



## INFLOWS OF FOREIGN CAPITAL, TOOL FOR ECONOMIC DEVELOPMENT: THE NIGERIAN EXPERIENCE.

Monogbe, T.  
Okereke, E  
Ogunbiyi, S

Department of Finance and Banking, Faculty of Management Sciences, University of Port Harcourt, Port Harcourt, Nigeria.

Article history:	Abstract:
<p><b>Received:</b> 1<sup>st</sup> July 2021 <b>Accepted:</b> 11<sup>th</sup> July 2021 <b>Published:</b> 12<sup>th</sup> August 2021</p>	<p>This study examined that extent to which Foreign Capital Inflows promote Economic Development in Nigeria using time series data sourced from the World Bank Data base and the Central Bank of Nigeria Statistical Bulletin. The study scope covers the period 1980 to 2019 where foreign capital inflows is decomposed into Foreign Direct Investment, Foreign Portfolio Investment, Foreign Aids, External Borrowing and Personal Remittance while Misery Index is used as proxy for economic development. The study employed Stationarity Test, Long Run Bound Test, Long Run Auto Regressive Distributed Lag, Granger Causality Test and Residual Diagnostic Test. Findings show that Foreign Direct Investment significantly influence economic development in Nigeria in a negative manner while External Borrowing appear to be the only variable that exhibited a positive and significant relationship with Economic Development. However, result further shows that Foreign Portfolio and Personally Remittance has the capacity of influencing Economic Development in Nigeria if properly channeled. As such, this study conclude that of the five decomposed measure of Foreign Capital Inflows, only two (Foreign Direct Investment and External Borrowing) significantly promote Economic Development in Nigeria. Although, the contribution of Foreign Direct investment to development is inversely related. On this basis, we recommend that more investment friendly environment such as (adequate security, electricity stability, pocket friendly tax rate for foreign investors, good road network nationwide) should be considered as this will help attract more foreign investors and further keep the existing once as the exit of most of these foreign investors from the Nigerian region is the reasons for its negative effect on the Nigerian economy.</p>
<p><b>Keywords:</b> Economic Development, Foreign Capital, Foreign Direct Investment ,External Borrowing, Nigerian economy</p>	

### INTRODUCTION

Economic development is the major target of government in every economy and in achieving this, investment capital must be readily available Oladapo, (2017); Quati, Abudul & Rasheed, (2018). Due to the capital deficiency nature of most developing nations, leveraging on foreign capital becomes an option to accelerated economic development. Within the context of this study, economic development is the dependent variable and it is a process of targeted activities and policies that works to improve the economic wellbeing and quality of life of the citizens by building local wealth, diversifying the economy, creating and retaining jobs, and building the local tax base (Ivaldi, Bonatti, & Soliani, 2016 cited in Akinpelumi, Nwakanma & Nnamdi, 2021).

The measurement of economic development has grown in recent years based on increasing understanding of the key role of various economic indicators which should be considered to ensure a rounded perception of an economy. Plethora of authors have taken different dimension in measuring economic development. Prominent among them include Per capita gross domestic product as introduced by Todaro (1977), Human Development Index has developed by Ul Haq (2003), Human Poverty Index as advanced by the World Bank (1997) and other crucial indicators, down to the recently acclaimed Misery Index.

Misery index otherwise called discomfort index is a more encompassing measure of economic development. Unlike other measures of development, it summarized a range of macroeconomic indicators into a single statistic in order to track the state of health of the macroeconomic during the business cycle. This measure was introduced by Arthur Okun (1963, 1983) and subsequently developed by Rober Barro (1999) and Henderson (2011). The index encompasses the addition of the unemployment rate, inflation rate, lending (interest) rates, while adjusting the

annual per capita gross domestic product growth rate (Cohen, Ferretti, & McIntosh, 2014). An increasing index indicates declining economic wealth, which has an adverse impact on the living standard of the populace and vice versa as explained by Wang, Shah, Ali, Abbas, & Ullah (2019).

However, there have been wide range of both conflicting and diversified opinions regarding the empirical influences of inflows and operations of foreign capital on economic development of both developed and developing nations. Borensztein, De Gregorio and Lee (1998), Caves (1996), Smarzynska (2002) and Findlay (1978) assert that foreign capital inflows are capable of promoting local enterprises by exposing them to international competition. Conversely, Siddiqui (2018), Hanson (2001), Lipsey (2002) and Greenwood (2002) contend that foreign multinationals only operate to maximize their pecuniary interests as distinct from the interests of the host economies. This view argues that increased inflows of foreign capitals investment tend to threaten the existence and survival of local industries due to high level of competition.

The poor development level experienced in the past and the recent surge in growth of many Sub-Saharan Africa countries especially in Nigeria deserve research attention. Could foreign capital inflows have been partly responsible for the development pattern experienced in the Nigerian context?. Adeola, (2019) reported that despite the huge inflows of foreign capital into the Nigerian economy with the notion to fast-tracking economic development through investment, the economy still witness high level of underdevelopment as the standard of living of her populace is very poor, national infrastructure and needed basic amenities are dilapidated, high level of unemployment while health-wise, the citizens do not have access to quality health facilities. Given the aforementioned anomalies, the question is whether the various capital flows of foreign capital into the Nigerian economy have contributed less to economic development or were indeed part of the cause of the present level of growth in Nigeria is what this study set out to investigate.

Given the above identified problems, this study deviates from previous related studies by taking another dimension of disaggregation. Precisely, this study disaggregated foreign capital inflows into seven classifications namely: Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI), Home Remittance, Foreign Aids and External Borrowing. Consequently, economic development will be measured using misery index. It is on this backdrop that this study finds more justification as such will add to existing literature.

## 2. THEORETICAL REVIEW

### Dependency Theory

Dependency theory was developed by Paul in 1957. This theory describes the nature of international relations among countries of the world, stressing that developed countries influence less developed countries through their economic power. Major assumptions of the theory include that the (i) present underdeveloped state and inequality among countries are essential aspect of these interactions; (ii) wealthy countries oppress and dominate poor countries via media control, politics, economics, education, sport, culture, banking and finance (Utomi, 2014); (iii) resources are evacuated from "periphery" of poor and underdeveloped countries to "core" of rich countries, thereby improving the economic wellbeing of the latter at the expense of the former; (iv) underdeveloped economies not only provide dumping grounds for obsolete technology, but also supply natural resources, cheap labour and markets for developed economies, enhance their living standards. The theory adherents prescribe foreign assistance in form of loan, aid, investment, as well as unhindered operations of the Multinational Corporations (MNCs) as remedial measures. The state of dependency on technologically advanced countries by Africans is attributed to bad leadership, mismanagement, poor institutional framework, corruption, low level of technology, and lack of close integration (Utomi, 2014). As a result, most needy countries rely on imported products and financial services from Europe, America and China as lifeline.

### Argument of Technological Transfer

The theory was developed by Charles (1986) as cited in Nduka and Achugbu (2017). The theory posit that developing nations has the resources for development, but lacks the capacity to transform this resources to accelerate sustainable level of desired economic development. Meanwhile, these transforming ability is what the developed countries (China, US, UK, UAE) has which makes them the giant of the world. As such, developing nations thus considered foreign capital inflows in form of foreign direct investment, foreign portfolio investment, foreign aids, home remittance, external borrowing and so on as the transformation element needed to accelerate economic development. These foreign inflows will help facilitate the financial system and investment environment towards achieving development.

### Empirical Review

Adegboye, Osabohien, Olokoyo, Oluwatoyin and Adediran (2021) investigated the extent to which institutional challenges affect inflows of direct investment and it transmitting effect on economic development in 30 sub Saharan African countries. An historical data was sourced from the apex bank of the thirty African counties under investigation for the period of thirty-two years. The analysis was conducted under the panel framework of fixed, random and Hausman effect test. Economic development was quantified using human development index while international inflows alongside with institutional factors was proxy with direct investment, domestic investment, infrastructure, political stability, government effectiveness and accessibility. Findings show that institutional balancing is a major requirement that attract inflows of foreign capital. Hence, if the institutional balancing is not gotten right, African continent might find it difficult to benefit from the numerous inflows into their nations. Hence, it was recommended

that domestic investors should be financial fortified to reduce over reliance on inflows of foreign capital for developmental purposes as excessive inflows of this capitals could negatively affect the economy in the long run. One pitfall identified with this study is the use of panel framework. Panel framework does not take into account the country specific differences but a partial similarity in which case, could lead to misleading conclusion and recommendation. Rather, a country comparison analysis would have provided a better result and further shows countries peculiarities.

Furqan, Vasilii, Hongshu, Shafiqur, and Anna (2021) using a panel framework on the 14 Latin American and Caribbean countries examined the nexus between international capital surge and its effect on agriculture development and poverty reduction. The objective of the study was to identify the extent to which inflows of foreign investment in the agricultural sector have helped in reducing poverty trend in the African region. The study was a comparison analysis between a low-middle-income countries and some upper-middle income nations. The study utilized an historical data sourced from the apex banks of the 14 considered countries. A panel unit root, long un and short run panel estimation tools was utilized. The study proximate capital inflows using direct investment inflows on agriculture, outflows from agriculture, remittance, foreign assistant and external borrowing. Finding shows that inward flows of international capital into the agricultural sector has helped in reducing poverty tend in the Latin America, east Asian and central Asian while external debt has compounded the problems thus leading to intergenerational effect and perpetual servicing of debt. The study concluded that inflows of foreign resource could help reduce poverty trend if well-structured and utilized. Meanwhile, the pitfall identified with this study is the utilization of panel framework. This type of estimation tool does not take account of the country specific peculiarity but a joint effect thereby reporting a false and similar relationship among studied countries. To avoid giving misleading result that would lead to wrong recommendation, a pure comparative analysis would have provided a better result.

Anidiobu, Okolie, Onyia and Onwumere (2021) conducted an empirical investigation on the ECOWAS sub region, considering the contribution of foreign capital surge on it growth. A panel data that cover the period of 32 years was utilized on the study. External debts and it serving cost were proxies for international capital inflows while nation output level of the ECOWAS region was used as a measure for growth. The study subjected it data set to unit root test alongside co-integration test where a futuristic relationship was identified among the series. This led to a panel least square regression and finally huasman test. The study found that international capital inflows inform of public debt does not contribute to growth in ECOWAS region. Further, it was reported that the cost of servicing those debts in the long run is more expensive than the debt itself. The study further highlighted lack of financial discipline and poor implementation of fiscal policy instrument as some of the reasons why international inflows were unable to contribute to the African region. Therefore, the study recommended that financial discipline and proactive fiscal policy measure such be enacted as this will help in boosting the African market.

Okoro, Nzotta, and Alajekwu (2020) statistically accessed the influence of international capital inflows on economic bliss in Nigeria. The study employed an historical data sourced from the published periodic record of the Nigerian apex bank. The study covers a period of thirty years (1986-2016) and they conceptualized international capital inflows using official development assistance, external debt stock, direct investment, personal remittance, and exchange rate while economic bliss was proxied with gross domestic product. The study employed the stationarity test, long run co-integration test of Johansen and ordinary least square to ascertain the short run static relationship that may have transpired among the study variables. Findings show the existence of mixed stationarity level among the series. That is, the data set became stationary at order  $i(1)$  and  $i(0)$ . Further, it was reported within the study that long run relationship existed among the study variables, this was identified from the two series of ranking order in the co-integration test. And finally, result of the ordinary least square projected that of the five proxies of international capital inflows proposed in this study, only personal remittance and exchange rate seem to be significant in boosting economic bliss in Nigeria. Although, an inverse relationship seems to have prevail between exchange rate, external debt stock and economic bliss. The study concluded that internal inflows is a stimulant that is capable of accelerating economic bliss in Nigeria. Hence, the study recommended that the use of external debt in servicing government deficit should be discourage since external debt stock poses a negative influence on economic bliss. The short fall identified in this study is that analytical blunder was committed. The study reported that the series under investigation became stationary at order  $i(1)$  and  $i(0)$  and further proceed to conduct Johansen co-integration test which is not appropriate. Rather, autoregressive distributed lag would have been a better option.

Badwan and Atta (2020) investigated the economic growth nexus in Palestine given the influence of international capital inflows. The study employed historical data between the periods 2007 to 2018 where international capital inflows were measured using direct investment, portfolio investment, grant and remittance. The data were analyse using descriptive analysis and variance inflation factor (VIF). Findings show that international capital inflows optimistically promote economic growth in Palestine. Economic bliss reacts more to direct investment and portfolio investment while remittance and aid are not significant. The study concluded that the economic implication of international capital inflow is that local competitor will be expose to international competitive platform and development. The pitfall identified with this study is the abuse of estimation tool. The study fails to test for stationarity using time series data which is prone to stationarity problem. Further, the study proceeded to variance inflation factor without justifying whether there exists co-integration among the series or not which is against the rudiment of econometric.

Ahmed (2020) using the panel regression framework accessed forty African countries on the nexus between foreign capital surge and economic bliss. The rationale behind the study is to identify the spill over effect of foreign surge on macroeconomic and trade development in the selected forty countries. The study generated historical data from the selected forty countries between the periods 1980 to 2015. A panel dynamic regression model was constituted. International inflows were proxied with ODAs, portfolio investment, remittance, direct investment. Result infers that remittance contribute more to the growth witnessed in the selected countries than other measures of inflow. However, macroeconomic indices and trade also benefit more from remittance as little, or no charges/interest is paid back on remittance compared to direct investment and portfolio investment that require certain considerations. The study concluded that inward flows of foreign capital have the capacity to transform the developing region in Africa depending on strong institutional support. The shortcoming identified with this study is that panel regression does not take into account the economic peculiarity with each country, and this may lead to false conclusion and recommendation.

Rodionova, Yakubovskiy and Kyfak (2020) examined the extent to which international capital flows determine economic growth in the emerging economies of the central and eastern European countries. The central and eastern European countries considered in the study include Bulgaria, Czech Republic, Hungary and Poland. The study covers a period of eleven years where historical data were sourced from the various apex banks of the countries under investigation. The study employed the autoregressive mechanism and findings reveals that before the event of crisis that erupt the central European countries considered, capital inflow has significantly influenced economic bliss accordingly and afterwards, a demand following hypothesis was identified as economic growth is seen to be the driving force that determine capital inflows. It was also identified that due to the large volume of accumulated asset acquired by foreign investors in the national economies, an adverse effect of international capital inflow in form of excessive repatriated profit was identified. The study concluded that although inflows of international capital is capable of boosting economic bliss of the euro zone countries, but it is also necessary to note that it is capable of posing threat on development of the recipient counties if not properly guided.

### 3. METHODOLOGY

For the purpose of this study, we utilized the ex-post facto research design. The choice of this research design is anchored on the fact that historical data which is not within the control of the researcher has been used for the study. The selected foreign capital inflows identified with in this study include foreign direct investment, foreign portfolio investment, foreign aids otherwise called (official development assistance), personal remittance, external borrowings while Mistry index is used as a metric of development as propounded by Henderson (2011). We sourced our data from the Central Bank of Nigeria Statistical Report alongside the World Bank Data Base between the periods 1980 to 2019 for effective and efficient data analysis.

#### **Operational Measures of Variables**

**Misery Index:** It is an economic index used in measuring the level of economic development in a country. Within the context of this study, misery index is conceptualized as inflation rate plus unemployment rate less gross domestic product. The output is used as a caption for economic development. An inverse relationship is predicted between misery index and all other variables. This is on the basis that an increase misery index is an indicator of high economic hardship/underdevelopment and vice viz. Misery index assumption states that the higher the index, the lower the economic development level and a lower index depict a favourable economic development stance. Further, increase in inflows of foreign capital is targeted at improving economic development level hence, all the measures of international capital inflows are expected to respond in an inverse manner to misery index.

**Foreign Direct Investment FDI:** According to the central bank of Nigeria statistical bulletin, foreign direct investment is decomposed into oil and non-oil related investment. The oil related FDI is the quantum of direct investment that flows into the Nigerian economy which involve crude oil and its property (Nnamdi & Enekezeimene, 2018). However, non-oil related FDI is the quantum of direct investment that flows into the Nigerian economy and it involves other investment like manufacturing, telecommunication, engineering and so on (Anthony-Orji, Orji, Ogbuabor & Nwosu 2020). The aggregate of oil and non-oil FDI is used in this study. More inflows of FDI is expected to promote economic development thereby reducing misery index (MXI) hence, negative relationship is expected to transpire between the series. As such, this is measured in billions of naira as reported in the CBN bulletin and we expect a positive relationship between FDI and Misery Index.

**Foreign Portfolio Investment FPI:** From the statistical report of the apex bank of Nigeria, FPI is decomposed into equity related and debt related. The aggregate of the debt and equity related foreign portfolio investment is used in this study. An inverse relationship is expected to transpire between the series such that decrease in misery index will bring about more inflow of foreign portfolio investment.

**Personal Remittance:** This comprises of all kinds of transfer received from abroad in cash or kind by resident or non-resident sent to his or her home country. Personal remittance is an expanding source of external finance in form of private capital that goes to individual home country from their temporary country of resident. As expected, a negative relationship is expected between remittance and misery index.

**Foreign Aids:** This is otherwise called official development assistance (ODA). It is usually given to countries in form of donation as a means of supporting them in times of natural disaster, economic hardship and most especially for



developmental purpose. This has been captured in billion and converted to rate as reported in the world bank data base and an inverse relationship is expected between the series.

**External Borrowings:** This is a money borrowed from a source outside the country. within the report of the central bank of Nigeria, this is captured as the total amount of foreign loan borrowed by the Nigerian government over the period considered in this study. It is also captured in billion but is converted to rate since the dependent variable is in rate.

All variables used in this study is converted to rate to ensure uniformity of measurement. This is because the misery index was presented in rate from the World Bank data base, hence, all other variables is converted to rate to ensure uniformity of measurement.

**Model Specifications**

In consonant with the empirical model of Adeola (2019) whose study disaggregated foreign capital inflows into four components (foreign portfolio investment, foreign direct investment, foreign borrowing, and foreign aids) using human development index as a measure of economic development. We remodify this model by further decomposing foreign capital inflows into five components which include foreign direct investment, foreign portfolio investment, foreign aids, home remittance and external borrowing while misery index will be used as a metric for economic development accordingly. In this same vein, we formulate our model thus;

$$MXI_t = f(FDI_t, FPI_t, PRRM_t, EXTB_t, FORA_t) \text{-----}(1)$$

The above model is stated in its functional form, we therefore introduced coefficient of each variables and error term to convert it into an econometrics model accordingly.

$$MXI_t = \alpha_0 + \alpha_1 FDI_t + \alpha_2 FPI_t + \alpha_3 PRRM_t + \alpha_4 EXTB_t + \alpha_5 FORA_t + \epsilon_t \text{-----}(2)$$

Due to the mixed stationarity level  $i(0)$  and  $i(1)$  identified in the unit root test, auto regressive distributed lag became the most appropriate estimation tool as johansen co-integration test does not accommodate stationarity level at  $i(0)$  and  $i(1)$ . Hence, the ARDL model is specified accordingly;

$$MXI_t = \alpha_0 + \alpha_1 FDI_t + \alpha_2 FPI_t + \alpha_3 PRRM_t + \alpha_4 EXTB_t + \alpha_5 FORA_t + \dots + \alpha_6 MXI_{t-x} + \alpha_7 FDI_{t-x} + \alpha_8 FPI_{t-x} + \alpha_9 PRRM_{t-x} + \alpha_{10} EXTB_{t-x} + \alpha_{11} FORA_{t-x} + \epsilon_t \text{-----}(3)$$

**Where**

- MXI = Misery Index
- FDI = Foreign direct investment
- FPI = Foreign portfolio investment
- PRRM = Personal remittance
- EXTB = External borrowings
- FORA = Foreign aids
- $\alpha_0$  = Constant
- $\alpha_1$ - $\alpha_5$  = Coefficients of the explanatory variables
- $\mu_t$  = Error Terms/Stochastic variables
- t = time series
- t-x = Allowable lag of variable (Based on lag selection criteria)

**4. RESULT AND DISCUSSION**

**Table 1: Presentation of Data**

Table 4.1: Misery Index (MXI), Foreign Direct Investment Growth Rate (FDI), Foreign Portfolio Investment Growth Rate (FPI), External Borrowing Growth Rate (EXTB), Personal Remittance Growth Rate (PRRM), Foreign Aids Growth Rate (FORA) in Nigeria for the Periods 1980 to 2019.

YEARS	FDI %	FPI %	EXTB %	PRRM %	FORA %	<b>MXI %</b>
1980	11.8	50.2	23.9	169.7	18.7	16.58
<b>1981</b>	30.8	56.6	18.3	-23.7	32.7	15.40
<b>1982</b>	-13.4	58.0	278.3	21.4	-1.5	26.70
<b>1983</b>	-8.9	61.0	19.9	-16.6	42.3	17.07
<b>1984</b>	36.4	65.7	40.0	-10.2	-20.6	32.38
<b>1985</b>	20.4	154.7	16.8	0.2	13.0	20.87
<b>1986</b>	69.5	-100.0	139.6	-10.4	214.4	16.40
<b>1987</b>	233.4	2771.4	143.1	36.5	93.1	5.35
<b>1988</b>	-29.9	-40.0	32.9	-0.1	71.6	3.58
<b>1989</b>	707.7	-162.0	79.5	584.3	383.0	51.65
<b>1990</b>	-66.2	-73.1	24.2	6.9	-21.3	53.57
<b>1991</b>	-68.9	36.7	10.0	707.4	23.0	15.03
<b>1992</b>	892.3	-6294.6	65.7	50.3	64.3	<b>34.56</b>
<b>1993</b>	105.1	-101.0	16.3	1691.1	53.5	<b>65.08</b>
<b>1994</b>	-99.9	-99.9	2.5	-31.2	-36.8	<b>63.2</b>
<b>1995</b>	241.6	2742.8	10.5	-54.5	-5.1	<b>13.98</b>
<b>1996</b>	46.5	108.4	-13.9	18.6	-4.3	<b>11.05</b>

1997	-0.8	-60.3	-3.5	97.5	12.5	30.6
1998	-26.9	-86.7	6.2	-23.4	3.8	27.59
1999	14.9	-259.3	307.2	1128.5	210.4	17.61
2000	25.0	4928.8	20.2	17.8	31.8	22.43
2001	14.2	81.1	2.5	-8.1	9.9	36.43
2002	70.1	-73.2	23.8	12.0	85.0	19.11
2003	14.7	-5.0	13.9	-6.0	0.3	47.05
2004	-3.9	-0.1	9.2	120.7	73.6	17.3
2005	-84.1	1462.5	-44.9	537.6	904.3	17.67
2006	103.6	51.7	-83.2	12.6	72.3	14.16
2007	121.9	31.3	-2.8	4.1	-84.1	25.5
2008	91.3	98.5	19.2	0.4	-36.5	33.08
2009	81.2	21.4	12.8	20.1	62.5	46.13
2010	205.4	-87.4	16.8	8.5	25.9	29.34
2011	5.2	5.3	30.0	6.9	-14.1	36.42
2012	3.6	-1.6	14.5	2.0	9.3	35.51
2013	4.2	-0.5	35.1	1.1	30.4	33.91
2014	4.3	8.2	17.6	0.8	-2.5	33.26
2015	2.5	16.6	29.4	24.0	29.9	42.28
2016	3.3	43.9	64.8	22.0	36.4	54.23
2017	4.0	9.2	66.4	34.9	59.8	54.38
2018	7.0	0.9	34.1	10.6	58.5	55.6
2019	28.2	866.6	16.3	11.6	58.9	56.07

Source: Extraction from World Bank data based, CBN Statistical Bulletin 2019 issues and further converted accordingly. The raw sheet is pasted on the appendix

Table 2: Presentation of Unit Root Test

Variable	ADF T-statistics	Mackinnon's test critical values @			Probability Level	Order of Integration	Decision
	At Level	1%	5%	10%			
MXI	-3.763544	-3.610453	-2.938987	-2.607932	0.0067	i(0)	Stationary
FDI	-12.67286	-3.621023	-2.943427	-2.610263	0.0000	i(1)	Stationary
FPI	-6.183177	-3.610453	-2.938987	-2.607932	0.0000	i(0)	Stationary
EXTB	-5.681614	-3.610454	-2.938987	-2.607932	0.0000	i(0)	Stationary
FORA	-5.873608	-3.610453	-2.938987	-2.607932	0.0000	i(1)	Stationary
PRRM	-6.803574	-3.610453	-2.938987	-2.607932	0.0000	i(0)	Stationary

Source: Extraction from E-views 10

Result presented in table 2 above shows that FORA and FDI became stationary at first differencing in the order of i(1). This therefore provided us with an evidence of mixed stationarity trend among the series. MXI, FPI, EXTB and PRRM became stationarity at level in the order of i(0) while FDI and FORA are stationary at first differencing in the order of i(1) integration. This thus suggested that we may not proceed to Johansen co-integration test due to mixed level of stationarity. The mixed stationarity level conforms with the auto regressive distributed lag conditions; hence we proceed to ARDL mechanism. We start the ARDL analysis with the lag length criterion.

Table 3: Presentation of Lag Length Criteria.

VAR Lag Order Selection Criteria  
 Endogenous variables: MXI FDI FPI FORA EXTB PRRM  
 Exogenous variables: C  
 Date: 06/28/21 Time: 21:51  
 Sample: 1980 2019  
 Included observations: 40

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1175.147	NA	4.64e+29	91.01133	91.39844*	91.12280
1	-1139.626	46.45081*	5.26e+30*	93.20201*	96.68597	94.20526*
2	-984.3297	107.5129	2.87e+28	86.17921	92.76002	88.07424

\* indicates lag order selected by the criterion  
 LR: sequential modified LR test statistic (each test at 5% level)  
 FPE: Final prediction error  
 AIC: Akaike information criterion

SC: Schwarz information criterion  
 HQ: Hannan-Quinn information criterion

**Source: EViews 10 Output**

Table 3 above shows that all available criteria such as the LR, FPE, AIC, and HQ point to the sufficiency and adequacy of the first lag. Only the SC shows the suitability of no lag in the model. This, therefore, shows that all employed subsequent tests will be evaluated using the first lag (1) as the maximum possible lag.

**Table 4: Presentation of ARDL Long run form Test**

ARDL Long Run Form and Bounds Test  
 Dependent Variable: D(MXI)  
 Selected Model: ARDL(1, 1, 0, 0, 0, 0)  
 Case 2: Restricted Constant and No Trend  
 Date: 06/29/21 Time: 09:56  
 Sample: 1980 2019  
 Included observations: 39

---

Conditional Error Correction Regression

---

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.44858	6.528932	2.213009	0.0344
MXI(-1)*	-0.528901	0.160578	-3.293736	0.0025
FDI(-1) **	0.043034	0.023857	1.803847	0.0010
FPI	-0.002128	0.001871	-1.137198	0.2642
FORA	0.003266	0.018041	0.181021	0.8575
EXTB**	-0.002656	0.035927	-0.073924	0.0415
PRRM	-0.000790	0.009183	-0.085985	0.9320
Coint(ECM)	-0.528901	0.098790	-5.353705	0.0000

---

R-squared	0.634860	Mean dependent var	1.012564
Adjusted R-squared	0.619586	S.D. dependent var	17.65774
S.E. of regression	13.45254	Akaike info criterion	8.086133
Sum squared resid	6695.917	Schwarz criterion	8.171444
Log likelihood	-155.6796	Hannan-Quinn criter.	8.116742
Durbin-Watson stat	1.960362		

---

Source: Extraction from E-views 10

The speed at which the short run distortion is corrected in the long run amounted to 52.8%. This is identified from the ecm negative coefficient of -0.5289 alongside a significant P-value of 0.000 thus suggesting that the short run-long run disequilibrium is corrected to the tune of 52.8%. The result presented in table 4 above is not too different from what we have in table 7. In terms of the value of influence each variable has on the misery index, it can be seen that the past values of the misery index account for a significant influence on the present values of the misery index. Misery index exhibited a high coefficient of 52% which shows that the quantum of underdevelopment witnessed in Nigeria is still on the increase. FPI, EXTB and PRRM exhibited a negative coefficient of -0.00212, -0.00265 and -0.00079 which implies that increase in the inflows of this variables will bring about decrease in misery index thereby promoting economic development to the tune of 0.00212, 0.00265 and 0.00079 respectively. However, Foreign aids (FORA) exhibited a positive coefficient of 0.00326 alongside an insignificant P-value of 0.8575. Which implies that increase in the inflows of foreign aids brings about decrease in economic development to the tune of 0.00326. The result here is against our a priori expectation and the direct witnessed relationship could be attributed to some anomalies not too far from fund mismanagement. Meanwhile, the lag value of foreign direct investment exhibited a positive coefficient 0.04303 alongside a significant P-value of 0.0010 thus suggesting that direct investment significantly promote economic growth in an inverse manner in Nigeria. That is, further increase in the inflow of direct investment will bring about decrease in economic development. Although the result is in consonant with some empirical report which will be discussed later. Overall, foreign direct investment and foreign aids appear to inversely influence economic development in Nigeria while portfolio investment, external borrowing and remittance exhibited a negative sign as expected thereby contributing to the development pace.

The global statistics shows an adjusted R<sup>2</sup> coefficient of 61.9% which implies that the joint influence of the foreign capital inflows would cause a change in the economic development indices to the tune of 61.9% accordingly. The Durbin Watson statistics exhibited a high coefficient of 1.9603 pointing to an absence of auto correlation thus suggesting that the result is free from spurious observation at this level.

**Table 5: Presentation of Pairwise Granger Causality Test Result**

Pairwise Granger Causality Tests  
 Date: 06/29/21 Time: 14:39  
 Sample: 1980 2019  
 Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
FDI does not Granger Cause MXI	39	5.32998	0.0268
MXI does not Granger Cause FDI		3.32085	0.0767
FPI does not Granger Cause MXI	39	4.14311	0.0492
MXI does not Granger Cause FPI		0.29347	0.5913
EXTB does not Granger Cause MXI	39	0.23960	0.0275
MXI does not Granger Cause EXTB		0.67604	0.4164
FORA does not Granger Cause MXI	39	0.02722	0.8699
MXI does not Granger Cause FORA		2.12486	0.1536
PRRM does not Granger Cause MXI	39	1.11447	0.2981
MXI does not Granger Cause PRRM		0.00188	0.9656

**Source: Extraction from E-views**

Three prevailing relationship is identified from this study report presented in table 10 above. (i) a unidirectional relationship exists between foreign direct investment and misery index with causality flowing from FDI to MXI. The implication of this result is that foreign direct investment directly influences or predict economic development in Nigeria. The result here is in line with that of the ARDL long run estimate which shows that FDI significantly promote economic development but in an inverse manner, (ii) a unidirectional tie prevails between portfolio investment and misery index with causality flowing from FPI and MXI. The economic implication of this is that over the years, portfolio investment has directly contributed to economic development in Nigeria, finally (iii) external borrowing shows a prevailing tie with economic development with causality flowing from EXTB to MXI. However, foreign aids and home remittance does not seem to influence or predict economic development metric (MXI) in Nigeria as reported by their respective insignificant coefficients. In all, the causality result provided us with an evidence to assert that foreign capital inflows inform of portfolio investment, direct investment and external borrowing have contributed to the Nigeria’s economic development over the years.

**5. SUMMARY OF FINDING, CONCLUSION AND RECOMMENDATION**

This study investigated the extent to which various foreign capital inflows promote economic development in Nigeria. An historical data sourced from the Central Bank of Nigeria Statistical bulletin and the World Bank data based is used for the study. Foreign capital inflows are proxied with foreign direct investment, portfolio investment, foreign aids, external borrowing, and personal remittance while misery index which is a composite statistics of unemployment rate, inflation rate, interest rate and gross domestic product growth rate is used as a measure of economic development. The study employed Stationarity test, Bound Test, ARDL Short and Long run test alongside Granger causality test. Within the contest of the study, it was reported that

- Misery index exhibited a high coefficient of 52% which is quite higher than the threshold level of 24% thus indicated the poor level of development pace in Nigeria. This further justify that its component such unemployment rate, inflation rate and interest rate deepen overs the years.
- Foreign Direct Investment over the years have significantly contributed to economic development in Nigeria, but in an opposite direction. Result of the Granger causality test further supported that of the ARDL estimate as unidirectional causal relationship is identified between FDI and MXI.
- Foreign Portfolio Investment does not significantly promote economic development in Nigeria as reported by the result of the ARDL long run estimate used in testing h study hypothesis.
- Foreign Aids do not have a statistically influence on Misery Index in from both result used in testing the study hypothesis.
- External borrowing exhibited a significant statistical tie with Misery Index as report from the Granger Causality Test provided us with an evidence of causal relationship between the series with causality flowing from EXTB to MXI.
- Finally, personal remittance does not statistically contribute to economic development in Nigeria.



The study concludes that of the five decomposed proxies of foreign capital inflows identified in this study, only foreign direct investment and external borrowing seem to have significantly contributed to economic development in Nigeria. Therefore, we recommend that

- i. Since result shows that personal remittance positively contributed to economic development in Nigerian but, in an insignificant manner, which is in line with the report of (Fajnzylber & Lopez, 2017; Acosta, Calderón, Fajnzylber, & Lopez, 2018) that larger percentage of personal remittance that flows into the African region are mostly used for consumption and luxury purposes and not investment purpose, we therefore recommend that large percentage of home remittance should be allocated towards investment oriented project and not to be used or luxury purposes. Investing personal remittance on viable investment will help boost the economy through the window of job creation and tax payment to the government.
- ii. Finally, to further enjoy more benefit of external borrowing in Nigeria, managers of the Nigerian economy should ensure that external borrowed funds are used on capital project that is capable of yielding appreciable returns thereby improving the well-being of her citizens and avoid fund diversion.

## REFERENCES

1. Adegboye, F., Osabohien, R., Olokoyo, F., Oluwatoyin, O., & Adediran, O. (2021). Institutional quality, foreign direct investment, and economic development in sub-Saharan Africa. *Humanities and Social Sciences Communications*. 7(38), 1-9 |<https://doi.org/10.1057/s41599-020-0529->
2. Adeola, O. (2019). Foreign capital flows and economic growth in selected sub-Saharan African economies. Dissertation presented for the degree of Doctor of Philosophy in Development Finance (Faculty of Economics and Management Sciences) at Stellenbosch University.
3. Ahmed, M. (2020). Foreign capital inflows and economic growth: A cross county panel analysis. A thesis submitted for the partial fulfilment of the requirements of the Cardiff Metropolitan University in Collaboration with the London School of Commerce (Associate College) for the degree of Doctor of Philosophy.
4. Anidiobu, G., Okolie, P., Onyia, C., & Onwumere, U. (2021). Impact of foreign capital inflows on economic growth in ECOWAS sub-region. *International Journal of Academic Research in Accounting, Finance and Management Sciences* 10(1), January 2021, 172188
5. Anthony-Orji, I., Orji, O., Ogbuabor, E., & Nwosu, O. (2020). Disaggregated foreign capital inflows and economic growth in a developing economy: Empirical evidence from Nigeria. *Journal of Empirical Studies*. 5(1) 1-11 ISSN(e): 2312-6248 ISSN(p): 2312-623X DOI: 10.18488/journal.66.2018.51.1.11
6. Acosta, P., Calderón, C., Fajnzylber, P. & Lopez, H. (2018). What is the impact of international remittances on poverty and inequality in Latin America? *World Development*, 36(1), 89- 114.
7. Akinpelumi, O., Nwakanma, P., & Nnamdi, S. (2021). Institutional funding and economic development in Nigeria. *ABSU journal of management sciences*, 7(8), 23-38.
8. Barro, R. J. (1999). Notes on growth accounting. *Journal of economic growth*, 4(2), 119-137.
9. Barro, R. J. (1999). Inequality, growth, and investment (No. w7038). National bureau of economic research.
10. Borensztein, E., De Gregorio, J. and Lee, J. W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*. 45,115–135. Cambridge University Press
11. Badwan, N., & Atta, M. (2020). The impact of international capital flows on economic growth in Palestine. *Journal of Economics, Management and Trade*. 26(11): 23-37, 2020; Article no. JEMT.64368.
12. Cohen, I. K., Ferretti, F., & McIntosh, B. (2014). Decomposing the misery index: A dynamic approach. *Cogent Economics & Finance*, 2(1), 991089.
13. Charles R. (1986). Evidence on the determinants of foreign direct investment: The case of EU regions, *Eastern Journal of European Studies*.19;2. 25.
14. Caves, R.E. (1996). *Multinational enterprise and economic analysis*, 2nd ed. Cambridge
15. ,Furqan, S., Vasilii, E., Hongshu, W., Shafiqur, R., ,& Anna, I. (2021). The impact of foreign capital inflows on agriculture development and poverty reduction: Panel data analysis for developing Countries. *Sustainability* 2021, 13(4), 1-22. 3242. <https://doi.org/10.3390/su13063242>
16. Fajnzylber, P. & López, J.H. (2017). Close to home: The development impact of remittances in Latin America. *International Bank for Reconstruction and Development*
17. Findlay R. (1978). Relative backwardness, direct foreign investment and the transfer of technology: A simple dynamic model. *The Quarterly Journal of Economics*. 1978; 92(1):1-16
18. Greenwood, R.. (2002). Theorizing change: The role of professional association in the transformation of institutionalized fields. *The Academy of Management Journal* 45(1), 58-88
19. Hanson, G. (2001). Should countries promote foreign direct investment?, G-24 Discussion Papers 9, United Nations Conference on Trade and Development.
20. Henderson, D. R. (2011). When Economics Was Young. *Policy Review*, (170), 83.
21. Ivaldi, E., Bonatti, G., & Soliani, R. (2016). The construction of a synthetic index comparing multidimensional well-being in the European Union. *Social Indicators Research*, 125(2), 397-430.
22. Lipsey, R. (2002). Home and host country effects of FDI. Lidingö, Sweden.

23. Nnamdi, I. S., and Eniekezimene, D. E. (2018). Foreign direct investment inflows and economic performance in a developing economy: Nigerian evidence. *European Journal of Business and Management*. 10(6), 104-113.
24. Nduka, J., & Achugbu A. (2017) Impact of foreign direct investment on economic growth in Nigeria. *Interdisciplinary Journal of Contemporary Research in Business*. 2017;4(3):43- 54
25. Oladipo, S. O (2017) Macroeconomic determinant of foreign direct investment in Nigeria (1985-2010): A GMM Approach *Journal of Emerging issues in Economics Finance and Banking*, 12 (4).
26. Okun, A. M. (1963). *Potential GNP: its measurement and significance* (pp. 98-103). New Haven: Yale University, Cowles Foundation for Research in Economics.
27. Okoro, O., Nzotta, N., & Alajekwu, B. (2020). Effect of international capital inflows on economic growth of Nigeria. *International Journal of Science and Management Studies (IJSMS)*. 02(1) 13-25. [www.ijmsjournal.org](http://www.ijmsjournal.org).
28. Okun, A. M. (1983). *Economics for policymaking: selected essays of Arthur M. Okun*. MIT Press
29. Books, 1.
30. Rodionova, T., Yakubovskiy, S., & Kyfak, A. (2020). Foreign capital flows as factors of economic growth in Bulgaria, Czech Republic, Hungary and Poland. *Research in World Economy*. 10(4);48-57. Special Issue, 2020 <http://rwe.sciedupress.com>
31. Smarzyńska, B. (2002). Spillovers from foreign direct investment through backward linkages: Does technology gap matter? Mimeo, World Bank.
32. Siddiqui, O. (2018). Impact of foreign direct investment on economic growth of Pakistan. *Advances in Management & Applied Economics*,3(1),35-45
33. Todaro, M. P., & Smith, S. C. (2011). *Economic development*. Addison-Wesley, NY, USA.
34. UI Haq, M. (2003). *Human development reports*. London: Oxford University Press.
35. Utomi, S. (2014). The impact of foreign direct investment on the Nigerian economy. *European Journal of Business and Management*,5(2), 25-33.
36. World Bank (2013.) *World bank world development indicators database (WDI)*. Washington D.C. World Bank.
36. Wang, N., Haroon, S. M., Ali, K., Abbas, S., & Ullah, S. (2019). Financial structure, misery index, and economic growth: Time series empirics from Pakistan. *Journal of Risk and Financial Management*, 12(2), 100-109.