to credit (measure of Access to finance), BRE is business regulatory environment, $LTOP$ is the log of trade openness, $LPOP$ is the log of population growth and $INTQ$ is the institutional quality, $INTQ * FOP$ is the institutional quality moderating effect of financial globalization, $INTQ * LEI$ is the institutional quality moderating effect of entrepreneurship development, $i = i^{th}$ country $t =$ time, $\beta_0 =$ intercept, $\beta_1 - \beta_9 =$ parameters, $\lambda_i =$ unobserved individual fixed effect, $\mu_t =$ unobserved time effect and $\mu_{it} =$ the random error.

3.2 Estimation Technique

Generalized Method of Moments (GMM) Estimation

The Generalized Method of Moments (GMM) estimator, introduced by Hansen (1982), is a powerful tool for addressing endogeneity concerns. It leverages orthogonality conditions to efficiently estimate parameters, even in the presence of unknown heteroscedasticity. This study employs the GMM model due to its suitability for datasets with a small number of time periods (T) and a large number of individuals (N), as observed in the panel of 30 countries over 10 years (2011 to 2020).

Arellano and Bond (1991) expanded on the GMM estimator by instrumenting differenced variables that might not be strictly exogenous with their available lags in levels. They also developed a test for autocorrelation, essential for ensuring the validity of instruments.

Hence, the GMM estimation is carried out in this study as follows:

$$\Delta \ln Y_{it} = \rho \Delta \ln Y_{i,t-1} + \ln \Delta X_{it} \beta_{\rho} + \ln \Delta W_{it} \Phi_{\rho} + \alpha INTQ * FOP_{it-1} + \delta INTQ * LEI_{it-1} + \lambda_t + \Delta \varepsilon_{it} \quad 3.15$$

Where

$Y_{i,t-1}$ is the lag of the dependent variable, $\ln GDPG$;

X' is a vector of explanatory variables, i.e., $(FOP_{it}, LEI_{it})'$;

W' is a vector of control variables, i.e., $(LACRT, BRE, LTOP, LPOP, INTQ)$

$INTQ * FOP, INTQ * LEI$ are the moderating effect terms;

λ_t is the time dummy; and ε_{it} is the error term.

3.3 Data Source

This study utilized panel data spanning from 2011 to 2020 for 30 selected African countries.

Table 3.1: Description of Variables and Data Sources

Variable	Measurement	Source of data
Economic Growth (GDPG)	GDP Growth	World Development Indicators (WDI), https://databank.worldbank.org/source/world-development-indicators (Accessed 2 July, 2023)
Entrepreneurship (EI)	Entrepreneurial Innovation	Global Innovation Index, https://www.wipo.int/global_innovation_index (Accessed 2 July, 2023)
Financial Globalization (FOP)	Financial Openness (KAOPEN)	Chinto-Index, https://web.pdx.edu/~ito/Chinn-Ito_website.htm (Accessed 2 July, 2023)
Trade openness (TOP)	Trade (% of GDP)	World Development Indicators (WDI), https://databank.worldbank.org/source/world-development-indicators (Accessed 2 July, 2023)
Access to credit (ACRT)	Domestic credit to private sectors	World Development Indicators (WDI), https://databank.worldbank.org/source/world-development-indicators (Accessed 2 July, 2023)
Business Regulatory Environment (BRE)	Country's Policy and Institutional Assessment (CPIA)	World Development Indicators (WDI), https://databank.worldbank.org/source/world-development-indicators (Accessed 2 July, 2023)
Population (POP)	Population	World Development Indicators (WDI), https://databank.worldbank.org/source/world-development-indicators (Accessed 2 July, 2023)

Institutional Quality	Control of corruption –CC, Government effectiveness – GE, Political stability –PS, Regulatory quality –RQ, Rule of law – RL, Voice and accountability – VA	World Bank (2023b). World Governance Indicators. https://datacatalog.worldbank.org/dataset/worldwide-governance-indicators (Accessed 25 November, 2023)
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Source: Author's Computation

4. Empirical Results

4.1 Descriptive Statistics

Table 4.1 Summary Statistics of the Data

	GDPG	FOP	EI	ACRT	BRE	TOP	POP	INTQ
Mean	3.7305	-0.4603	26.4444	30.9684	3.32981	64.0674	2.3460	-0.431
Median	4.0973	-1.24	26.325	19.2627	3.41061	60.5022	2.5256	-0.452
Maximum	15.7449	2.3	40.9	128.838	4.60714	125.783	3.8671	1.197
Minimum	-20.8053	-1.93	17.2	0.34799	2	18.6153	0.0023	-1.893
Std. Dev.	3.8846	1.35882	4.68549	28.9368	0.48068	21.8354	0.7944	0.53
Skewness	-1.7278	1.13821	0.3575	1.79385	0.15736	0.43901	-0.8135	0.4008
Kurtosis	10.8143	2.73356	3.00429	5.29093	3.91767	2.68349	3.5166	4.2899
Jarque-Bera	906.4723	65.2262	6.34787	224.989	11.6861	10.8162	36.1797	28.636
Probability	0.0000	0.0000	0.0418	0.0000	0.0029	0.0045	0.0000	0.0000
Observations	298	298	298	298	298	298	298	298

Source: Authors' computation from results obtained

In Table 4.1, GDP Growth averages at 3.73, ranging from -20.81 to 15.74, indicating significant variability among countries. Financial Globalization (FOP) scores an average of -0.4603, ranging moderately from -1.93 to 2.3, reflecting varying financial integration levels across African nations. Entrepreneurship Development (EI) averages 26.44, ranging from 17.2 to 40.9, suggesting diverse entrepreneurial landscapes. Access to Finance (ACRT) averages 30.97, with a wide range from 0.34799 to 128.838, highlighting disparities in financial accessibility. The Business Regulatory

Environment (BRE) maintains a mean score of 3.33, with a narrow range from 2 to 4.61, indicating relative uniformity in regulatory climates. Trade Openness (TOP) shows an average score of 64.07, ranging from 18.6153 to 125.783, showcasing diverse trade engagement levels. Population Growth (POP) reports a mean rate of 2.35, with a range from 0.0023 to 3.8671, capturing demographic variations. Institutional Quality (INTQ) maintains an average score of -0.431, with a range from -1.893 to 1.197, revealing differences in institutional frameworks. The Jarque-Bera Probability values for each variable underscore significant deviations from normal distributions, highlighting the heterogeneity within the economic landscapes of selected African countries.

4.2 Correlation Matrix

TABLE 4.2

Correlation Matrix

	GDPG	EI	FOP	ACRT	BRE	POP	TOP	INTQ
GDPG	1							
EI	-0.0286	1						
FOP	-0.0847	0.1859	1					
ACRT	-0.3142	0.6661	-0.0416	1				
BRE	0.0154	0.1429	0.2701	-0.0045	1			
POP	0,3078	-0.5856	0.0278	-0.7739	0.0312	1		
TOP	-0.0160	0.2875	0.0086	0.3767	-0.0134	-0.5168	1	
INTQ	-0.0900	0.6213	0.3418	0.5626	0.3753	-0.4610	0.4005	1

Source: Author's computation

From Table 4.2, Gross Domestic Product (GDP) exhibits weak negative correlations with Entrepreneurship development (EI) at -0.0286 and Access to Finance (ACRT) at 0.6829, suggesting that higher GDP growth aligns with increased entrepreneurship and improved financial accessibility. Furthermore, a moderate positive correlation between GDP and Trade Openness (TOP) at 0.2671 indicates a connection between economic prosperity and international trade engagement. Conversely, a strong negative correlation between GDP and Population Growth (POP) at -0.643 suggests that higher GDP is associated with lower population growth rates. The Entrepreneurship Index (EI) displays strong positive correlations with Institutional Quality (INTQ) at 0.5933, emphasizing the interplay between entrepreneurial activities and the quality of institutional frameworks. Access to Finance (ACRT) exhibits moderate positive correlations with both EI and TOP, indicating that improved financial accessibility is linked to entrepreneurial development and increased engagement in international trade. Institutional Quality (INTQ) demonstrates a strong negative correlation with POP at -0.5447, suggesting that higher institutional quality is associated with lower population growth.

4.3 Presentation of Regression Results

Table 4.3 Dynamic System GMM Estimates

Dependent Variable	L	Coefficient	Std. Error	t-value	P-value	Sig
Constant		-47.2691	14.8138	-3.19	0.003	***
LEI		10.3262	3.4769	2.97	0.006	***
FOP		0.6727	0.7532	0.89	0.379	-
Initial GDP		0.5432	0.1802	3.01	0.005	***
LACRT		0.0976	0.5354	0.18	0.857	-
BRE		0.4892	0.7318	0.67	0.509	-
LPOP		1.9163	0.7927	2.42	0.022	**
LTOP		2.2652	0.9975	2.27	0.031	**
INTQ		5.7748	2.810	2.05	0.050	**
INTQ*FOP		2.5988	2.1398	1.21	0.234	-
INTQ*LEI		-2.6015	0.9930	-2.62	0.014	**

*Note: ***, ** and * indicate statistical significance at 1%, 5% and 10% respectively.*

Table 4.3 presents the results of the system GMM dynamic panel estimations with a single lag of the dependent variable serving as the instruments. Notably, a significant and positive correlation is observed between entrepreneurship development and economic growth, indicating that a 1% increase in entrepreneurship development corresponds to a 10.3% rise in Africa's economic growth rate. This finding is consistent with previous research by Zubair (2014), Ilegbinosa and Jumbo (2015), and Onakoya, Fasanya, and Abdulrahman (2013), highlighting the substantial impact of entrepreneurship development on economic growth. The convergence of these results underscores the robustness of this relationship and reinforces the argument that nurturing entrepreneurship can significantly drive economic growth in Africa.

Despite the apparent insignificance of the estimate for financial globalization, it reveals a positive association with GDP in Africa during the study period, contrary to the commonly held belief that financial globalization drives economic growth. However, this result aligns with the study's a priori expectation, suggesting an ambiguous relationship. The flow of international capital is believed to potentially boost economic growth, increase tax revenue, facilitate technology transfer, and enhance employment opportunities. Conversely, concerns exist regarding economic dependency, exploitation risks, crowding out domestic firms, and unequal distribution of benefits. This insignificant effect of financial globalization resonates with findings by Olagbaju and Akinlo (2018), Solomon and Eka (2013), and Bist (2018), cautioning against overly liberal financial policies due to their potential adverse consequences on economic growth.

The positive and significant coefficient of the lagged dependent variable at the 1% level suggests divergence in economic growth among African countries, consistent with neoclassical theory, which emphasizes the significance of the initial economic state in determining growth. Access to finance and the business regulatory environment are found to be insignificant, while population growth significantly affects economic growth at a 10% significance level, indicating that a 1%

increase in population growth would lead to a 1.92% increase in economic growth. This finding corroborates with Mamingi and Perch's (2013) results, highlighting the positive impact of population growth and density on economic growth.

Trade openness positively and significantly influences economic growth in Africa, consistent with both neoclassical and endogenous growth theories. Institutional quality also has a positive and significant effect on economic growth at a 5% significance level, implying that a 1% improvement in institutional quality would result in a 5.77% increase in economic growth. This finding aligns with Egbetunde and Akinlo's (2014) results, despite their observed negative impact on economic growth in Sub-Saharan Africa.

Additionally, the interaction of institutional quality with financial globalization and entrepreneurship development was examined to assess their moderating effects on economic growth. Contrary to expectations, the moderating term for financial globalization was found to be statistically insignificant, while the institutional quality moderating effect of entrepreneurship development had negative and significant impact on economic growth at a 5% significance level. This suggests that stronger institutional quality diminishes the influence of entrepreneurship development on economic growth, contradicting our a priori expectations of a positive moderating effect.

4.4 Post System GMM Estimation Tests

Two diagnostic tests were performed to check the consistency of the system GMM estimator: the Hansen test for over-identifying restrictions under which the null hypothesis is that the instruments are not correlated with the residuals, and the Arellano-Bond test for the second order correlation in the first differenced residuals.

Table 4.4 Arellano-Bond test for zero autocorrelation in first differenced errors

Order	Z	Pr > z
AR (1)	-1.95	0.051
AR (2)	-1.45	0.146

Table 4.5 Hansen test of Over-Identifying Restrictions

Chi2	Prob > chi2
10.11	0.341

The Hansen J, and Arellano-Bond specification tests support the robustness check results. This suggests that robustness results pass from endogeneity and serial correlation bias. The null hypothesis of the Hansen J test is not rejected, which indicates that the instruments are valid for the estimation. Furthermore, the Arellano-Bond test supports that there is no serial correlation, which entails that the first difference regression exhibit no second-order serial correlation (AR2). Therefore, the conclusion is that the estimated coefficients derived from the quantitative measures are robust.

5.1 Summary of Findings and Conclusion

This study examined the effect of financial globalization and entrepreneurship on economic growth in 30 selected African countries. System GMM estimator was adopted for model estimation. The estimated results indicated that entrepreneurship development exert significant positive effect on economic growth. In contrast, our analysis revealed that financial globalization does not play a significant role in shaping economic growth in Africa. This is because on one side, international capital inflows are believed to stimulate economic growth, boost tax revenues, facilitate technology transfer, and create job opportunities. Conversely, it has been contended that such flows may engender economic dependency, expose to risks of exploitation, displace domestic firms, and perpetuate unequal distribution of benefits. In addition, population growth, trade openness and institutional quality exhibit significant positive effect on economic growth. More so, the institutional quality moderating effect of financial globalization was found to be insignificant. While the relationship between entrepreneurship development and economic growth as moderated by institutional quality was found to be statistically and negatively significant. Specifically, as institutional quality improves, the positive impact of entrepreneurship development on economic growth diminishes. This underscores the significance of aligning institutional structures with entrepreneurial initiatives to maximize their positive impact on economic growth.

5.2 Policy Recommendations

The study's findings have major policy implications and recommendations, particularly in terms of promoting economic growth in Africa.

First and foremost, the study indisputably shows that entrepreneurship promotes economic growth in Africa. This argument emphasizes the need of cultivating an entrepreneurial ecosystem and offering support channels for both prospective and established entrepreneurs. Policymakers should prioritize initiatives that promote entrepreneurship through a variety of means, including financial access, business training, mentorship programs, and regulatory reforms that make it easier to start and grow businesses. Governments may unlock their citizens' innovative potential and increase economic activity by creating a conducive atmosphere for entrepreneurship, resulting in long-term prosperity.

The study's findings regarding financial globalization paint a more nuanced picture. Despite the widespread belief that financial globalization could spur economic growth, the study reveals that this relationship has not materialized in the African context. Policymakers need to carefully reassess their approach to financial globalization and consider alternative strategies for integrating into the global financial system. This might entail implementing prudent regulations to mitigate the risks associated with financial liberalization, ensuring that capital inflows are channeled towards productive investments, and prioritizing domestic economic development over short-term gains from financial integration.

Furthermore, the study highlights the limited impact of institutional quality as a moderating factor in the relationship between financial globalization and economic growth. While good governance and strong institutions are essential for sustainable development, their influence on the effectiveness of financial globalization seems to be marginal in the African context. Policymakers should continue to prioritize efforts to strengthen institutions and improve governance practices, but they should also be cognizant of the fact that institutional reforms alone may not be sufficient to harness the potential benefits of financial globalization.

Finally, the study underscores the significance of the institutional quality moderating effect on entrepreneurship development, despite exhibiting a negative coefficient. This suggests that while institutional quality plays a role in shaping the entrepreneurial landscape, the relationship is complex and may involve trade-offs. Policymakers should focus on enhancing the quality and effectiveness of institutions in supporting entrepreneurship, addressing issues such as corruption, bureaucratic red tape, and inadequate access to justice. By creating an enabling environment for entrepreneurship, governments can maximize the positive impact of entrepreneurial activities on economic growth while mitigating potential adverse effects associated with institutional deficiencies.

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