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FINANCIAL DETERMINANTS OF ENTREPRENEURSHIP IN NIGERIA

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Abstract

Finance is a crucial component to entrepreneurial success and the dearth of financial resources can be detrimental to entrepreneurs and affect entrepreneurial activities and growth opportunities. This study investigates the financial determinants of entrepreneurship in Nigeria from 1991 to 2021 using the auto regressive distributed lag model. The findings to the study revealed that while foreign direct investments and financial development negatively affect self-employment rate in Nigeria, access to finance increases the rate of self-employment in Nigeria. This study, therefore, recommends that policy makers need to make access to financial resources easier and at a lesser cost to individuals who wants to be self-employed in order to encourage self-employment and entrepreneurial activities for economic growth and stability.

Keywords: Financial determinants, entrepreneurship, FDI

1. Introduction

In recent times, scholars have focused on the importance of entrepreneurship in developing, emerging and transition economies (DETEs). The DETEs environments are seen as key for entrepreneurial activity to promote economic development, alleviate poverty, and improve standards of living, (Aminova et al., 2020; Abraham et al., 2020). Also, due to the increasing population, changing economic policies, institutions, infrastructure facilities and bureaucratic procedures within the administrative system in the DETEs (Ngo et al., 2021), entrepreneurship is seen as an important factor in economic success (Ratten, 2020; Acs et al., 2014) and societal wellbeing (Bruton et al., 2021). Therefore, entrepreneurship is a process of innovation and risk-taking that can lead to business success and job creation. However, entrepreneurship development is not possible without financial ingredients and determinants in the DETEs, which cut across foreign direct investments, general financial development and financial inclusion (access to finance). Research has shown that finance is a key determinant of entrepreneurship

development (Ahmad & Hoffman, 2007; Dibal et al., 2021) and crucial to the success of entrepreneurial ventures, as studies have shown that a significant number of small businesses fail due to a dearth of financial resources (Coleman & Kariv, 2013). This lack of access to capital can affect the legitimacy of business activities and limit their growth opportunities (Erikson, 2001; Morris, 1998).

Entrepreneurship involves the introduction of new products and/or services to the market, leading to business success and job creation (Baumol, 2002; Ansari et al., 2023). Successful entrepreneurs require innovative ideas and the ability to take risks. In addition to creativity and capital, entrepreneurs must be able to identify and implement changes to improve social and economic systems and increase their profits. Therefore, entrepreneurship is about more than simply starting a business. Entrepreneurship is a process that involves both identifying opportunities and allocating resources to create value. This value is created by identifying unmet needs or opportunities for change. Entrepreneurship is influenced by several factors, including financial, organizational, and economic conditions (Fasano et al., 2020). Financial factors, particularly in the early stages of entrepreneurship, are especially important, and a dearth of financial assets has been acknowledged as a significant barrier for entrepreneurs (Pan & Yang, 2019). According to the Global Entrepreneurship Monitors (GEM) report, 20% of entrepreneurs quoted the dearth of financial resources as a major obstacle to success. A well-developed financial system is critical to reducing the costs of financing for entrepreneurs, and the primary goal of such a system is to support entrepreneurs (Gozgor, 2018).

Global Entrepreneurship Monitor [GEM] (2000) has shown, that access to financial resources is a crucial factor in determining whether people will choose to start a business. Paulson and Townsend (2004) asserts that many potential entrepreneurs have ideas for new businesses, but the lack of capital and high opportunity costs make it difficult for them to start and grow their ventures. Also, even when individuals have the capacity for entrepreneurship and the right mix of opportunities and financial resources, they may not leap into business ownership if the costs are perceived to outweigh the potential benefits (Organization for Economic Corporations and Development [OECD], 2011). In addition, regulations and policies around access to financial sources play a role in shaping the business environment (Desai et al., 2003; Klapper et al., 2004). This study, therefore explores the financial determinants of entrepreneurship in Nigeria.

Financial determinants as likened in this study covered foreign direct investments, financial development and financial inclusion. Foreign direct investment is a vital

constituent of the foreign cash flows into a country. It is the inflow of financial and human capital from a foreign country to a host country for investment which can be owned by an individual investor, corporate organization or government (Montiel & Reinhart, 2002). Nigeria is the third host economy for foreign direct investment, after Egypt and Ethiopia. Considered as the giant of Africa Nigeria is a fertile ground to foreign investors in the different sectors of the economy because of her natural resource, size of domestic market and the population advantage (United Nations Conference on Trade and Development [UNCTAD], 2023). This attraction of foreign direct investment into DETEs such as Nigeria spurs entrepreneurial activities. Shreds of empirical evidence have shown foreign direct investment has a negative (Danakol et al., 2013; Eren et al., 2019; Goel, 2018; Ha et al., 2021) and positive (Ebele & Moneme, 2014; Herrera-Echeverri et al., 2014; Kim & Li, 2014; Nguyen, 2023; Thompson & Zang, 2022) effect on entrepreneurial activities.

The development of a country's financial system plays an important role the growth of other areas in the economy. Financial development is the process of minimizing the effects of information asymmetry, limited enforcement and transactions costs with the help of financial instruments, markets and intermediaries without necessarily eliminating these effects (Chihak, 2012). Furthermore, a more comprehensive and wider definition by Levine (1997, 2004) defined financial development as enhancements in the quality of five vital functions of finance: generating and processing information about potential investments and allocating funds based on these evaluations; monitor individuals and businesses and implementing corporate governance when capital is allocated; aiding risk trading, diversification, and management; financial resources mobilization and pooling; and exchanging products, services and financial instruments with ease. It has been theoretically and empirically established that financial development influence economic development, poverty alleviation, a stable economy, and entrepreneurial activities (Bayar et al., 2018; Dibal. 2021; Kar & Ozsahin, 2016; Levine, 2004).

Financial inclusion (access to finance) is fundamental to every business growth. According to the World Bank, financial inclusion is a vital enabler that reduce extreme poverty and boost shared prosperity. It is the enabler of seven (7) out of the 17 Sustainable Development Goals (SDGs): poverty alleviation; reducing hunger; good health and well-being; gender equality; employment and economic growth; industry, innovation and infrastructure development; reducing income inequality (World Bank, 2022). From extant literature, financial inclusion is spurs entrepreneurship activities (Ajide, 2020; Fareed et al., 2017; Goel & Madan, 2019).

This study, is therefore structure as follows: the study started with an introduction followed by the theoretical framework and hypothesis development. The study presented the methodology, then empirical results and discussion followed by the contributions and implication. This is followed by limitation and suggestions for further studies and finally the conclusion.

2. Theoretical Framework and Hypothesis Development

Some economic theories propose that financial development can affect economic growth through a 'supply-driven ' or 'demand-driven' mechanism. The theory suggests that a lack of financial opportunity is a major factor contributing to income inequality and slow development. However, a stable, affordable and accessible financial system is seen as a key requirement for promoting growth, reducing income inequality and combating poverty (Serrao et al., 2012). From a theoretical perspective, there is no clear agreement on the role of finance in economic growth. Some economists argue that the impact is minimal or negligible, while others believe it is significant. The demand-based theory suggests that money does not cause economic growth and that the financial system merely reflects what is already happening in the productive economy. Proponents of the supply-leading view argue against the demand-based view, suggesting instead that financial development drives economic growth. The roots of the finance-led growth theory can be traced back to Walter Baghot's work in 1873. Schumpeter (1911), suggested that banks play a vital role in stimulating economic growth by facilitating the efficient exchange of capital. Later, Goldsmith (1969), McKinnon (1973), Levine and Zervos (1996), and other scholars echoed Schumpeter's view, acknowledging the positive impact of finance on economic development (Ndebbio, 2004). Proponents of the supply theory argue that financial institutions developed in response to the growing demand for financial services in the marketplace. Therefore, financial sector development is seen as a consequence of, rather than a driver of, economic growth. In other words, a large body of economic theory holds that improved financial development correlates with better economic performance.

2.1 Foreign Direct Investment and Entrepreneurship

Foreign direct investment (FDI) is defined as a capital flow from one country into another to gain ownership and control of a business in the host country. Hill et al. (2008) describe FDI as investment outside a company's home country, either through the acquisition of an existing business or expansion of existing operations. Adeleke et al. (2014) have a similar definition, emphasizing the direct investment in another country's production or business. FDI involves direct ownership and control of a firm, giving the investor greater influence on how the firm is managed.

FDI can result in horizontal and vertical spillover effects. Horizontal spillover effects are when the foreign firm's products create new markets or opportunities for local firms to imitate them and the vertical spillover effects occur when the products or services of the foreign firm create demand for complementary goods and services that can be supplied by local firms.

Several studies have investigated the effect of foreign direct investment on entrepreneurship development and it was revealed that foreign direct investment has a positive link with domestic entrepreneurship (Ebele & Moneme, 2014; Misra et al., 2014; Munemo, 2015), and increased new firm creation (Herrera-Echeverri et al., 2014; Kim & Li, 2014), especially in countries with inadequate legal and regulatory frameworks for private business, low levels of political stability and poor human capital (Kim & Li, 2014; Munemo, 2015). Albulescuab and Tămășilăa (2014) investigated the role of inwards and outwards FDI and the results revealed that the FDI inflows positively influence opportunity-driven entrepreneurs while the FDI outflows have a positive influence on necessity-driven entrepreneurs and a negative impact on the other category of entrepreneurs. Misra et al. (2014) investigated the impact of foreign direct investment (FDI) on women's entrepreneurship and the result shows that foreign direct investment and women's entrepreneurship have an inverted U-shaped relationship. Goel (2018) and Eren et al. (2019) examined the impact of foreign direct investment (FDI) on entrepreneurship activity and the results support the crowding out effect. However, this effect varies across nations with different prevalence of entrepreneurship. Thompson and Zang (2023), on the other hand, examined the link between self-employment and different components of foreign influences (FI) at a regional level. The outcome of this findings suggest that cross boarder investments reduce self-employment rate, while the number of foreign firms and foreign exports encourage self-employment. From extant literature and theoretical assumptions, we, therefore, postulate that

Hypotheses 1: foreign direct investments increase self-employment rate in Nigeria.

2.2 Financial development and entrepreneurship

Financial development occurs when financial institutions provide a broader range of financial services, making these services available to more members of society. A highly developed financial system is one in which financial markets are well-integrated, rather than fragmented so that firms and households have access to a variety of financial services at the lowest possible cost and in the shortest time frame (Bilir et al., 2019). In this way, savers are connected with borrowers,

allowing capital to flow to the most productive opportunities. An efficient financial sector plays a crucial role in channeling financial resources to productive and profitable investment projects, improving the allocation of capital and maximizing economic efficiency (Allen & Qian, 2018). This ultimately helps drive economic growth.

The link between the development of the financial sector and its impact on entrepreneurship has been explored in the past. Earlier scholarly works revealed better financial development leads to a significant increase in entrepreneurial activity (Klapper & Love, 2011; Muhsin & Şerife, 2016), while entrepreneurial businesses is dependent on fulfilling their financing needs by banks (Omri & Ayadi-Frikha, 2014). Other works have shown that entrepreneurs need access to suitable sources of financing to establish and expand their businesses (Ajide&Osinubi, 2020; Kantis et al., 2020; Ghosh, 2021) while institutional framework, capital infrastructure, and product market regulations all play a significant role in determining how individuals develop and engage in entrepreneurial activities (Li, 2020; Assmann & Ehrl, 2021). Dibal et al. (2021) revealed a regulatory quality as a moderator to dimensions of financial market development-self-employment nexus. Dutta and Meierrieks (2021) pointed out that improved financial development increases entrepreneurial activities, especially in countries with strong political and institutional framework. The findings indicate that financial development encourages entrepreneurial activities by extending accessible, cheap and widespread financial resources to entrepreneurs, as well as the demand for efficient and economical risk and information management from investors. A most recent work examined the effect of financial development on entrepreneurship and the study concluded that private sector credit and entrepreneurship index have a positive relationship (Ansari et al., 2023; Habib et al., 2023). This study, therefore, proposed

Hypotheses 2: financial development increases self-employment rate in Nigeria.

2.3 Financial Inclusion and Entrepreneurship

Financial inclusion is considered an essential right of citizens that improves the economic capacities and capabilities of the poor (Fadun, 2014). This term describes the process by which all people have equal access to formal financial services, including banking, credit, insurance, pension, and investment products. In addition, financial inclusion involves making financial products affordable, accessible, and easy to use for all. Financial inclusion goes beyond just access to financial products and services but also involves regularity of use, benefits to the user, and

affordability (Park & Mercado, 2015). In other words, financial inclusion is achieved when individuals have easy and frequent access to a wide range of financial products designed to meet their needs and are reasonably priced. These products can include payment systems, savings accounts, credit, insurance, and pension plans.

Access to finance for entrepreneurship development is an interesting field and studies have shown that financial inclusion positively impacts entrepreneurship development (Ajide, 2020), economic prospects for women entrepreneurs in the formal and informal sectors (Fareed et al., 2017; Goel & Madan, 2019), entrepreneurial development of farmers (Wang & Tan, 2017) and entrepreneurial training (Fan & Zhang, 2017), while Ibekwe et al. (2021) showed that deposit to rural areas, credit to rural areas, credit to deposit ratio and credit to small-scale enterprises had positively and significantly affected entrepreneurial development in Nigeria. According to Koloma (2021) there are equal beneficial effects of financial inclusion on the level of entrepreneurial activities and intentions among youths. The study further identified three main obstacles of financial inclusions to youth. They are: cost of financial services; dearth of financial resources; and the general notion that financial services like savings are not essential.

Hypotheses 3: access to finance increases self-employment rate in Nigeria.

3. Methodology and Data

The data covered a period of thirty-one years (31) years from 1991 to 2021. This period is considered because of data availability for all the variables of focus in this study. The objective of the study is to investigate the financial determinants of entrepreneurship in Nigeria. As the dependent variable, the study used self-employment (Dibal et al., 2021) as a proxy for entrepreneurship, while the independent variables as financial determinants were proxied by foreign direct investment (Goel, 2018; Thompson & Zang, 2023), financial market index (Dutta & Meierrieks, 2021) and financial institutions access index (Dibal et al., 2021) while inflation was used a control variable in the study. Table 1 provides the operationalized variables and measurements for the study.

3.1 Autoregressive Distributed Lag (ARDL) Approach

The autoregressive distributed lag (ARDL) approach by Pesaran and Shin (1998) and Pesaran et al. (2001) was employed to investigate the financial determinants of entrepreneurship in Nigeria, while controlling inflation in the model. This approach was built on the ordinary least square (OLS) assumptions, suitable for time series

that are non-stationary and that with mixed order of integration (Pesaran & Shin, 1999; Pesaran et al., 2001). In order to tackle the various econometric issues that might be encountered and provide the most suitable and comprehensible model, a general-to-specific modelling framework that captures the data-generating process requires a significant number of lags (Pesaran & Shin, 1999). This approach provides an unbiased estimation for the study by concurrently estimating the short-run and long-run cointegration relationship (Pesaran et al., 2001; Qamruzzaman & Wei, 2018). Therefore, the ARDL model will be presented as follows:

$$\mathbf{y}_t = \sum_{j=1}^p \gamma_j \mathbf{y}_{t-j} + \sum_{j=0}^q (\delta_j \mathbf{x}_{t-j}) + \boldsymbol{\varepsilon}_t \quad (1)$$

Where \mathbf{x}_{t-j} is a $k \times 1$ vector of multiple regressors; γ_j is the autoregressive parameters; δ_j is the symmetric distributed lag parameters; $\boldsymbol{\varepsilon}$ is an iid process with zero mean and variance.

Operationalizing the variables for this study into the models, we, therefore, proposed as stated below:

$$\begin{aligned} \mathbf{ENT} &= \mathbf{f}(\mathbf{FDI}, \mathbf{FMI}, \mathbf{FIAI}, \mathbf{INF}) \\ \mathbf{SE}_{it} &= \delta'_1 \mathbf{FDI} + \delta'_2 \mathbf{FMI}_{i,t-j} + \delta'_3 \mathbf{FIAI}_{i,t-j} + \delta'_4 \mathbf{inf}_{i,t-j} \\ \Delta \mathbf{SE} &= \sum_{j=0}^p \gamma_{it} \mathbf{tSE}_{i,t-j} + \sum_{j=0}^q \delta'_1 \mathbf{FDI}_{i,t-j} + \sum_{j=0}^q \delta'_2 \mathbf{FMI}_{i,t-j} + \sum_{j=0}^q \delta'_3 \mathbf{FIAI}_{i,t-j} \\ &\quad + \sum_{j=0}^q \delta'_4 \mathbf{INF}_{i,t-j} + \boldsymbol{\varepsilon} \end{aligned}$$

Where: **ENT** is entrepreneurship; **SE** is self-employment rate; **FDI** is foreign direct investments; **FMI** is financial market index; **FIAI** is financial institution access index; **INF** is inflation; $\boldsymbol{\gamma}_{it}$ is the autoregressive parameter; $\boldsymbol{\varepsilon}$ is an **iid** process with zero mean and variance.

The study employed Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) test developed Dickey and Fuller (19789) and Phillips and Perron (1998) respectively to test the stationarity or determine the order of integration of the variables employed in the study. This is to ensure that none of the variables exhibit a second order integration I(2) to avoid spurious and inconsistent estimations in the regression model (Asteriou & Monastiriotis, 2004).

The bound test of cointegration using the F statistics obtained from the estimates of the ARDL is likened to the asymptotic critical value bounds of Pesaran et al. (2001) to test the long-run relationship between the variables. As stated by Pesaran et al. (2001), a conclusion is reached when the calculated f-statistics falls outside the critical value bounds, that is, below the $I(0)$ or higher than $I(1)$. Alternatively, when the f-statistics falls within these bounds, it results to an inconclusive inference which require further estimations to determine the order of integration of the variables before a conclusive inference is made. The representation of the null hypothesis of no cointegration is given by $\beta_1 \neq \beta_2 \neq 0$, while the alternative hypothesis of cointegration is given by $\beta_1 = \beta_2 = 0$.

4. Results and Discussions

Descriptive Statistics and Correlation Matrix

Table 2 presents the descriptive statistics and the values of the standard deviation for all the variables have observations not far from the sample mean. However, the value for inflation is a little bit away from the sample mean. The values of the skewness show that self-employment, financial market index and financial institutions access index reflect standard skewness considering that they are not too far away from zero and that of kurtosis for self-employment and financial institutions access index are less than 3, which indicates negative kurtosis (platykurtic). The correlation matrix reveals the relationship that exist between and among the variables. The generally agreed value that reveals the presence of multicollinearity is 0.8 and above.

Table 2: Descriptive and Correlation Matrix

	SE	FDI	FMI	FIAI	INF
Mean	82.88912	1.643745	0.191935	0.087419	18.40588
Median	83.02487	1.523782	0.200000	0.060000	12.87658
Maximum	85.03133	5.790847	0.320000	0.140000	72.83550
Minimum	79.26835	0.183822	0.090000	0.050000	5.388008
Std. Dev.	1.913759	1.214683	0.046577	0.036145	16.51685
Skewness	-0.259465	1.814034	0.030136	0.182237	2.127796
Kurtosis	1.620342	6.650027	4.265744	1.173581	6.423366
Jarque-Bera	2.806464	34.21054	2.074082	4.480338	38.52976
Probability	0.245801	0.000000	0.354502	0.106441	0.000000
Observations	31	31	31	31	31
Correlation					
SE	1.000000				
FDI	0.401095	1.000000			
	0.0253				

FMI	-0.512733 0.0032	-0.257560 0.1619	1.000000		
FIAI	-0.907391 0.0000	-0.357016 0.0487	0.498055 0.0044	1.000000	
INF	0.402735 0.0247	0.457953 0.0096	-0.638427 0.0001	-0.394933 0.0279	1.000000

Source: Authors' computations, 2023 (Eviews 9)

A preliminary test was conducted using the ADF and PP tests to determine the stationarity of the variables in focus. As presented in Table 3, the variables exhibit stationarity and are a mixture of I(0) and I(1).

Table 3: Stationarity Test

Variables	PP			ADF		
	T-statistics	Probability	Order of Integration	T-statistics	Probability	Order of Integration
SE	-4.9685	0.0004 ***	I(1)	-4.9827	0.0004 ***	I(1)
FDI	-2.9656	0.0498 **	I(0)	-2.9656	0.0498 **	I(0)
FMI	-5.8246	0.0000 ***	I(1)	-5.4646	0.0001 ***	I(1)
FIAI	-5.5901	0.0124 **	I(1)	-3.6960	0.0096 ***	I(1)
INF	-5.9286	0.0000 ***	I(1)	-5.3089	0.0002 ***	I(1)

Notes: (*), (**) and (***) represent significant at 10%, 5% and 1% respectively.

*MacKinnon (1996) one-sided p-values.

Source: Authors' computations, 2023 (Eviews)

The cointegration test presented in Table 4 revealed that the variables are not cointegrated. That means there is no long-run relationship since the F-statistics of 1.181805 is below the lower bound I(1) value of 2.86 at a 5 per cent level.

Table 4: bound Test for Cointegration

Dependent Variables	F-Statistics	Outcome	Decision
SE	1.181805	Cointegration	Estimate ARDL

Note: Lower bound I(0) = 2.45 and upper bound I(1) = 3.52 @ 10%

Lower bound I(0) = 2.86 and upper bound I(1) = 4.01 @ 5%

Lower bound I(0) = 3.74 and upper bound I(1) = 5.06 @ 1%

Source: Authors' computations, 2023 (Eviews 9)

The short-run dynamics of the ARDL estimation presented in Table 5 show that foreign direct investment ($\beta = -1.8175435$, $p < 0.05$) and financial market index ($\beta = -12.74805$, $p < 0.05$) have a negative and significant effect on self-employment rate

in Nigeria at 5 per cent, while financial institutions access index ($\beta = 23.21084$, $p < 0.10$) has a positive and significant effect on self-employment rate in Nigeria at 5 per cent.

Table 5: ARDL Estimates

Dependent Variable: SE				
Variables	Coefficient	Std. Error	t-Statistics	Prob.*
SE(-1)	-0.261542	0.113457	-2.305215	0.0825
SE(-2)	0.540289	0.268571	2.011718	0.1146
SE(-3)	-1.118148	0.282993	-3.951155	0.0168
FDI	-1.817435	0.254210	-7.149341	0.0020
FDI(-1)	-0.621689	0.148397	-4.189356	0.0138
FDI(-2)	-0.251674	0.114364	-2.200631	0.0926
FDI(-3)	1.121142	0.154719	7.246322	0.0019
FDI(-4)	1.808139	0.210451	8.591748	0.0010
FMI	-12.74805	2.095234	-6.084309	0.0037
FMI(-1)	-24.12416	3.273758	-7.368950	0.0018
FMI(-2)	-9.793502	2.627439	-3.727394	0.0203
FMI(-3)	27.57393	4.258227	6.475448	0.0029
FMI(-4)	7.206621	1.916261	3.760773	0.0198
FIAI	23.21084	7.042638	3.295760	0.0301
FIAI(-1)	-52.80607	13.71703	-3.849671	0.0183
FIAI(-2)	-83.36842	9.783294	-8.521508	0.0010
FIAI(-3)	-17.43563	5.471293	-3.186747	0.0333
INF	0.159766	0.025890	6.170969	0.0035
INF(-1)	0.045804	0.012857	3.562688	0.0235
INF(-2)	-0.159993	0.018291	-8.747320	0.0009
INF(-3)	-0.136827	0.015816	-8.651355	0.0010
INF(-4)	0.072720	0.006563	11.08048	0.0004
C	166.0141	12.78348	12.98661	0.0002

Source: Authors' computations, 2023 (Eviews)

To evaluate the validity, reliability and applicability of the regression model, we employed some diagnostics tests to address the econometric problems as presented in Table 7. Autocorrelation test by Durbin-Watson (1950, 1951) for first-order autocorrelation and Breusch-Godfrey tests by Breusch (1978) and Godfrey (1978) for higher-order autocorrelation was conducted and the study established no problem of autocorrelation in the regression model. The Breusch and Pagan (1979) for heteroscedasticity and Jarque and Bera (1987) for normality were also employed and the findings also revealed no problem of heteroscedasticity and the residuals

are normally distributed respectively. Also, the model misspecification test using the Ramsey Regression Specification Error Test (RESET) by Ramsey (1969) and the model stability test using the cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) plots of recursive residuals developed by Brown et al. (1975) were employed and the plots fall within the 5 per cent significance level as presented in Figure 1 and Figure 2 respectively.

Table 7: Diagnostic tests

Specification	Stat (p-values)	Conclusions
Durbin-Watson (autocorrelation)	3.241484	No Autocorrelation
Bruesch–Godfrey (Serial Correlation)	3.406855 (0.1621)	No Serial Correlation
Bruesch–Pagan (heteroscedasticity)	0.288270 (0.9758)	No Heteroscedasticity
Jarque–Bera (normality)	1.110667 (0.573881)	Normality
Ramsey RESET Test	0.783647 (0.4904)	No Model specification error
R ²	0.999497	
F-statistics	361.6206 (0.000017)	

Source: Authors’ computations, 2022 (Eviews 9)

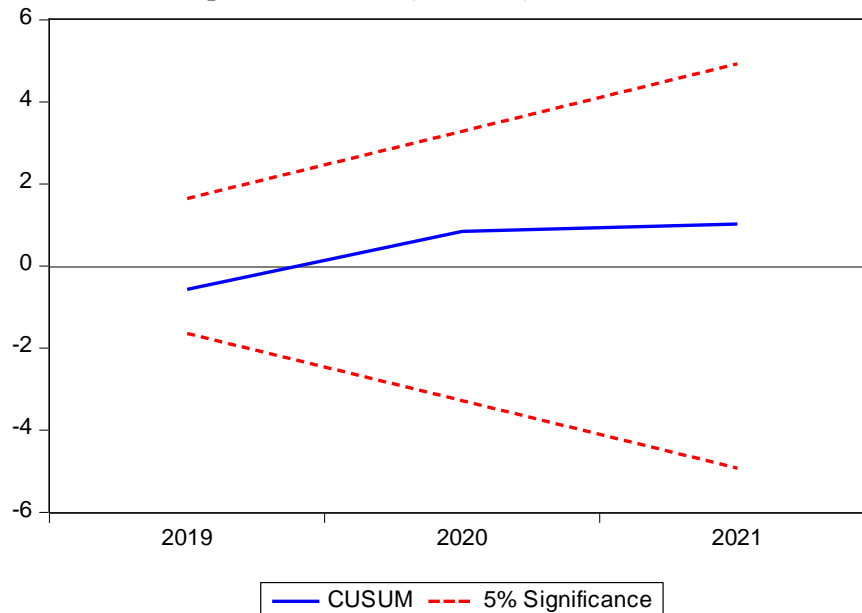


Figure 1: CUSUM Plot

Source: Authors’ computations, 2023 (Eviews 9)

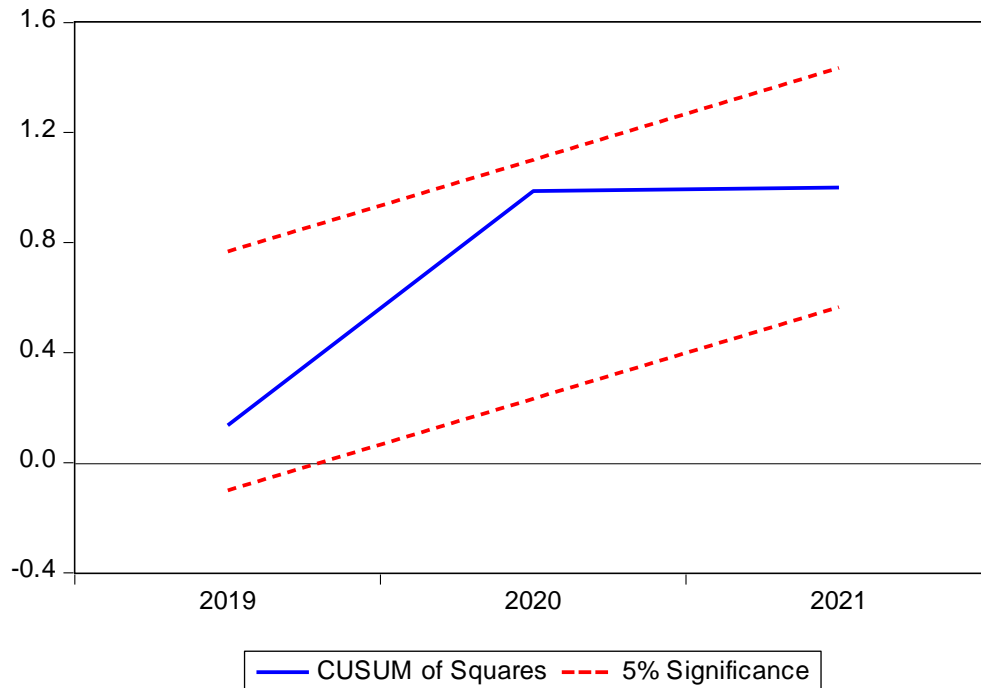


Figure 2: CUSUMSQ Plot

Source: Authors' computations, 2023 (Eviews9)

4.2 Discussion of Findings

The objective of the study is to investigate the financial determinants of entrepreneurship in Nigeria using time series data from 1991 to 2021. Foreign direct investments proxied by foreign direct investment inflows as a percentage of GDP, financial development proxied by financial markets index and financial inclusions proxied by financial institutions access index were used as financial determinants, while self-employment rate was used as a proxy for entrepreneurship. The study hypothesized that foreign direct investment increases self-employment rate in Nigeria. The empirical result revealed foreign direct investments have a negative and significant effect on self-employment rate in Nigeria which is inconsistent with the established hypotheses. However, the finding is consistent with the conclusions by Goel (2018), Eren et al. (2019), Thompson and Zang (2023), who found that foreign investment lowers the level self-employment and entrepreneurial activities. Contrary conclusions by Ebele and Moneme (2014) and Misra et al. (2014) Munemo (2015) revealed that foreign direct investments have a positive effect on entrepreneurship.

The findings of this study is also inconsistent with Hypotheses 2 that states financial development increases self-employment rate in Nigeria. The finding revealed that financial markets index has a negative and significant effect on self-employment rate in Nigeria. This is inconsistent with Dutta and Meierrieks (2021) who revealed that economies with an advanced financial development will bring about increased entrepreneurial activates, especially in economies with a strong economic and political structure. Also, it disagrees with Ansari et al. (2023) and Habib et al. (2023) that suggest private sector credit has a positive and significant effect on entrepreneurship index.

Lastly, having proposed that access to finance increases self-employment rate in Nigeria and this is consistent with the findings of the study. It further supports the works of Fareed et al. (2017) and Goel and Madan (2019) that financial inclusion positively affects the economic opportunities of entrepreneurs in the formal and informal sectors, while that of Ajide (2020) concluded that financial inclusion positively impacts entrepreneurship development. However, the finding is inconsistent with the conclusions reached by Dibal et al. (2021) that there is a linear and non-linear negative and significant effect of financial institutions access index on self-employment in Nigeria.

This study, therefore, has identified theoretical, empirical and practical implications. It established the importance of finance as a key determinant of entrepreneurship in Nigeria. The study revealed that not all financial determinates guarantee self-employment. While foreign investments affect self-employment rate negatively, access to finance increases the self-employment rate in the country. It means that making access to finance cheaper will encourage informal entrepreneurship in the country. The study further revealed that macroeconomic instability caused by high inflation spurs individual into self-employment to help cushion the effect of the economic hardship.

The study is country-specific focusing on financial determinants of entrepreneurship in Nigeria. Future research can further investigate these determinants in a panel data research based on regional or economic classifications. Also, other financial, economic, and institutional determinants can be further investigated using different measure of entrepreneurship. Additionally, there will be need to investigate the causal relationship in the finance-entrepreneurship nexus.

5. Conclusion

This study investigated the financial determinants of entrepreneurship in Nigeria. The study used foreign direct investments proxied by foreign direct investment inflows as a percentage of GDP, financial development proxied by financial markets index and financial inclusions proxied by financial institutions access index as the financial determinants, while self-employment rate was used as a proxy for entrepreneurship. The study established that foreign direct investments and financial development negatively affect self-employment rate in Nigeria, while financial inclusion increases the rate of self-employment in Nigeria. This study, therefore, recommends that policy makers need to make access to financial resources cheaper to individuals who want to be self-employed in order to encourage self-employment and entrepreneurial activities. This will have a resultant effect on the welfare of individuals and the growth of the economy.

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