

# Impact of foreign direct investment on financial institution performance in Nigeria: A study of Jos Metropolitan City of Plateau State

Isaac Jonathan Maude<sup>1</sup>, Shitnaan Emmanuel Wapmuk<sup>2</sup> and Arinzechukwu Jude Okpara<sup>3\*</sup>

<sup>1</sup>M.sc Student Faculty of Management Sciences, Department of Business Administration, University of Jos, Nigeria.

<sup>2</sup>Department of Business Administration, Faculty of Management Sciences, University of Jos, Nigeria.

<sup>3</sup>Juhoari Enterprise and Consulting Services, Rock Haven, Jos, Nigeria.

\*Corresponding author. Email: arinzeokparaj@yahoo.com; ndewofc@gmail.com

Copyright © 2023 Maude et al. This article remains permanently open access under the terms of the [Creative Commons Attribution License 4.0](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Received 24th August 2022; Accepted 19th December 2022

**ABSTRACT:** Financial institutions are faced with increasingly keen competition and rising costs as a result of regulatory requirements, financial and technological innovations, institutional distress and other challenges which have dramatic effects on their performances. The aim of this study is to examine the impact of foreign direct investment on financial institution performance in Nigeria. The study was grounded in profit maximization theory in relation to FDI performance. This study employs a survey design aimed at establishing the effects of the variables of foreign direct investment as the independent variable on financial institution performance as the dependent variable. The population of this study was based on 10 selected financial institutions operating in Jos Metropolitan city of Plateau Nigeria as at 1st January 2022. Each bank is represented by its Chief finance officer (CFO). Primary data and secondary data were collected from the annual financial statement of selected financial institutions through the respective Chief finance officers also, books, journals and publications, while primary data was collected through questionnaire, while the scope dwells on the deposit money banks in Jos, Plateau State. Descriptive statistics and content analysis were used to analyze the data collected. The results revealed that the FDI variables indicate a strong impact on financial institution performance in Nigeria. The study recommends that a solid framework should be set up in order to curtail bottlenecks and other issues in relation to FDI among Financial institution performance. The study concludes that FDI in relation to financial institutions' transactions can be intermediated by its dimensions (Foreign exchange).

**Keywords:** Financial institutions, foreign exchange, performance.

## INTRODUCTION

### Background to the study

Financial institutions play a vital role in the growth and development process of a nation. Traditionally, the role of banks in an economy is to facilitate an efficient payment system and to serve as a conduit for the implementation of monetary policies (Ron, 2012). A bank's primary purpose is financial intermediation; accepting deposits, making loans at a variety of maturities either fixed or at variable rates and making money through interest rates spread by charging for services provided (Onyemachi, 2012).

Financial institutions in Nigeria have undergone immense regulatory and technological changes since the attainment of independence in 1960 as this marked the establishment of formal money and capital markets, and portfolios (Ajibola, 2011). Nigerian Financial institutions are faced with increasingly keen competition and rising costs as a result of regulatory requirements, financial and technological innovations, institutional distress and other challenges which have dramatic effects on their performances.

Performance is a general structure that refers to the

enterprise's operations (Opusunju *et al.*, 2019). Opusunju *et al.* (2017) noted that performance reflects the productivity (efficiency) of members of an enterprise measured in terms of revenue, profit, growth, competitiveness, development, and expansion of the organization. It is defined as how an enterprise is doing in terms of an increase in profit, market share, product (service), quality, and expansion compared to other enterprises in the same industry (Akyuz and Opusunju, 2019). It is measured using diverse parameters by different organizations, firms can measure performance through market share, growth metrics, expansion, efficiency, survival, number of employees, competitiveness, and capital employed (Akyuz and Opusunju, 2020).

Specifically, increasing the maximum paid-up capital is expected to enhance the deepening of financial institution performance in Nigeria, this is expected to enable Nigerian financial institutions to offer services to the segments of the society that had remained outside the coverage of the existing sector. The proponent of consolidation Jemeli and Caroline (2019) opined that financial institutions in Nigeria that could not solely meet recapitalization requirements should engage in merger and acquisition, and, as such, recapitalization is seen as an important component of consolidation. Ajibola (2011) asserts that financial sector reforms and recapitalization have resulted from deliberate policy responses to correct perceived or intended banking sector crises and subsequent fractures.

The Nigerian financial sector is, no doubt, among the most digitally-driven sectors in the country. Over the years, the sector has witnessed tremendous changes owing to ever-dynamic financial innovations. Generally, Nigerian financial institutions through the Central Bank of Nigeria are adopting new solutions to improve and simplify operations which foster a move away from physical channels and towards digital and mobile delivery, especially in external transactions (PWC Nigeria, 2017). According to Onuoha *et al.* (2019), these financial innovations can boost aggregate income and by extension improve the performance of the institution in terms of efficiency levels, to achieve improved performance, financial institutions provide access to a diverse range of financial products and services for individuals and businesses. The use of e-banking channels has led to improved financial inclusion, which later improved performance in terms of efficiency (Motsatsi, 2016; Onuoha *et al.*, 2019).

The performance of financial institutions will be assessed from different perspectives using financial as well as non-financial indicators of financial institutions. Hughes and Mester (2015) identify two broad approaches in measuring the performance of banks (non-structural and structural approaches). Non-structural approaches use different performance measures (e.g. ROE, ROA, net interest margins, Tobin's q-ratio among others).

In contrast, structural approaches are based on

theoretical models of banking behaviour such as efficient and profit frontiers (Hughes and Mester, 2015). The efficiency measures how best financial institutions perform with respect to FDI, also the industry in the process of converting inputs into outputs, financial institutions are different from other business entities and they function as an intermediary between depositors and borrowers. Therefore, the performance of financial institutions has to be measured by considering the financial intermediation process (Jayasekara *et al.*, 2020).

In 2017, foreign reserves in African countries comprised 2.9% of global FDI inflows (in which Nigeria stood at 1.1%) compared to the 49.8% share for developed economies, 33.3% share for developing Asia, and 10.6% share for Latin America and the Caribbean (UNCTAD World Investment Report, 2018). FDI is now a major channel used for the transfer of resources from the developed economy to developing economies. One important item of today's globalization is the fostering of business or investment between two different countries using TNCs as frontiers (Hanson *et al.*, 2020). Many countries including Nigeria now depend on FDI as a major source of income for both economic growth and development. This is possible because FDI is an embodiment of new capital, technology advancement and new management. According to Abdelbaki (2019), FDI plays a very big role in economic growth contribution via technology transfer, increase in capital and value addition to human capital.

Foreign direct investment is a phenomenon caused by globalization through the integration of domestic markets with international markets. It is mainly accomplished through the creation of conducive business environment to the locals as well as to the foreign investors so as to enhance rapid economic growth (Ferrouhi, 2018). The lasting interest among various states implies that a long lasting association between the direct and indirect investments as it direct investors an effective voice with regard to management of direct investment markets (Hanson *et al.*, 2020).

In this study, FDI was conceptualized using foreign exchange rate, capital adequacy, equity capital and reinvested foreign earnings, as guided by Aguda and Oladoja (2017) and Uwubanmwun and Ogiemudia (2016). Specifically, CAR ratio had a positive relationship with ROA and a negative one with ROE and GDP growth rate, but had relatively no relation with Net Interest Margin, Capital Risk, Inflation Rate, Size of financial institution, and so on, as first expected. An empirical study by Ajayi (2020) showed that Bank Size had insignificant negative effect on capital.

However, FDI remains inadequate for rapid infrastructural and economic development. This issue prompts the researcher to employ the micro effect of exchange rate as on foreign direct investment in Nigeria. Okonkwo (2019) and Dabwor *et al.* (2019) stated that the exchange rate measures the external value of a currency and provides a direct relationship between the domestic

and foreign prices of goods and services. Foreign currency is required for making payments to the countries concerned for goods, services, interest payments on loans for investment there. Thus, Nigeria's demand for US dollars, British sterling, French francs and Japanese Yen is largely derived from Nigeria's demand for American, British, French and Japanese goods respectively. Nigeria's supply of these currencies is earned by its exports to those countries (Okonkwo, 2019).

Exchange rate policy in Nigeria has undergone a good number of changes (Obi *et al.*, 2016). There are three main quotations of exchange rate namely; the nominal exchange rate, the real exchange rate and the real effective exchange rate. The nominal exchange rate refers to the stated price of one country's currency in terms of another's while the real exchange rate represents the nominal exchange rate treated for inflation or deflated by the index of relative inflation rates (Bolarinwa, 2020). The average Capital Adequacy Ratio (CAR) of the banks in the industry was consistently above the stipulated minimum of 10.0 per cent in the first half of 2012 (Atuahene *et al.*, 2021).

The current study aims to make key contributions to the growing research focus given to the impact of FDI on performance of financial institutions in Nigeria, the study makes use of variables associated with FDI (foreign exchange rate). Despite these obvious benefits, a survey of existing literatures shows limited studies in this area in Nigeria. As such, this research seeks to fill the gap in knowledge inherent in this problem area, to investigate the impact of FDI on performance of financial institutions in Nigeria.

Research questions was raised which is "What is the impact of foreign exchange rate on financial institution performance in Nigeria?" While the objectives of the study was stated as "To examine the impact of foreign exchange rate on financial institution performance in Nigeria".

### Statement of the problems

Chimaobi (2018) posits that FDI is not simply (or even primarily) an international transfer of capital but rather, the extension of an enterprise from its home country into foreign host country. The extension of enterprise involves flows of capital, technology, and entrepreneurial skills and, in more recent cases, management practices to the host economy, where they are combined with the local factors in the production of goods and services.

Consequently, Nigerian needs substantial amounts of foreign investment to speed up rapid performance among financial institutions. Foreign direct investment is known for improving GDP through gains resulting from increases in international trade, international competitiveness and improved access to foreign markets for domestic products and training of labour force has been neglected by financial institutions in Nigeria, with focus on crude oil businesses.

Other shortcomings include the use of the standard within transformation to eliminate the individual country specific fixed effects which according to Elar (2018), is incapable to deal effectively with serial correlation of the transformed error terms. In these prior studies, the fact that current FDI is affected by the previous FDI (dynamic nature of FDI) is completely ignored the reaction of foreign exchange rate. The high regulation in the foreign exchange market which in advertently have a determining factor on the performance of financial institution in Nigeria. Since the adoption of exchange rate deregulation policy in Nigeria, the exchange rate, which is the price of domestic currency in terms of foreign currency, has become so volatile. Moreover, this study expands the investigation by using one variables that truly represent the broad spectrum of the whole financial sector (stock market, banking sector and bond market development variables). Against the above backdrops the study purpose is decipher impact of foreign direct investment on financial institution performance in Nigeria.

### Research hypothesis

**H<sub>01</sub>:** Foreign exchange rate does not have any significant impact on financial institution performance in Nigeria.

## LITERATURE REVIEW

### Conceptual review

#### **Concept of foreign direct investment**

Foreign direct investment (FDI) can be defined as the financed by a loan obtained in a host country, payments in exchange for equity (patents, technology, machinery etc.), and other methods. Neo-classical researchers regard FDI, foreign direct investment (FDI) as the process where people in one country obtain ownership of assets for the purpose of gaining control over the production, distribution and other activities of a firm in a foreign country and international capital flows as closing the savings gap in developing countries (Danja, 2012). It was recognised as a powerful engine for economic growth; it did not only serve the long-term commercial interests of foreign investors but can also play a significant role in the growth dynamics of host countries (Jonida, 2015). The Nigeria government had in the past endeavoured to provide foreign investors with a healthy climate as well as generous tax incentives within the banking and financial sector, but the result has not been sufficiently encouraging in the past. Nigeria still required foreign aids in the form of managerial and technical skills. FDI represents control of production as well as a flow of capital, and it is influenced by other factors as well in the financial sector (Nwanji *et al.*, 2020).

Peres *et al.* (2018) pointed out that FDI can be regarded as a form of foreign aid. The core goal of official development international aid is not only to promote economic growth, but also to reduce poverty. Okaro (2016) pointed out that if a developing country actively implements reform and opening policies to promote economic growth, then active political assistance can play a supporting role in domestic economic development. Peres *et al.* (2018) pointed out that the effectiveness of international aid is well known. International aid will bring some positive effects to developing countries, such as providing public goods, increasing human capital, alleviating huge debts, and promoting the development of some technologies to a certain extent. On the other hand, foreign aid also faces many challenges and criticisms. Foreign direct investment and other aid funds always ignore the industries or enterprises in developing countries that are in urgent need of funds, and are allocated to those places where there is no relative shortage of funds, resulting in uneven distribution.

In general, from a macro perspective, FDI has a positive effect on economic development and the balanced development of the labor market. Otegunrin *et al.* (2018) research shows that for every 1% increase in FDI, actual employment can increase by 0.008%. Poelhekke (2014) research shows that FDI can create a large number of employment opportunities in the short-term. The impact of medium-term FDI on total employment is not yet clear. The impact of long-term FDI on employment is positive, but it depends on the spillover effect.

### ***Determinants and development impacts of FDI***

In the context of FDI in developing countries, two strands of literature can be distinguished: First, there are studies that analyse empirically or by means of case studies, which factors encourage or deter foreign investment in a country. The second strand, examines the consequences of FDI on the host country in general or on domestic companies specifically. Besides macro-economic impacts on indicators such as growth, poverty, exports or employment (Saddimbah, 2014), many studies analyse the existence of spill-over effects. To the largest extent, these studies on spill-over effects of FDI focus on Latin American, South-East Asian countries or Eastern European transition economies, while work on SSA countries is scant.

### ***Foreign direct investment in the banking sector in Nigeria***

Foreign direct investment (FDI) was recognised as a powerful engine for economic growth; it did not only serve the long-term commercial interests of foreign investors but can also play a significant role in the growth dynamics of

host countries (Jonida, 2015). The Nigeria government had in the past endeavoured to provide foreign investors with a healthy climate as well as generous tax incentives within the banking and financial sector, but the result has not been sufficiently encouraging in the past. Nigeria still required foreign aids in the form of managerial and technical skills. FDI represents control of production as well as a flow of capital, and it is influenced by other factors as well in the banking sector. In the traditional trade approach, trade and FDI might be substituted, but other factors affect FDI, such as technology and firm-specific assets (Danja, 2012). Foreign Direct Investment (FDI) plays an extraordinary and growing role in global business.

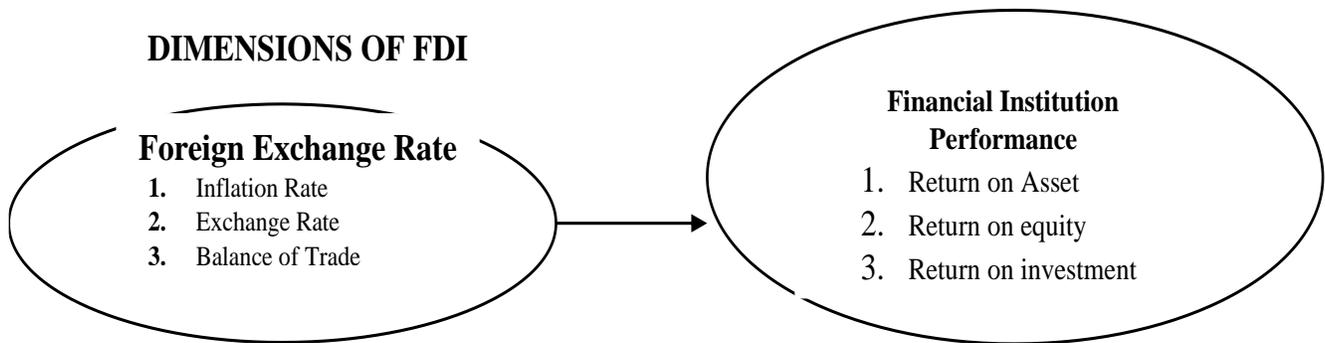
### ***Role of financial institution in facilitating FDI***

FDI inflows in the financial sector are mostly channeled through banks which may hold or distribute FDI inflows to priority sectors (Olokoyo, 2012). However, the lack of support from government and regulatory authorities of the host country may negatively affect FDI inflows into a country. Past studies have identified the key drivers of FDI, and concluded that economic size, economic growth, financial development, infrastructure, institutional development, economic freedom, distance between countries, cultural difference, inflation, openness and tax rates are some of the key drivers of FDI inflows (Yilmaz and Ozel, 2014; Salman *et al.*, 2016; Zyphur and Pierides, 2019).

### ***Impacts of FDI on the financial sector and performance***

Zyphur and Pierides (2019) in their study on "Financial Sector FDI and Host Countries: New and Old Lessons" admits that the foreign direct investment in the banking and financial sector relatively a recent phenomenon, which comes in the form of financial institutions in emerging and industrialized countries and establishing subsidiaries and facilities in developing countries. Saad (2014) in his work "Foreign Direct Investment in the Banking Sector: Empirical Evidence from Turkey" posited that there have been inflows of FDI capitals into especially developing countries through the establishment of multinational banking activities.

Zyphur and Pierides (2019) argues that more recently, foreign direct investment into the financial sector has increased drastically especially in developing economies. The proliferation of foreign banks in Ghana is a perfect example to support the above argument. Studies have revealed that for a host country to get maximum benefits from FDI inflows, it must have a well-developed financial sector as Saad (2014) in their studies "Foreign Direct Investment, Financial Development and Economic Growth: Empirical Evidence from North African Countries"



**Figure 2.** Conceptual model (Source: Akyuz and Opusunju, 2020; Okonkwo, 2019).

confirmed this statement by positing that the development of the local financial market and system is very critical for the realization of the overall impact of foreign direct investment on economic growth. Onaji-Benson (2016) examined the impact of foreign direct investment on the profitability of telecom companies in India.

### **Foreign exchange**

Foreign Exchange Transactions It is the conversion of a country's currency to another for the purpose of transaction executed by the banking sector over a specified period of time. Foreign exchange transactions operations of financial institution are the facilitator of international trade between Nigeria and the outside world as it involves the sales and purchase of foreign exchange (Manyo *et al.* 2016).

### **Concept of financial institution performance**

Performance of financial institutions was rated as strongly rated as institutions achieved financial conditions which are satisfactory as well as improved operations results despite increase in market competition as the firms scramble for market shares (Danja, 2012). Introduction of new or foreign products in the market as a result of increase in competition as the system continue to remain more capitalized. Financial soundness is defined as a phenomenon where by the fund from the depositors are kept safely in a stable banking system. The financial soundness tends to vary in each financial institution and would be unsatisfactory or satisfactory depending on the test and preference of customers.

### **Conceptual framework**

Kasau (2017), defined a conceptual framework as a hypothesized model that identifies the model for the study and compares the independent and dependent variables. The main aim of a conceptual framework is to describe and categorize concepts that are relevant to the study and map

the relationships that exist among them. The Independent variable of this study is foreign direct Investment, with the following dimensions; (foreign exchange rate, capital adequacy, equity capital and reinvested foreign earnings). On the other hand, dependent variable is performance financial institution (Figure 1).

### **Theoretical review**

In Gakii (2017), a theory is a system of interconnected ideas that condense and organize knowledge about the world. The study will be grounded on the theory of profit maximization which relates to impact of FDI on performance of financial institution in Nigeria.

### **Profit maximization theory**

The profit maximization theory was founded by to Marshall (1890). The theory is based on the argument that the key goal of enterprises is the maximization of profits. According to the theory, every person who is part of the organization acts in his self-interest to make sure that the profits of the business are maximized. The theory is usually used in the economic perspective whereby organizations ensure their profits are maximized by equating marginal revenue to marginal costs.

Players in the financial institutions industry in Nigeria have adopted various strategies to improve their performance activities in connection to FDI. On the part of developing and developed nations, there is need to seek for foreign investment as they have seen the importance of such investment in the economic activities, through maximizing profit through the generated revenue from the transaction (Wong, 2012).

### **Empirical review**

#### **Bank performance**

In the United State of America, Cyree and Morris (2018) conducted a research on the role of market demographics

in determination of performance of banks, by using a sample of single county bank. The study adopted a descriptive research design. The study found that market demographics play a key role in the determination of the performance of financial institutions. Performance was measured in terms of return on equity, return on investment, and return on assets.

### **FDI and Bank performance**

Salazar *et al.* (2012) did a study on the relationship that exists between capital structure and profitability of listed industrial firms on the main board of the Kuala Lumpur Stock Exchange (KLSE). Data analysis was done with the help of Ordinary Least Squares and Correlation Analysis. According to the findings of the study, a significant relationship did exist between market imperfections changes in capital structure and the firm's profitability. Another finding was that there was a negative relationship between equity size and the firm's financial performance.

In Kenya, Githire and Muturi (2015) conducted a research on the effect of equity financing on financial performance of firms listed at the Nairobi Securities Exchange. The research population was made up of the organizations listed at the Nairobi Securities Exchange and the study's sample was made up of a census of all organizations listed at the Nairobi Securities Exchange between 2008 and 2013. The research used an explanatory non-experimental research. There was overwhelming evidence that showed that equity financing positively affected the financial performance of the organization. The reason behind this was that there was direct control from the equity holders who ensured to maximize the interest of the shareholders.

In India, Qureshi *et al.* (2015) found that almost one-fourth of the foreign direct investment in India is from foreign investors who reinvest their earnings, which shows the commitment to the operations in India. This analysis was done on official data from the years 2008-09 and 2012-13. Tsaurai (2014) conducted a study on the relationship between reinvested earnings and foreign cash acquisitions' profitability. According to the US tax 1819 laws, there is an incentive for the organization in the US meant to avoid foreign earnings repatriation as the government has put up more charges for any repatriated foreign earnings. As pointed out in ASC 740, taxes on foreign earnings are treated differently. Incentives are higher so that firms can designate foreign earnings in terms of permanently reinvested earnings and delay the recognition of the deferred tax liability that comes as a result of repatriation of the US tax which leads to a higher after tax income. Consistent with expectations, the study observed that organization that showed high earnings that were termed as PRE and which were held as cash did not make more acquisitions that were profitable by making use of their cash consideration compared to organizations that had high levels of PRE that were considered as cash.

### **Gaps in literature**

This study bridges the literature gap by providing an update on the impact of FDI on the performance of financial institutions in Nigeria by employing variables of foreign direct investment as independent variables (foreign exchange rate) and performance as the dependent variable. The study also focuses on the gap that exists in the state of knowledge on the impact of FDI and financial institution performance, with a clear focus on the variables (foreign exchange rate). Nigeria still fails to keep pace with others in attracting FDI poor infrastructure, inadequate government policies, uncontrollable corruption, and inflexible labour laws due to the foreign exchange rate, thereby making the system prone to poverty, liberalized trade, banking and insurance sector not performing. The nonprofit world has no corollary, making it difficult, costly, and time-consuming to raise money. A country of Nigeria's economic where performance of financial institutions is rated beyond average since the government has reluctantly refused to address the underlying structural bottlenecks that make Nigeria's financial institutions encounter through their various transaction with respect to foreign direct investment and other business investments. Therefore, it should be made clear the factors that determine the optimal level of foreign retained earnings in any given financial period among financial institutions in Nigeria.

### **METHODOLOGY**

This study employs a survey design because it aims at establishing the effects of the variables of independence on the variables of the dependence. It is an inferential and descriptive survey design that is cross sectional in nature (collected at one-time period). Appiah and Fynn (2017) maintain that survey design helps a study to describe the relevant aspects of the phenomenon under consideration and provide detailed information about each relevant variable and it is popular in social and management sciences and associated with deductive research approach (Kerdpitak and Jermsittiparsert, 2020; Wangechi and Ndeto, 2019).

The population of this study is 10 selected financial institutions operating in Jos Metropolitan city of Plateau Nigeria as of 1st January 2022 (Table 1). Each bank is represented by its Chief finance officer (CFO).

### **Data collection**

The data for this study were obtained from two main sources namely primary and secondary sources. The study collected both primary data and secondary data. Secondary data were collected from the annual financial statement of selected financial institutions through the respective Chief finance officers also, books, journals and

**Table 1.** Population of the Study.

S/N	Names of financial institutions	Group chief finance officer
1	Eco Bank Plc	1
2	Access Bank Plc	1
3	Zenith Bank Plc	1
4	Wama Bank Plc	1
5	Guarantee Trust Bank Plc	1
6	Unity Bank Plc	1
7	First Bank Plc	1
8	United Bank for Africa Pl	1
9	Fidelity Bank Plc	1
10	Sterling Bank Plc	1
11	Union Bank Plc	1
12	Stanbic IBTC Bank	1
13	First City Monument Bank Plc	1
	<b>Total</b>	<b>10</b>

**Table 2.** Tests of reliability for risk management s' questionnaire.

Number	Type of reliability test	Value	Remarks
1	Cronbach Alpha	0.799	Very Reliable
2	Split-half	Part 1=0.715 Part 2 =0.692	Very Reliable fairly Reliable
3	Parallel	0.799 0.801 (unbiased)	Very Reliable Very Reliable
4	Strict Parallel	0.699 0.703 (unbiased)	fairly Reliable Very Reliable
5	Guttman	Lambda 1 = 0.765 Lambda 2 = 0.818 Lambda 3 = 0.799 Lambda 4 = 0.686 Lambda 5 = 0.795 Lambda 6 = 0.849	Very Reliable Very Reliable Very Reliable fairly reliable Very Reliable Very Reliable

publications. For primary data, the study employed semi-structured interviews to collect data from Chief finance officers to authenticate the data from audited financial statements. This is a tool of data collection in which each person is asked to respond to the same set of questions in a predetermined order (Bell et al., 2018). Semi-structured interview is where the questions are pre-planned prior to the interview but the interviewer gives the interviewee the chance to elaborate and explain particular issues through the use of open-ended questions. They enable a researcher to obtain information on the knowledge of FDI to the finance officers in some selected financial institutions in Jos Plateau State. The questionnaire was adapted from the study of Nwanji *et al.* (2020).

### Reliability

Reliability refers to the extent to which a measurement scales or test is dependable, consistent, predictable and stable (Thornhill, 2015). The reliability analysis is to test the internal consistency of the items. Cronbach alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. Abdulkadir (2018) posits that reliability refers to the extent to which a set of variables is consistent with what is intended to be measured. The results of the Cronbach alpha analysis and the other confirmatory tests are presented in Table 2.

This study adopts the Cronbach's Alpha reliability test. The Cronbach's Alpha is computed using the stated

formula given as:

$$\alpha = \frac{k}{k-1} \left[ 1 - \frac{\sum S_{ki}^2}{\sigma^2} \right]$$

Where:  $\alpha$  = Cronbach's Alpha Coefficient;  $k$  = number of items in the questionnaire (1, 2, 3, ..., N);  $i = 1, 2, 3, 4, 5, \dots, N$ ;  $S_{ki}^2$  = sample variance;  $\sigma^2$  = the population variance; and 2 = constant

## Data analysis

Quantitative data collected through the questionnaires was checked for completeness and accuracy and usability. Descriptive statistics and content analysis were used to analyze the data collected. Closed questions were analyzed through the help of the Statistical Package for Social Science (SPSS) computer software by assigning numbers to responses for analysis of qualitative data as it is efficient and gives straight formal analysis. Regression is able to estimate the coefficients of the linear equation, involving one or more independent variables, which best predicted the value of the dependent variable. The researcher used multiple linear regression analysis to analyze the data. The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \epsilon$$

Where:  $Y$  = Performance of Financial institutions;  $X_1$  = Foreign exchange rate;  $\beta_0$  = Constant  $\beta_1$   $\beta_2$  = the regression equation coefficients for the variables, and;  $\epsilon$  = error.

## RESULTS

### Profile of the respondents

This study engaged 13 CFO on interview, especially those banks that have their branches in Jos Metropolitan city of Plateau State (First bank, Access Bank, UBA, Union Bank, Guarantee Trust Bank, Zenith Bank, Eco Bank, Stanbic IBTC Bank, First City Monument Bank, Wema Bank, Fidelity Bank, Sterling Bank and Unity Bank). The questionnaire was given to the chief finance officer (CFO). As a result of the researcher's persistence in completing each questionnaire, since the population is small, all questionnaires were retrieved from the respondents. Writing materials were given as an encouragement which to an immense degree encouraged all participants.

The descriptive statistics show that 6 respondents representing (60%) of the respondents are male while 4 respondents representing (40%) are female, for the years respondents spent working as CFO 1 (10%) of the respondents have spent 1-5 years, 6 (60%) of the

respondents have spent 6-10 years while 1 respondent each with (10%) have spent 11-15, 16-20 and 21 years and above as CFO. Educational qualification of the CFO, 1 of the respondent each with (10%) holds B.Sc and Other certificates, while 4 respondents each hold M.Sc or Ph.D. Marital status shows that 7 (70%) respondents are married, while 3 (30%) respondents are either widows or widowers. On the age of the respondents, 2 (20%) are within the age of 26-40 years, 7 (70%) respondents are between 41-53 years and 1 ((10%) respondent is above 56 years.

From the descriptive statistics (Table 3), the independent variables result shows that the mean value for Foreign exchange (FX) had 17.6328 mean, while the performance of financial institutions has a mean of 19.0213 which is higher than other variables.

### Multicollinearity

Multicollinearity is a dilemma that happens when the independent variables are extremely interrelated to as high as 0.9 and above (Tabachnick and Fidell, 2007). The general rule of the cut-off points is that the VIF and the tolerance values should not exceed 10 and not be less than 0.10 (Hair *et al.*, 2012). Table 2 clearly shows that tolerance ranges between 0.384 – 0.608 significantly > 0.10 and less than 10. Similarly, VIF ranges from 1.646–2.604, and thus, is good enough as being < 10 (Tabachnick and Fidell, 2007). Consequently, it is concluded that there is no multicollinearity problem among the variables. The multicollinearity test is based on tolerance values and VIF.

### Hypotheses testing

In this section, attempt is been made to show the results of the main effects for independent variables (foreign exchange) and the performance of financial institutions as earlier hypothesized. Table 5 shows the standardized path coefficient ( $\beta$ ), standard error, t-values, p-value and decision taken. All the relationships are represented by standardized beta values. In testing the relationships, the significance level was set at  $p < 0.05$  (Hair *et al.*, 2012). As indicated in Table 5, the two direct relationships between the four independent variables and the dependent variable demonstrate significant positive effects. The four significant relationships include: (1) Foreign Exchange (FX) and Performance of financial institution (PERF) ( $\beta = 0.104$ ;  $t = 1.816$ ,  $p > 0.070$ ), (2); Capital adequacy (CA), and Performance of Deposit Money Banks (PERF) ( $\beta = 0.090$ ;  $t = 1.401$ ,  $p > 0.162$ ); (3) Equity Capital (EC) and Performance of Deposit Money Banks (PERF) ( $\beta = 0.071$ ;  $t = 1.311$ ,  $p > 0.102$ ); and (4) Reinvested Foreign Earnings (RFE) and Performance of Deposit Money Banks (PERF) ( $\beta = 0.049$ ;  $t = 1.400$ ,  $p > 0.010$ ).

**Table 3.** Descriptive statistics and correlation.

Variables	N	Mean	Std Dv.	Skewness	Kurtosis	1
FX	10	17.6328	3.28663	-.249	.254	1.000

Where: FX =Foreign exchange.

**Table 4.** Collinearity statistics.

Independent variables	Tolerance	VIF
Foreign exchange	0.548	1.825

Source: SPSS Output 26.0.

**Table 5.** Hypotheses testing.

Hypotheses	Relationship	Std beta ( $\beta$ )	Std. error	T-value	P-value	Decision
H1	FX $\rightarrow$ PERF	0.104	0.070	1.816	0.070	Fail to reject

Source: SPSS OUTPUT 26.0.

**Table 6.** Coefficient result.

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.883	0.153		25.368	0.000
	FX	0.104	0.070	0.0820	1.816	0.002

a. Dependent Variable: PERF (Source: SPSS 26.0).

### ***Hypothesis 1: Foreign exchange rate does not have any significant impact on financial institution performance in Nigeria***

This direct hypothesis is rejected based on SPSS output, which shows that there is a statistically significant relationship between foreign exchange and financial institution performance (FX-PERF). In addition, the relationship between the constructs is positive ( $\beta = 0.104$ ;  $t = 1.816$ ,  $p > 0.070$ ). Based on the one-tailed test, the t-value of 1.810 is significant since 1.65 is the threshold value for acceptance, therefore the study fail to reject  $H_{01}$ .

### **Panel regression analysis**

Model 1: foreign direct investment variables (foreign exchange) with the performance of financial institutions in Nigeria; The Hausman test was adopted to select the best-fit model to test the hypothesis; the cross-section chi-square statistic with 5 degrees of freedom is 2.80 and the p-value of 0.0000 is presented in Table 4. The p-value of the Hausmann chi-square statistic is lower than 5%. The null hypothesis is accepted.

Table 6 shows the coefficient result of a beta value of 0.0820, which indicates a higher percentage of the

variables. Table 7 explains the correlation between FDI and the performance of financial institutions in Nigeria with a T statistic of 1.469 and probability of 0.0002.

The R<sup>2</sup> of 66% shows the goodness of the panel regression (Table 8). The exogenous variables are jointly responsible for a 66% variation in the endogenous variable with an unexplained variation of 34%. Financial institution performance proxy by studied variables indicates a negative and significant relationship between foreign direct investment variable (foreign exchange) and financial institution performance. The overall panel regression results are significant. The F-stat of 28.87 is associated with a p-value of 0.000. The result is reliable for a meaningful analysis. The Durbin Watson statistics of 1.90 is approximately 2.00 ruling out all possible suspicion of first-order positive autocorrelation.

## **DISCUSSION**

### **The Relationship between foreign exchange and financial institution performance**

From the statistical findings in the result Tables, foreign exchange and financial institution performance with foreign direct investment transactions, shows the

**Table 7.** FDI ratio correlates with performance financial institutions in Nigeria.

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Constant	2.649	1.802	1.469	0.0002
FX	-0.185	0.148	-1.2467	0.0001

Source: Authors' Computation (2022).

**Table 8.** Effects specification Hausman Test.

R <sup>2</sup> Adjusted	R-squared	F-Stat	P-value	Test	D.w Stat	P-value
0.66	0.63	28.87	0.0000	2.80	1.902	0.7305

Source: Authors' Computation (2022).

importance of foreign exchange in line with the activities and transactions of the financial institutions, with the effect of fluctuation of the foreign exchange, it appears very difficult for the financial institutions involves. The finding of this result was in line with Ahmed (2014) and Opusunju *et al.* (2019). It was also supported by the study of Manyo *et al.* (2016). The possible reason for the significant relationship between foreign exchange and the performance of Deposit Money Banks was supported by the above studies.

The objectives of the new capital standards include raising the capital base, enhancing risk coverage, and reducing pro-cyclicality movements within the banking system through counter-cyclical buffers. Capital Adequacy Ratio (CAR) gives some protection to Deposit Money Banks when conducting transactions and the higher the CAR, the higher the level of protection. Empirically, the result indicated a positive impact of capital adequacy on performance of Deposit Money Banks especially when dealings involve foreign direct investment, and this goes in line with the theoretical expectation and in line with the findings of Jonida (2015). A positive relation between capital adequacy and performance was suggested by Gul *et al.* (2011) which shows a significant relationship between Deposit Money Banks' performance and capital adequacy. Based on the results of this study, there is a relationship between equity capital and Deposit Money Banks' performance. Equity capital was recorded high and very crucial when involving foreign direct investment, and it establishes the facts that foreign direct investment capital is financed by equity capital by financial institutions. Financial performance is the process of measuring the result of a firm and finding equity capital as a positive variable to the financial performance of any Deposit Money Banks involved in foreign direct investment. These findings agree with Saddimbah (2014) findings that equity capital results in greater value for equity holders leading to better performance of the firm. Based on the results of this study, there is a relationship between reinvested foreign earnings and Deposit Money Banks' performance. From the result, reinvested foreign earnings and performance of financial institutions, the study found that they were all statistically

significant with performance, there exists a positive and statistically significant relationship. This means Deposit Money Banks involved in FDI also reinvest part of their profit within the economy for more profit. On a balance sheet or profit and statement, kept earnings appear as the part of the profit that stays after a company pays its taxes and issues dividends to its stockholders. The results of this study are consistent with previous studies by Ndaba (2015). These findings also agree with Eseye and Yarosan (2014) that reinvestment of earnings by overseas investors reflecting their long-term commitment towards the operations in India had a significant influence on performance.

## Conclusion and Recommendation

The study concludes that foreign direct investment has a significant effect on financial institutions' performance in Nigeria. The study revealed that foreign direct investment has a significant and positive effect on the return on equity of financial institutions' performance in Nigeria. The study also concludes that foreign exchange has a significant effect on the performance of Nigerian financial institutions. It is believed that foreign direct investment is significant for emerging countries. Many developing countries see FDI as a source of acquiring funds to augment the domestic market, enhancing foreign exchange reserves and expanding domestic savings hence they provide incentives to attract it. Foreign Direct Investment is important in the activities of financial institutions in Nigeria. The study established that the variables of foreign direct investment (Foreign exchange) have a significant effect on the performance of the financial institution in Nigeria. The study revealed that these variables (foreign exchange) significantly and positively affect those Nigerian financial institutions involved in foreign direct investment. The capital also increases the equity holder's value thus positively impacting their performance through profitability. The financial institution that applies the use of equity financing can improve their viability due to the direct control and due to the monitoring of how the resources are

used by the equity holders in a bid to maximize their wealth. The study found that foreign exchange establishes strong effects on financial the performance of listed financial institutions.

In view of the above conclusions drawn from the findings, the following recommendations were made to contribute to the to the effect of foreign direct investment and financial institution performance in Nigeria:

1. The government should reduce discrepancies in foreign exchange rates through policies of appreciation or depreciation of the countries' exchange rates.
2. Financial institutions should balance foreign exchange rates with the banking sector in order to sustain the economy.

## CONFLICT OF INTEREST

Authors declare that they have no conflicts of interest.

## REFERENCES

- Abdelbaki, H. H. (2019). Macroeconomic determinants of non-performing loans in GCC economies: Does the global financial crisis matter? *International Journal of Economics and Business Research*, 17(4), 433-447.
- Aguda, N. A., & Oladoja, I. (2017). The Impact of Foreign Direct Investment on Economic Growth in Nigeria. *International Journal of Business and Law Research*, 5(1), 52-60.
- Ahmed, A. (2014). *Analysis of Performance of Sample Microfinance Institutions in Nigeria* (Unpublished Thesis). Department of Banking and Finance, Eastern Mediterranean University, Gazimagusa, North Cyprus
- Ajayi, S. I. (2006). *The determinants of foreign direct investment in Africa: A survey of the evidence*. Foreign Direct Investment in Sub-Saharan Africa: Origins, Targets, Impact and Potential. Retrieved from [https://www.africportal.org/documents/5981/FDI\\_papers\\_booklength\\_volume.pdf#page=25](https://www.africportal.org/documents/5981/FDI_papers_booklength_volume.pdf#page=25)
- Ajibola, M. A. (2011) Casual relationships between financial development, foreign direct investment and economic growth: The Case of Nigeria. *International Journal of Business Administration*, 2, 93-102
- Akyuz, M., & Opusunju, M. I. (2020). Infrastructural and performance of small and medium scale enterprises in federal capital territory (FCT) Abuja, Nigeria. *Journal of Global Economics and Business*, 1(3), 93-108.
- Appiah, W. A., & Fynn, I. A. (2017). The Impact of occupational stress on employee's performance: A study at Twifo Oil Palm Plantation. *African Journal of Applied Research*, 3(1), 14-25.
- Atuahene, S. A., Yusheng, K., Benturn-Micah, G., & Aboagye, A. K. (2021). Impact of Capital Adequacy on Banks' Performance: Considering the Basel International Regulatory Framework for Banks. *Etikonomi*, 20 (1), 45-54.
- Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*. Oxford university press.
- Bolarinwa, O. A. (2020). Sample size estimation for health and social science researchers: The principles and considerations for different study designs. *Nigerian Postgraduate Medical Journal*, 27(2), 67-75.
- Chimaobi, C. M. (2018). Impact of internet banking on profitability of commercial banks in Nigeria: A Study of Zenith Bank Plc [2005 – 2017] (Unpublished Thesis). Godfrey Okoye University Uguwu Nike, Enugu
- Cyree, K., & Morris, B. (2018). The effects of income and population demographics on a single county bank performance. *Journal of Economics and Finance*, 42(1), 174-190.
- Dabwor, T. D., Ezie, O., & Tukur, D. M. (2019). Effect of Nominal Exchange Rates on Nigeria's Balance of Payments: 1986-2016. *Benue Journal of Social Sciences*, 6(10), 35-52
- Danja, K. H. (2012). Foreign direct investment and the Nigerian economy. *American Journal of Economics*, 2(3), 33-40.
- Elar, S. J. (2018). *The effect of inflation on foreign direct investment in Kenya*. Unpublished Masters Research Project in Finance, University of Nairobi.
- Esew, N., & J. Yaroson (2014). Institutional quality and foreign direct investment in Nigeria: A prognosis. *IOSR Journal of humanities and social science*, 19(6), 37- 45.
- Ferrouhi, E. M. (2018): Determinants of banks' profitability and performance: An overview. *Contemporary Research in Commerce and Management*, 4, 61-74. Retrieved <https://mpr.ub.uni-muenchen.de/89470/>
- Gakii, M. F. (2017). *Effect of work-life balance on employee productivity in universities in Kenya*. School of business, KCA university.
- Githire, C., & Muturi, W. (2015). Effects of capital structure on financial performance of firms in Kenya: Evidence from firms listed at the Nairobi securities exchange. *International Journal of Economics, Commerce and Management*, 3(4), 1-10.
- Gul, S., Irshad, F., & Zaman, K. (2011). Factors Affecting Bank Profitability in Pakistan. *Romanian Economic Journal*, 14(39), 61-87.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, 40, 414-433.
- Hanson, U. E., Efang, U. O., & Ekanem, B. C (2020). Foreign Direct Investment inflows and its impact on the performance of the Nigerian economy (1981-2017). 8(2), 4192-4215
- Hughes, J., & Mester, L. (2015). Measuring the performance of banks: Theory, practice, evidence and policy implications. In: *The Oxford Handbook of Banking* (Second edition, pp. 247-270). Oxford University Press.
- Jayasekara, S. G. S. D., Perera, K. L. W., & Ajward, A. R. (2020). Empirical studies on the performance of banks: A systematic literature review for future research. *Journal of Research in Emerging Markets*, 2(4), 1-20.
- Jemeli, K., & Caroline, A. (2019). Effect of financial innovations on financial sustainability of microfinance institutions in Eldoret Town, Kenya. *Journal of Economics and Finance*, 10(5), 80-89.
- Jonida, L. (2015). Foreign direct investment in banking system. *Journal of Research and Development*, 2(1), 1-10.
- Kasau, M. G. (2017). Work-life balance and employee performance in the ministry of finance and economic planning Kitui country Government, Kenya. *A Research Project Submitted to the School of Business in Partial Fulfillment for the Award of Degree of Master of Business Administration of Kenyatta University*.
- Kerdpitak, C., & Jermstittiparsert, K. (2020). The effects of workplace stress, work-life balance on turnover intention: An empirical evidence from pharmaceutical industry in Thailand.

- A Multifaceted Review Journal in the Field of Pharmacy*, 11(2), 586-594.
- Manyo, S. T., Sabina, N. E., & Ugochukwu, U. S. (2016). The effect of foreign exchange transaction on the performance of Nigerian banks. *Journal of Business Management*, 2(11), 139-154.
- Ndaba, S. (2015). The impact of foreign direct investment on economic growth in Zambia: A study in the context of a natural resource dependent economy. A research paper presented in partial fulfilment of the requirements for obtaining the degree of Master of Arts in Development Studies, Economics of Development (ECD).
- Nwanji, T. I., Howell, K. E., Faye, S., Otegunrin, A. O., Eluyela, D. F., Lawal, A. I., & Eze, S. C. (2020). Impact of foreign direct investment on the financial performance of listed deposit banks in Nigeria. *International Journal of Financial Research*, 11(2), 323-247.
- Obi, K. O., Oniore, J. O., & Nnadi, K. U. (2016). The Impact of Exchange Rate Regimes on Economic Growth in Nigeria. *Journal of Economics and Sustainable Development*, 7(12), 116-127.
- Okaro, C. S. (2016). Foreign Direct Investment (FDI) inflows and real sector of the Nigerian economy (2000-2015). *Journal of Policy and Development Studies*, 10(4), 1597-9385.
- Okonkwo, J. J. (2019). Exchange rate variation and Nigeria's balance of trade. *Discovery*, 55(283), 361-366.
- Okonkwo, R. I., Egbunike, F. C., & Udeh, F. N. (2015). Foreign direct investment and economic growth in Nigeria. *Developing Country Studies*, 5(9), 47-52.
- Olokoyo, F. O. (2012). Foreign direct investment and economic growth: A case of Nigeria. *Journal of Management Research*, 4(1), 1-20.
- Onaji-Benson, T. (2016). The role of the Nigerian institutional environment on foreign direct investment inflows. *Bullion*, 40(2), 51-60.
- Onuoha, O., Peregrino, T., & Isiavwe, U. (2019). Fintech as the driver for growth in Africa's banking sector. Retrieved from the DLA Piper website: <https://www.dlapiper.com/en/belgium/insights/publications/2019/04/africa-connected-issue-2/fintech-as-the-driver>.
- Onyemachi, C. (2012). An Empirical Analysis of Financial Deepening and Economic Growth (1986-2010). Ahmadu Bello University, Economics, Zaria.
- Opusunju, M. I., Akyuz, M., & Abdullahi, I. A. (2019). Effect of structure and strategy on organizational performance: case study of Remou Oil Nig. Ltd. *American Journal of Environmental and Resource Economics*, 4(4), 139-143.
- Opusunju, M. I., Akyuz, M., & Jiya, N. S. (2017). Application of simplex method to evaluate advertising and performance of quoted multinational corporation in Nigeria. *Nile Journal of Business and Economics*, 7, 3-1. <https://doi.org/10.20321/nilejbe.v3i7.117>
- Otegunrin, O. A., Nwanji, T. I., Agba, D. Z., Olowookere, J. K., Fakile, S. A., Ajayi, S. A., & Oladiran, T. (2018). Outsourcing of accounting services and strategic cost management method (A case study of Dangote flour Plc and Doyin Investment Nig. Ltd). In: Proceedings of the 32rd International Business Information Management Association Conference, Seville, Spain.
- Peres, M., Ameer, W., & Xu, H. (2018). The impact of institutional quality on foreign direct investment inflows: evidence for developed and developing countries. *Economic Research-Ekonomska Istraživanja*, 31(1), 626-644.
- Poelhekke, S. (2014). Do global banks facilitate foreign direct investment? VU University Amsterdam and De Nederlandsche Bank (Dutch Central Bank).
- PWC Nigeria (2017). Nigeria fintech survey 2017. Retrieved from <https://www.pwc.com/ng/en/publications/nigeria-fintech-survey-report.html>.
- Qureshi, M. A., Sheikh, N. A., & Khan, A. A. (2015). A Revisit of pecking order theory versus trade-off Theory: Evidence from Pakistan. *Pakistan Journal of Commerce and Social Science*, 9(2), 344-356.
- Ron, B. (2012). Bank financial analysis. Richards College of Business, Accounting and Finance, Carrollton.
- Saad, R. M. (2014). Effects of equity and debt financing on SME performance in Malaysia.
- Saddimbah, G. (2014). Effect of Foreign Direct Investments (FDI) inflow in Kenya on Economic Growth (GDP), Exports and Balance of Payment (BOP). Unpublished MBA Thesis, United States International University-Africa.
- Salazar, L. A., Soto, C. R., and Mosqueda, E. R. (2012). The impact of financing decisions and strategy on small business competitiveness. *Global Journal of Business Research*, 6(2), 93-103.
- Salman, A., Atefi, R. K., Sammour, H. I., & Zelenskikh, A. (2016). Empirical analysis of Foreign Direct Investments: The case of UAE. 2nd Academic International Conference on Business, Marketing and Management AICBMM. Harvard University, Boston, 978(1), 911185-05-5.
- Tabachnick, B. G., & Fidell, L.S. (2007). *Using Multivariate Statistics*. 5th edition. London: Pearson.
- Thornhill, S. (2015). Knowledge, innovation and firm performance in high- and low technology regimes. *Journal of Business Venturing*, 21(5), 687-703.
- Tsaurai, K. (2014). Banking sector development and foreign direct investment. A case of Botswana. *Risk Governance and Control: Financial Markets and Institutions*, 4(3), 44-50.
- UNCTAD World Investment Report (2019). World Investment Report: Special Economic Zones. Retrieved 30th September 2019 from [https://unctad.org/en/PublicationsLibrary/wir2019\\_en.pdf](https://unctad.org/en/PublicationsLibrary/wir2019_en.pdf).
- Uwubanmwun, A. E., & Ogiemudia, O. A. (2016). Foreign direct investment and economic growth: Evidence from Nigeria. *International Journal of Business and Social Science*, 7(3), 89-103.
- Wangechi, N. M., & Ndeto, M. (2019). Influence of workplace environment on employee productivity in Nairobi City County. *International Academic Journal of Human Resource and Business Administration*, 3(7), 117-139.
- Wong, R. E. (2012). Profit maximization and alternative theories: A Dynamic reconciliation. *American Economic Review*, 65(4), 689-694.
- Yılmaz, B., & Ozel, H. A. (2014). Determinants of foreign direct investment inflows in the transition economies of European Union. *International Journal of Research in Commerce, Economics and Management*, 4, 49-53.
- Zyphur, M. J., & Pierides, D. C. (2020). Making quantitative research work: From positivist dogma to actual social scientific inquiry. *Journal of Business Ethics*, 167, 49-62.