

Vestnik MIRBIS. 2020; 3(23):41–48.

Вестник МИРБИС. 2020. № 3 (23). С. 41–48.

Original article

УДК 339.97

doi: 10.25634/MIRBIS.2020.3.5

### The determinants of foreign direct investments (FDIs) in digital economy: a policy study on Nigerian economy

Michael Madojemu<sup>1,2</sup>, Etse Dadson Gomado<sup>1,3</sup>,

1 Peoples' Friendship University of Russia (RUDN University), Moscow, Russia.

2 [agomado@inbox.ru](mailto:agomado@inbox.ru)

3 [dadfrango@mail.ru](mailto:dadfrango@mail.ru), <https://orcid.org/0000-0002-6261-9728>

**Abstract.** This study examined the factors influencing foreign direct investment (FDI) and their effects on the economy of Nigeria. Ex-post facto methodological design was used. The annual time series data for thirty years (1988–2018) from Central Bank Statistical Bulletin, Mundi Index and World Bank Development indicators were used. Augmented Dickey-Fuller (ADF) unit root test of stationarity and cointegration test were employed to verify the fitness of the series and exist of long run relationship. Multiple regressions analytical technique was applied. The results reveals that, market size, energy consumption, capital infrastructure, trade policy, foreign debt, political regime (risk) and exchange rate all have significant impact on FDI inflow in Nigeria. Therefore, we recommend that government need to enhance infrastructural facilities such as good road networks, healthcares, energy to accelerate more investments. Also In light of rapid advancement of technology which has necessitated digitalization of the economy as evident by the disruption the covid-19 has caused, government should direct more resources towards improving digital infrastructure and programmes to improve digital culture to guarantee FDI and knowledge based operations.

**Key words:** foreign direct investment, determinants, Nigeria economic growth, digital infrastructure, digitalization, digital culture.

**For citation:** Madojemu M. The determinants of foreign direct investments (FDIs) in digital economy: a policy study on Nigerian economy. M. Madojemu, E. D. Gomado. Vestnik MIRBIS. 2020. No. 3 (23). P. 41–48. doi: 10.25634/MIRBIS.2020.3.5

JEL: O14; O33; O55

Научная статья

### Детерминанты прямых иностранных инвестиций (ПИИ) в цифровую экономику: политическое исследование экономики Нигерии

Михаэл Мадоджему<sup>4,5</sup>, ДадсонГомудо Этсе<sup>1,6</sup>

4 Российский университет дружбы народов (РУДН), Москва, Россия.

5 [agomado@inbox.ru](mailto:agomado@inbox.ru)

6 [dadfrango@mail.ru](mailto:dadfrango@mail.ru), <https://orcid.org/0000-0002-6261-9728>

**Аннотация.** В этом исследовании рассматривались факторы, влияющие на прямые иностранные инвестиции (ПИИ), и их влияние на экономику Нигерии. Была использована методологическая конструкция Ex-post facto. Были использованы годовые данные временных рядов за тридцать лет (1988–2018 гг.) из статистического бюллетеня Центрального банка, индекса Мунди и показателей развития Всемирного банка. Для проверки пригодности ряда и наличия долговременной связи были использованы расширенный тест единичного корня Дикки-Фуллера (ADF) стационарности и тест коинтеграции. Была применена аналитическая методика множественных регрессий. Полученные результаты свидетельствуют о том, что размер рынка, потребление энергии, капитальная инфраструктура, торговая политика, внешний долг, политический режим (риск) и валютный курс оказывают значительное влияние на приток ПИИ в Нигерию. Поэтому мы рекомендуем правительству усилить инфраструктурные объекты, такие как хорошая дорожная сеть, медицинское обслуживание, энергетика, чтобы ускорить увеличение инвестиций. Кроме того, в свете быстрого развития технологий, которое обусловило необходимость цифровизации экономики, о чем свидетельствует

разрушение, вызванное covid-19, правительство должно направить больше ресурсов на совершенствование цифровой инфраструктуры и программ по совершенствованию цифровой культуры, чтобы гарантировать ПИИ и операции, основанные на знаниях.

**Ключевые слова:** прямые иностранные инвестиции, детерминанты, экономический рост Нигерии, цифровая инфраструктура, цифровизация, цифровая культура.

**Для цитирования:** Мадоджему М. Детерминанты прямых иностранных инвестиций (ПИИ) в цифровую экономику: политическое исследование экономики Нигерии / М. Мадоджему, Э. Д. Гомадо // Вестник МИРБИС, 2020, № 3 (23), с. 41–48. doi: 10.25634/MIRBIS.2020.3.5 JEL: O14; O33; O55

## 1. Introduction

Nigeria as emerging nations presently experience abundant labour and deficits funds due to inability to save locally, that retards accumulation capital that decreases growth economically. In a situation capital/fund could be generated with sufficient manpower supply, the increased in productivity may be hindered by deficiency in external inputs (technological knowhow, equities, machines) upon which manufacturing of goods and services in developing nations rely on. This makes foreign capital flow a very germane aspect of efforts by emerging nations to bridge saving gap. The significant of FDI to national building cannot be overemphasized by host nations. Receiving nation is nourished with technological know-how, facilitates local firms' access to global markets; capital inflows; enhances global trade integration; provides avenues for risk and product diversification; enhance human capital development; encourages favorable competition among businesses, increases product diversity, managerial expertise required acceleration and sustain economic growth. It is pertinent to argue that developing nations that desire to stimulate and have a sustainable economic growth must formulate and implements policies that will facilitates investors' friendly environments. Investors generally believe that, the existence of investment friendly nations where tax incentives, export-import promotion, appropriate macroeconomic policies, political stability that guarantee safety of lives and property will facilitate good business environment. Nigeria as a nation being giant of Africa, given her vast natural resources base, population of over 200 million and large market size, qualifies to be a major FDI recipient in Africa [World Development Indicators, 2018]. In Nigeria, however, level of FDI attractiveness is low compared with natural resource endowments. Despite the policy strategy and huge resource base of the country, Nigeria has not been able to achieve

a higher level of economic growth, nor has it been able to attract a reasonable FDI commensurate with its socio-economic potentials endowments. It is worth mentioning that, the major obstacles to economic stability, development and FDI in Nigeria are over dependence on oil and gas sector, which accounts for 95% of foreign currency income, 80% national budget; Budget deficit and external debt caused by free-spending economic policies under past military junta regimes; infrastructural deficit; bribery and corruption; unstable institutional and regulatory environment; crime, youth unrest, Niger Delta Militants, Boko Haram in the North East, multiplicity of approving agencies, exchange rate, high interest rate. Furthermore, the inability and the unwillingness of governments to invest in technology and leverage on the global trend of digitalization and connectivity is starving the economy of much needed diversification. These and other related issues have prompted investors to prefer countries with peaceful environments for investment. Hence, given potential role of FDI to economic growth, this study will x-ray socio-economic determinants of FDI, and it impacts on the Nigeria economy in this digital era.

## 2. Literature review

Foreign direct investment (FDI) is the largest component of capital inflows; its roles over the World economic growth have been well-recognized. FDI contributes to economic growth in receiving nations in various ways. FDI fills capital deficits by providing capital investment; also carries new technologies and managerial know-how's to the receiving nations [Vu, 2015]. Oba and Onuoha (2013) view FDI as transfer of foreign capital as a form of equities and other assets of international investors. It may rely on joint ownership between foreigners and government domestic economy where capital is invested [Oba, 2013]. Thus, FDI promote socio-economic growth. In addition, FDI enabled receiving nations to utilize procurement, sales, information networks developed through foreign firms, resulting in a better improvement in production and

marketing efficiency. Today, the FDI story of Nigeria is dominated by oil industry and foreign investors has been instrumental to development of oil extraction to level where Nigeria is the largest producer in Africa and 11th in the world. At independence in 1960, it was not always so, there was widespread of FDI presence in economy. Olatunji (2001) argued that irrespective of government favorable policies towards providing incentives to many investors, many of them are still adamant and unwilling to come to Nigeria [Olatunji, 2001]. This reveals that, this might not be due to lingering problems such as infrastructural decaying, insecurity challenges, impunity, youth and Niger Delta hostilities, injustice and macroeconomic instability that are becoming so alarming in Nigeria.

### **The Determinants of Foreign Direct Investments (FDIs) in the digital economy of Nigeria**

Government policy is a significant influence in attracting FDI into the economy. Government offer incentives to potential investor(s) in form of tax holidays, rebates, infrastructural investments among others. Following the return to democracy in May 1999, the reform process was re-energized, mainly through Nigeria's home-grown poverty reduction strategy. National Economic Empowerment and Development Strategy (NEEDS) were adopted 2003. The broad agenda of social economic reforms according to Nigerian investment policy Review (2009) was based on four key strategies to reform government works that will improve efficiency in service delivery, eliminating waste, free up resources for infrastructure and social services. This will make private sector major driver of economic growth, turning Nigeria Government into business regulator; implement social charter, that includes improving security welfare and participation; and Push a value re-orientation by shrinking the domain of state, hence, pie of distributable rents that been haven of public corruption and inefficiency [Estrin, 2018; Economy & Market., 2020].

Political economy consideration strongly influences FDI location decisions [Nazeer, 2017]. Political risk is a major component that influences FDI flows into Nigeria. Government stability, internal and external conflicts, law and order, ethnic tensions, and bureaucratic quality are important determinants of FDI. Before 1999, most foreign investors were scared to invest in Nigeria, but recently foreign investments

have improved significantly. A large market size suggests a prosperous business climate and hence serves as a factor to attract external investors in one hand, and a means to measuring impact on foreign investments in receiving nations. It's accepted that, market size is significant in terms of economies scale of resource utilization and exploitation [Chakrabarti, 2003]. Nigeria economic growth and increase population of over 200 million in 2019 has equally been incentive of foreign firms' market seeking investments. The expansion of market size led government of Nigeria to a programme of privatization and commercialization of public enterprises that received a greater attention that attracted foreign inflow since 1999. For example, deregulation of telecommunication industry created opportunities for granting licenses to Global System for Mobil Communication (GSM) investors in 1999 which attracted FDI inflows to the telecommunications sector from mere 50 million US dollar to 2.1 billion US dollar by the end of 2002. Furthermore, ICT infrastructure development plays a crucial role in enhancing the economic activities in this modern global economy because these infrastructures serves as medium in which economy activities are channeled and largely serves as salient instrument for bridging trade barrier between developed and developing nations – a major causation of the flow of FDI [Brennen, 2016]. Thus, through digitization, FDI does not become just an end product in the value chain but also an ingredient in the value creation. Natural resource attracts investors into Nigeria like crude oil, bitumen, ore, limestone, coal, tantalite, gypsum, barite, manganese, lead/zinc, gold, tin, columbite, kaolin, marble, etc. promotes FDI flows to Nigeria economy. Dinda (2008) opine that, Nigeria dominate receiving FDI in Africa continent, over 70% in sub-regional total, 11% Africa's total, Nigeria oil industry approximately receive 90% between 1988 and 2016. Infrastructures: Soft infrastructure implies market-oriented institutions, governance structures and hard infrastructure means physical infrastructures; roads, telephone connections, airports, fast distribution networks, electricity transmissions, railroads etc [Dinda, 2008]. It is worth noticing that telephone penetration and internet connectivity create a major avenue for government to attract direct foreign investment and helps diversify the economy in a digital economy. There is currently

huge shortage of infrastructural development and Nigerian authorities need to improve on quality of infrastructure so to reduce transaction costs faced by investors. It has been proven that poor infrastructural development is one reasons Nigeria has been receiving low levels of FDI in comparison to developing regions. It is clear that issue of infrastructures and security conditions in Nigeria must be given closer attention if major progress is to be attained on FDI inflow. Over decades, the Nigeria government has given top priority to this issue of infrastructural decayed; however, inadequate funding has hindered the much-desired pace for resolving this problem.

Openness to trade is significant factor that influence FDI flows into Nigeria [Foreign direct investment., 1998]. Ratio of trade volume (import-export) of Gross National Product (GNP) is important indicator in determining point of openness in Nigeria. The more a nation engaged in open economic activity with external investors, the more it will succeed to attract better FDI. Nigerian government has given serious attention in addressing problems of long-term fund of investment as a matter of high priority. In this regard, three developments-banks Nigeria: Import-Export Bank, Nigeria Bank for Industry and Nigeria Bank for Agriculture, Cooperatives and Rural Development- have been restructure

and recapitalized to provide long-term loans at low interest rate [ibid]. In addition, government established Small and Medium Enterprises Development Fund that allows commercial banks to set aside 10% of their pre-tax profit to fund small businesses. Inflation rate can determine cost of doing business with multinational firms that may enter into long-term contracts with host nation. When actual inflation rate turns out different from anticipated inflation rate, foreign firms might lose out purchasing power due to decrease. High inflation rate has negative impacts to attracting inward FDI. Exchange rate has also been considered to be important in determining FDI flows to Nigeria. In Nigeria, real exchange rate volatility has negative influence on FDI inflows. This means that exchange rate volatility, which measure risk, decreases FDI inflows [Osinubi, 2009; Muhammad, 2018].

Bilateral investments agreements are agreement among two nations that encourage promote and protect investments made with each other nations. Preferential trade agreements are among different nations that reduce tariff of some goods. Nigeria government have quite numbers of bilateral agreement that increase FDI inflows like New Partnership for Africa’s Developments (NEPAD) that was launched to stimulate FDI in Africa of which Nigeria is a signature to.

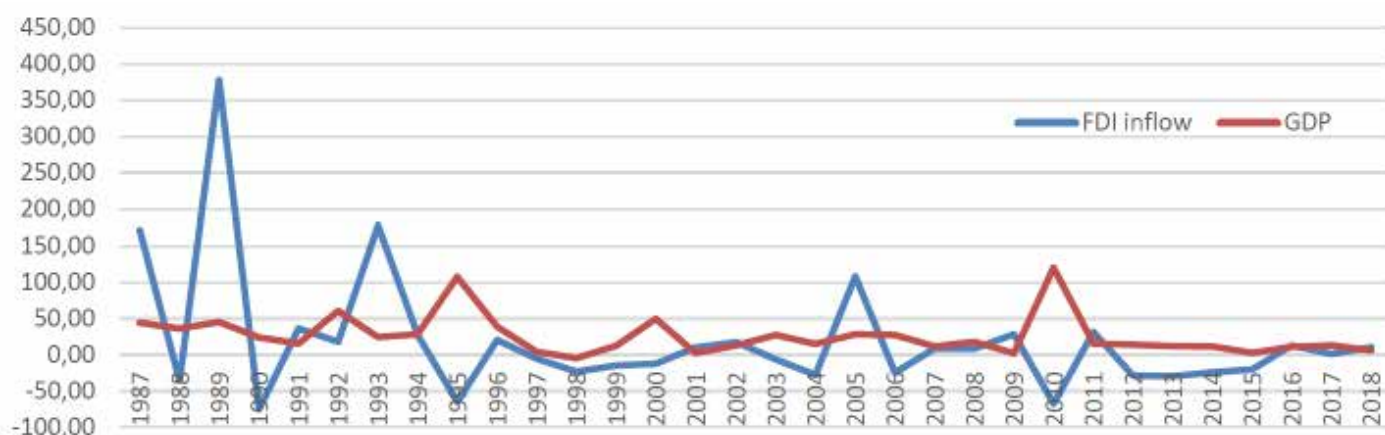


Fig. 1. Trend Analysis: Percentage Growth Rate in FDI and GDP  
Source: Author’s Analysis (MsExcel Output)

The trend of FDI inflow growth rate shows existence of high fluctuations and volatility in early part of 1987 to 1990. This fell from 171.77 percent in 1987 to -35.79 percent in 1988. It later rose in 1989 and fell in 1990 respectively. This could be due to the oil glut and fall in crude oil prices in the late 1980’s towards early 90’s. In early 1990’s, 1991 to the beginning of

democratic rules in 1999, FDI inflow was irregular with high inflow and high drops as a result of protracted political instability that disrupted socio-economic activities during the period, although, in 1995 government introduced the Nigerian Investment Promotion Commission (NIPC) and the deregulation polices like the Foreign Exchange



(Monitoring and Miscellaneous Provisions) Act 1999, the establishment of Export Processing Zones (EPZ), all to help to improve, accelerate and built foreign investors' confidence in business environment in Nigeria. From beginning of millennium in 2000 to 2005, Nigeria experienced slight increased due to the privatization and commercialization policy, and this attracted huge FDI into telecommunication sector from 50 million US dollar in 1999 to 2.1 billion US dollar 2002. From 2006 to 2018, FDI inflows had negative growth rate points that moved below trend line as shown in Figure above. This could be due to global financial meltdown in 2008, insecurity issues such as insurgency and terrorism attacks mostly in the north east which may have discouraged foreign investors from investing in Nigeria. From year 2010 to 2015 reveals negative trend continues, due to glut in oil price, uncertainty in election of 2015, change in government and unidirectional government policies all discouraged foreign investors. However, 2016, 2017 and 2018 experienced increased trends in foreign direct investment [Nigeria – foreign direct., n.d./2020].

On the other hand, GDP growth rate shows rate of changes (increase or decrease) in monetary value of goods and service produced in country annually. From 1988 to 1994, GDP growth rate has maintained a positive growth trend at double digit rate ranging from 15 percent to 60.4 percent. As at 1995, growth rate rose to three digit value of 107.7 percent growth rate. This could be due to implementation of second national plan which encouraged foreign investment and better diversification of the economy into various sectors – other than oil exploration. The year trend from 1996 to 1999; shows slow growth while 1998 had a negative growth at –4.77 percent. From 1999 when democratic rule began in Nigeria, GDP growth rate has maintained positive growth with highest value at 120.26 percent in 2010 and lowest at 2.05 percent in 2009. A decrease in 2011 value 15.32 percent, 13.87 percent in 2012, 11.68 percent in 2013, 11.18 percent in 2014 and further decrease in 2015 of 2.66 percent, this could be due to global declining commodity and oil prices. Again 2016 and 2017 experienced an increase GDP of 11.15 percent, this might be due to improved political and stability in macroeconomic variables and 13.09 percent, however, 2018 experienced a decreases to 5.75 percent [ibid].

### 3. Methodology

This study used ex-post facto design. Choice of this design is base on the fact that, it does not provide the study an opportunity to control variables mainly because they have already occurred, and not subjected to manipulation.

**Data collection:** Time series data were collected for period of 30years, 1988–2018 from Central Bank of Nigeria Statistical Bulletin, Mundi Index and World Bank Data Development Indicator.

**Data analysis:** The ordinary least square multiple regression analytical technique was used. The technique was adoption because it minimizes the error sum of square, has minimum variances, efficiency, unbiasedness and consistency advantages. Also applies correlation matrix to test extents which variables were correlated. Finally, unit root test was conducted using Augmented Dickey Fuller and Phillips Perron test to determine whether or not the time series are stationary.

### Models specification

This paper seek to trace relationship between FDI, official developments assistances (oda) political risk (pr) exchange rates (exr) inflation rates (infr) market size (mas) foreign debt electricity consumption transport telecommunication proxy for infrastructural developments (ind), and FDI impact on real gross domestic product growths (rgdp) in context of Nigerian economy. As part of methodological design, basic estimating equation in log linear form is specified as follows:

$$\text{LnFDI} = \beta_0 + \beta_1\text{LnMAS} + \beta_2\text{LnERC} + \beta_3\text{LnCINF} + \beta_4\text{TP} + \beta_5\text{LnFD} + \beta_6\text{PR} + \beta_7\text{EXR}$$

Where:  $\beta_0, \beta_1 \dots \beta_7$  are parameters to be estimated;

FDI = foreign direct investment;

MAS = market size; ERC = energy consumption;

CINF = capital infrastructure;

TP = trade policy proxied with trade openness;

FD = foreign debt;

PR = political regime or risk;

EXR = exchange rate; Ln = natural logarithm.

### 4. Results

The study showed the result of the unit root test

Table 1: Unit Root test results on the Variables

Var.	ADF statistics	Critical values		Order of Integration
		1%	5%	
FDI	-9.0415	-3.6616	-2.9604	I(1)
MAS	-5.1339	-3.6616	-2.9604	I(1)
ERC	-4.3999	-3.6616	-2.9604	I(1)

Var.	ADF statistics	Critical values		Order of Integration
		1%	5%	
CINF	-5.8784	-3.6616	-2.9604	I(1)
TP	-4.4925	-3.6537	-2.9571	I(0)
FD	-4.1735	-3.6537	-2.9571	I(0)
PR	-5.5677	-3.6616	-2.9604	I(1)
EXR	-3.9046	-3.6616	-2.9604	I(1)

Source: Regression result from (E-views version 9)

Results from Table 1 on the ADF statistics indicate that TP and FD were stationary at level i.e. integrated at order zero I(0) while FDI, MAS, ERC, CINF, PR and EXR were stationary at first difference i.e. integrated at order one I(1). Hence, the null hypothesis of no unit root exist was retained for TP and FD, but rejected for the other series – FDI, MAS, ERC, CINF, PR and EXR. Before estimating the equation, the long-run relation among the series was examined using Johansen Co-integration test.

Table 2: Unrestricted Cointegration Rank Test (Trace)

Sample (adjusted): 1988–2018  
 Included observations: 31 after adjustments  
 Trend assumption: Linear deterministic trend  
 Series: FDI MAS ERC CINF TP ED PR EXR  
 Lags interval (in first differences): 1 to 1

Hypothesized	No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0	0.898017	207.2057	159.5297	0.0000
At most 1 *	1	0.759488	136.4344	125.6154	0.0092
At most 2	2	0.621122	92.25977	95.75366	0.0849
At most 3	3	0.565682	62.17299	69.81889	0.1748
At most 4	4	0.445128	36.31964	47.85613	0.3804
At most 5	5	0.288688	18.06006	29.79707	0.5616
At most 6	6	0.203611	7.500089	15.49471	0.5203
At most 7	7	0.014169	0.442379	3.841466	0.5060

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Table 3: Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized	No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0	0.898017	70.77130	52.36261	0.0003
At most 1 *	1	0.759488	44.17460	24.23142	0.0008
At most 2	2	0.621122	30.08678	40.07757	0.4182
At most 3	3	0.565682	25.85335	33.87687	0.3298
At most 4	4	0.445128	18.25958	27.58434	0.4736
At most 5	5	0.288688	10.55997	21.13162	0.6909
At most 6	6	0.203611	7.057711	14.26460	0.4823
At most 7	7	0.014169	0.442379	3.841466	0.5060

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

From Table 2 and 3, trace and maximum eigenvalue statistics revealed that there are at least two co integrating equations or vectors among variables respectively. Therefore, there is a long run relationship among variables in the model. This result confirms the finding of Bakare and Olubokun (2011) found that there is a long run relationship among foreign direct investments. Similarly, Inuwa and Haruna (2017) found that there is a long run relationship between market size, foreign direct investments and health quality growth. The result of long run estimate is shown in table below.

Table 4: Long-run regression output for estimate for model

Variables	FDI
C	-2.3206 (0.5470)
MAS	0.1364* (0.0077)
ERC	0.8961* (0.0073)
CINF	0.1929* (0.0210)
TP	0.6429* (0.0037)
ED	-0.0090 (0.9575)
PR	0.0603* (0.0180)
EXR	-0.0013 (0.2643)
R-squared	0.5812
Adjusted R-squared	0.4638
F-statistic	19.556
Prob(F-statistic)	0.0000
Durbin-Watson stat	1.8070

Table 4, MAS, ERC, CINF have direct and significant relationship on FDIs. Coefficient value 0.1364 for MAS, 0.896 for ERC and 0.193 for CINF show that a unit decrease of MAS, ERC, CINF will bring about 0.136, 0.896 and 0.193 increase of FDIs respectively. Furthermore, TP, PR have direct and significant relationship with FDIs. Coefficient value 0.643 for TP shows units decrease in TP will bring about 0.643 increases in FDIs while changes in political regime from military to democratic rule promoted FDIs in Nigeria. On contrary, ED, EXR has inverse and insignificant relationship with FDIs. Coefficient value -0.019 for ED, -0.001 for EXR shows that unit increase of ED and EXR will bring about decrease in FDI. Coefficient of determination value (R<sup>2</sup>) 0.5812, reveals independent variables explains 58.12%

systematic changed dependent variable while unexplained residue 41.88% attributed values error term or other randomized variable not captured prominent effected dependent variable. Similarly, adjusted coefficient of determination (R-2) 0.4638 measures reduced models explanatory power. It further reveals independent variables explain 46.38% systematic changed dependent variable while unexplained residue 53.62% attributed values error term or other randomized variables not captured prominent effected dependent variable.

The f-statistic 19.556 significant at 5% level (prob<0.05), therefore, overall parameter estimates model is jointly significant. The Durbin Watson (D.W) statistics of models 1.8070, since value is approximately equal to 2. It explains no presence of serial auto-correlation among dependent and independent variables. Determining directions causation among health indicators and national productivity, Granger causality tests was employed. Accordingly, test variable MAS said Granger causes another variable FDIs if past and presents value of former (MAS) predicts latter FDIs.

Result of the causality test is presented in Table 5.

Table 4: **Result of the causality test**

Pairwise Granger Causality Tests  
Date: 03/16/20 Time: 17:33  
Sample: 1986–2018  
Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
MAS does not Granger Cause FDI	32	7.59840*	0.0100
FDI does not Granger Cause MAS		1.81302	0.1886
CINF does not Granger Cause FDI	32	5.25970*	0.0293
FDI does not Granger Cause CINF		0.11210	0.7402
TP does not Granger Cause FDI	32	0.00498	0.9442
FDI does not Granger Cause TP		7.01132*	0.0130
EXR does not Granger Cause FDI	32	8.20330*	0.0077
FDI does not Granger Cause EXR		2.34132	0.1368
TP does not Granger Cause ERC	32	0.53378	0.4709
ERC does not Granger Cause TP		4.63525*	0.0398
PR does not Granger Cause CINF	32	4.17288*	0.0503
CINF does not Granger Cause PR		0.01399	0.9067

Source: E-view result

The result (Table 5) pair wise granger causality tests conducted on variables shows that there exist

unidirectional causalities, running MAS to FDI; CINF to FDI; FDI to TP, EXR to FDI, ERC to TP and PT to CINF. This result has been able to uncover that MAS, CINF, FDI, ERC and PR in past year period causes current years FDI. By implication, results of this study have shown FDI may be undermined where market size, trade policy, exchange rate, capital infrastructure are neither stable overtime. This is because the quality of FDI inflow depends on trust of foreign investors in macroeconomic stability in host country.

### 5. Conclusion

Based on findings, it was concluded that Market size, energy consumptions, capital infrastructure, trade policy, foreign debt, political regime, exchange rate all have direct and significant impacts on FDI inflow. It shows increase in any of the variables promotes FDI inflow in Nigeria. Following outcome of the study, government must increase expenditures on capital accumulations to encourage investments by foreign investors. Furthermore, modern trade policies like digitization and digitalization policy must be implemented with consideration of foreign investors.

### 6. Recommendation

Based on the analyses and findings emanated from the study and their respective policies implication, the following recommendations were made.

Since economic growth rate serves as catalyst of FDI, therefore, government should increase investment on infrastructural developments (energy, roads and digital terminals) to serve as avenue to stimulate more FDI into Nigeria.

Government should create enabling environment, by formulating policies, programmes and strategy to enforce laws and regulations that will guarantee a secure investments atmosphere.

Since market size influence FDI inflow to Nigeria, government should create opportunities of incentives for production and policies that will potentially increase the purchase power activities of the population that will motivate more FDI into economic.

Again, government should formulate macroeconomics policies, programmes and strategy to accelerate more investment and open market operations.

### References

1. Brennen, 2016 – Brennen J. S. Digitalization. J. S. Brennen, & D. Kreiss. *The International encyclopedia of communication theory and philosophy*. Wiley-Blackwell, 2016. 2368 p. P. 1–11. DOI 10.1002/9781118766804.wbiect111. ISBN: 978-1-118-29073-6 2368.
2. Economy & Market., 2020 – Economy & Market: Impact of privatisation on Nigeria's economy. *Businessday* : [website]. URL: <https://businessday.ng/markets/article/economy-market-impact-of-privatisation-on-nigerias-economy/>. Publication date Apr 27, 2020.
3. Chakrabarti, 2003 – Chakrabarti A. A theory of the spatial distribution of foreign direct investment. *International Review of Economics & Finance*, 2003, vol. 12, no. 2, p. 149–169.
4. Dinda, 2008 – Dinda S. Factors Determining FDI in Nigeria: An Empirical Investigation. S. Dinda, 2008. MPRA Paper. MPRA : [website]. Date Deposited: 19 Jul 2012, Last Modified: 26 Sep 2019. URL: [https://mpra.ub.uni-muenchen.de/40170/7/MPRA\\_paper\\_40170.pdf](https://mpra.ub.uni-muenchen.de/40170/7/MPRA_paper_40170.pdf). Accessed 02/12/2020.
5. Estrin, 2016 – Estrin S., Pelletier A. Privatization in developing countries: what are the lessons of recent experience? S. Estrin, A. Pelletier. *The World Bank Research Observer*, 2018, vol. 33, no. 1, p. 65–102. ISSN: 1564-6971.
6. Foreign direct investment., 1998 – Foreign direct investment and economic development : lessons from six emerging economies. Paris: OECD Publ., 1998. DOI: 10.1787/9789264162983-en.
7. Nigeria – foreign direct., n.d/2020 – Nigeria – foreign direct investment. *Index mundi* : [website]. URL: <https://www.indexmundi.com/facts/nigeria/foreign-direct-investment>. Accessed 02/12/2020.
8. Muhammad, 2018 – Muhammad S. D. Influence of real exchange rate and volatility on FDI inflow in Nigeria. S. D. Muhammad et al. *International Business Research*, 2018, vol. 11, no. 6, p. 73–82. DOI: 10.5539/ibr.v11n6p73.
9. Nazeer, 2017 – Nazeer A. M. Impact of political instability on foreign direct investment and Economic Growth: Evidence from Malaysia. A. M. Nazeer, M. Masih, 2017. MPRA Paper. MPRA : [website]. URL: [https://mpra.ub.uni-muenchen.de/79418/1/MPRA\\_paper\\_79418.pdf-2017](https://mpra.ub.uni-muenchen.de/79418/1/MPRA_paper_79418.pdf-2017). Accessed 02/12/2020.
10. Oba, 2013 – Oba U. O. The determinants of foreign direct investments (FDIs) and the Nigerian economy. U. O. Oba, B. C. Onuoha. *American International Journal of Contemporary Research*, 2013, vol. 3, no. 11, p. 165–172. ISSN 2162-139X.
11. Olatunji, 2001 – Olatunji D. At Home Abroad When Titles Get In The way. *The Nation* : [Newspaper], Tuesday, September 25, 2001.
12. Osinubi, 2009 – Osinubi T. S. Foreign direct investment and exchange rate volatility in Nigeria. T. S. Osinubi, et al. *International journal of applied econometrics and quantitative studies*, 2009, vol. 6, no. 2, p. 83–116. ISSN: 1698-4153.
13. Vu, 2015 – Vu V. C. Foreign capital inflows and economic growth: Does foreign capital inflows promote the host country's economic growth? An empirical case study of Vietnam and the intuitive roles of Japan's capital inflows on Vietnam's economic growth. V. C. Vu, 2015. *Ministry of Finance. Japan* : [website]. URL: [https://www.mof.go.jp/pri/international\\_exchange/visiting\\_scholar\\_program/ws2015\\_vu2.pdf](https://www.mof.go.jp/pri/international_exchange/visiting_scholar_program/ws2015_vu2.pdf). Accessed 02/12/2020.
14. World Development Indicators, 2018 – World Development Indicators. World Bank T. World Bank open data. *World Bank* : [website], 2018. URL: <https://datacatalog.worldbank.org/dataset/world-development-indicators>. Accessed 02/12/2020.

#### Information about the authors:

**Madojemu Michael & Gomado Etse Dadson** are postgraduate students of the RUDN University, 6 Miklukho-Maklaya str., Moscow, 117198.

#### Информация об авторах:

**Мадоджему Михаэл и Гомадо Этсе Дадсон** — аспиранты РУДН, 117198, г. Москва, ул. Миклухо-Маклая, 6.

The article was submitted 06/10/2020; approved after reviewing 06/26/2020; accepted for publication 08/25/2020

Статья поступила в редакцию 10.06.2020; одобрена после рецензирования 26.06.2020; принята к публикации 25.08.2020.