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FOREIGN DIRECT INVESTMENT IN THE QUEST FOR POVERTY REDUCTION IN NIGERIA³

This study examined the direct and indirect impact of foreign direct investment (FDI) on poverty reduction in Nigeria using the Autoregressive Distributed Lag (ARDL) framework for the period 1981-2019. The results of the study revealed that foreign direct investment exerted a significant positive effect on economic growth and economic growth, in turn, significantly contributes to poverty reduction within the period of review 1981-2019. This implies that FDI indirectly contributes to poverty reduction, the study shows that FDI significantly exerted an adverse effect on poverty via relatively low income and loss of jobs. Similarly, the study shows that wage and private-sector credit contribute to poverty reduction.

Keywords: Foreign Direct Investment; Poverty Reduction; Economic Growth; Nigeria; ARDL Framework JEL: F21; F23; O10; O50

1. Introduction

Foreign direct investment (FDI) has been widely seen as a growth-enhancing factor in developing countries. It has the potential to augment the saving-investment gap in developing countries and comes with technology and managerial skills which set the pace for economic development, most importantly, poverty reduction. According to United Nations Conference on Trade and Development (UNCTAD, 2006), FDI has the potential to generate employment, raise productivity, transfer foreign skills and technology, enhance exports and contribute to the long-term economic development of developing countries.

In the 1960s, there was a huge foreign direct investment (FDI) inflow attraction into Nigeria. More than 25% of companies registered in Nigeria in 1956 were foreign-owned, while in 1963, as much as 70% of investment in the manufacturing sector was from foreign sources (Ohiorhenuan, 1990). However, there was a reduction in Nigeria's ability to attract and retain FDI due to policy design, decades of political instability, economic mismanagement, and

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endemic corruption. Also, the high level of deterioration of the country's social conditions and physical infrastructure compounded the fall in FDI inflows, despite increased public revenues generated by the oil sector. Consequently, over 70% of the population lived on less than one dollar a day (UNCTAD, 2009).

The return to democracy in 1999 created the opportunity for economic renewal and an associated broader base of FDI. To reap the benefits from FDI, the Nigerian government undertook critical measures to improve the investment climate. The aim is to provide an environment more conducive to domestic private investment and FDI. Thus, in May 1999, the reform process was set in motion, mainly through a home-grown poverty reduction strategy. On this note, the National Economic Empowerment and Development Strategy (NEEDS) was adopted in 2003 to guide public policies. In contrast with previous development plans, NEEDS made FDI attraction an explicit goal for the government as well as gave attention to drawing investment from wealthy Nigerians abroad. According to NEEDS, Nigeria would have to achieve 30% annual investment and 7 to 8% growth to successfully halve poverty by 2015, in line with the Millennium Development Goals. Since 2001, Nigeria has been the major recipient of FDI within the Economic Community of West African countries (ECOWAS) group and accounted for over 70% of the group inflows (UNCTAD, 2009). With the majority of FDI flowing into Nigeria, it is expected that jobs will be created, income raised and hundreds of millions lifted out of poverty while accelerating economic growth. Unfortunately, at present, despite the increased FDI inflows, Nigeria is off-track on meeting its poverty reduction target, as the poverty trend has continued to rise. According to the National Bureau of Statistics (NBS) (2019), 82.9 million (40.1%) Nigerians are classified as poor. In other words, on average, 4 out of 10 individuals in Nigeria have real per capita expenditures below N137,430 per year. This collaborates with Omoniyi (2013), who asserted that despite the government's poverty eradication campaigns, national development plans, and seasonal papers; poverty is still a major challenge in Nigeria.

Empirically, there have been conflicting results on the impact of FDI on poverty reduction. This has raised several questions in the minds of scholars and policymakers about the benefits of liberal policies that promote FDI inflows. The existing literature is divided between findings with a positive impact of FDI on poverty reduction, a negative one, and an insignificant impact of FDI on poverty reduction. For instance, Gohou & Soumare (2012), Fowowe & Shuaibu (2014), Uttama (2015), and Topalli et al.(2021) found a significant positive impact of FDI on poverty reduction, while Huang et al. (2010), Ali & Nishat (2010), and Agarwal et al. (2017) found a significant negative effect of FDI on poverty reduction. Also, Tsai & Huang (2007), Akinmulegun (2012), and Ogunniyi & Igberi (2014) asserted that there is an insignificant impact of FDI on poverty relationship, which is based on different countries, poverty proxies, and varied econometric approaches, failed to provide a conclusive result. Therefore, this study contributes to the examination of the direct and indirect impact of foreign direct investment on poverty reduction in Nigeria.

The rest of the paper is organized as follows. Following the introduction is the literature review, which is in section two, and section three deals with the method of analysis. Section four focuses on the empirical results and analysis of the data relating to FDI and inclusive growth in Nigeria, while section five deals with the concluding remark.

2. Literature Review

2.1. Impact of Foreign Direct Investment on Poverty

The impact of FDI on poverty alleviation could be indirect or direct effects.

2.1.1. Indirect Effect of FDI on Poverty Reduction

Given the positive influence of FDI on the host country's economic growth, the indirect effect of FDI on poverty depends on how economic growth affects poverty (World Bank 2000/2001). Empirical literature that has investigated the relationship between FDI and economic growth and how they have impacted poverty reduction revealed that economic growth is a channel through which FDI influences poverty reduction (Hanim, 2011). According to Klein et al. (2001), FDI is a medium through which economic growth improves the host country's welfare/poverty alleviation. Theoretically, this may occur through different channels. Firstly, economic growth may affect poverty through its impact on investment and employment. According to the flexible accelerator principle, on the supply side, an increase in the growth rate of output will lead to an increase in the level of investment, as well as employment. On the demand side, as the economy grows, there will be an increasing demand for existing goods and services or arising demand for new products (UNCTAD, 1999), thereby raising investment demand. Since investment and technology innovation are the main drives for employment and income, poverty reduction may be improved. Secondly, economic growth increases the government budget (income), which facilitates government spending on social programmes for the poor (Klein et al. 2000) and government investment in infrastructure, especially in poor areas. This shows that economic growth is one of the most important factors influencing poverty (World Bank, 2000/2001).

2.1.2. Direct Effect of FDI on Poverty Reduction

The impact of FDI on poverty also works by providing employment opportunities to the host country's workers. FDI under the mode of green-field investment may reduce existing unemployment by providing people with income and therefore reducing poverty. International Finance Corporation (IFC, 2000) considered this as a major impact of FDI on poverty. The green-field investment is an investment that relates to producing unique products without close substitutes in the host country. Contrarily, FDI may induce unemployment when it is under the mode of Merge and Acquisitions (M&A). When FDI takes the mode of M&A of moribund enterprises, it may help prevent potentially increased unemployment in local firms. FDI may raise employment in backwards-linkage entities (local firms) if the foreign investors use the local suppliers, subcontractors, and service providers and may also raise employment in forward-linkage entities when using local distributors (Hemmer & Phuong Hoa, 2002) and therefore improving poverty reduction. The reverse may be the case if foreign investors rely on imported inputs as well as foreign distributors.

2.2. Overview of FDI Inflows in Nigeria

Between the 1950s and 1960s, Nigeria attracted huge foreign direct investment (FDI) inflows. Ohiorhenuan (1990) asserted that more than 25% of companies registered in Nigeria in 1956 were foreign-owned, while in 1963, as much as 70% of investment in the manufacturing sector was from foreign sources. However, there was a reduction in FDI inflows into Nigeria due to policy design, decades of political instability, economic mismanagement, and endemic corruption. The reduction was also compounded by the high level of deterioration of the country's social conditions and physical infrastructure, despite increased public revenues generated by the oil sector (United Nations Conference on Trade and Development, UNCTAD, 2009).

In 1970, one year before Nigeria joined the Organization for the Petroleum Exporting Countries (OPEC), FDI inflows stood at \$205 million. By 1975 it reached \$470 million. After Nigerian National Petroleum Corporation's (NNPC) stake in Shell Nigeria and other oil companies reduced from 80 to 60%, which took place in 1989 (mergers and acquisitions), Nigeria's FDI inflows stood at below \$1 billion. However, the restriction policies (indigenization policy) affected the FDI inflows in sector other than oil. This pushed most foreign investors to divest. In 1989, the indigenization policy was partially reversed. However, it was in 1995 that the National Investment Promotion Act opened virtually all areas of the economy to foreign investors (UNCTAD, 2009).

Between 1970 and the 1990s, Nigeria accounted for more than 30% of all FDI inflows to Africa. However, in 2007, Nigeria accounted for about 16 percent of all FDI inflows to Africa. Similarly, in the 1970s, Nigeria attracted about half the FDI inflows into the Economic Community of West African countries (ECOWAS) group. Since 2001, Nigeria has been the major recipient of FDI within the group and accounted for over 70% of the group inflows. In Africa, in terms of absolute FDI stock, Nigeria remains the second largest recipient after South Africa, with \$63 billion and \$93 billion, respectively (UNCTAD, 2009).

In 2019, Nigeria attracted the third-largest foreign direct investment (FDI) inflows in Africa after Egypt (\$9 billion) and the Democratic Republic of the Congo (\$3.4 billion) received more inward FDI as FDI inflows across the whole African continent fell by 10.3% (\$45.4 billion), but it suffered a sharp yearly decline in inward investment. Data from the United Nations Conference on Trade and Development (UNCTAD) reveals that Nigeria received \$3.3 billion of FDI inflows in 2019, with a yearly decline of 48.5%. Despite the decline in FDI inflows in 2019, Nigeria's FDI stock has grown between 2017-2019 to reach \$98.6 billion in 2019. The number and value of green-field investments have been on the increase, steadily growing from 36 projects worth \$4.8 billion in 2017 to reach 76 projects worth \$10.2 billion in 2019 (UNCTAD, 2009).

In the same way, as shown in figure 1, there are indications that FDI has been positively fluctuating between 1981-2019. Between 1990 and 1995, there was a sharp rise in FDI as a percentage of GDP and later fell in 1998; thereafter, it rose in 1999.



Figure 1: Foreign Direct Investment Inflows (% of GDP), 1981-2019

In 2003, Nigeria underperformed in attracting FDI outside the oil sector. Only 18 of the top 100 world's largest non-oil transnational corporations (TNCs) had affiliates in Nigeria, compared with 42 in South Africa, 25 in Egypt, and 17 in Kenya. A total of 41 of the top 100 were present in at least one of these countries but not in Nigeria. These 41 TNCs represent a wide range of sectors, with pharmaceuticals and motor vehicles prominent (UNCTAD, 2005). This underperformance could be attributed to insecurity and instability as well as poor business perceptions. This is evident in the Economic Forum's index of business perceptions of costs of crime and violence which ranked Nigeria 120th of 130 countries in 2007.

2.3. Empirical Review

2.3.1. FDI and Economic Growth

The endogenous growth theories placed much emphasis on technological innovation and research and development as major sources of economic growth. As posited by the endogenous growth models, the growth rate of a country depends on the state of the technology applied. The foreign firms are seen by Ford et al. (2008) as the major sources of technological innovation and research and development in developing countries through their direct investment. Borensztein et al. (1998) assert that the advanced technologies provided by foreign firms stimulate the economic growth of developing countries.

Insah (2013), Iqbal & Abbas (2015), Agrawal (2015), and Bouchoucha & Ali (2019) investigated the impact of FDI on economic growth using various techniques and found that FDI has a significant positive effect on growth. Apergis, Lyroudi, & Vamvakidis (2008) investigated the effect of FDI on economic growth, using panel data from 27 transitional European economies and came to the conclusion that FDI improves economic growth in transitional economies with a high level of incomes and efficient privatization schemes.

Chowdhury & Mavrotas (2006) used Toda Yamamoto technique to analyze the direction of causality between FDI and GDP growth for Thailand, Chile, and Malaysia. Their findings show that for Chile, GDP growth caused FDI net inflows and not the opposite. In contrast, the findings for Thailand and Malaysia show strong evidence of a bi-directional causality between GDP growth and FDI inflows. Hemmer & Phuong Hoa (2002) used panel data covering 61 provinces of Vietnam and the 1990-2000 period to investigate the impact of FDI on economic growth, and they found that FDI has a positive and significant impact on growth. Olusanya (2013) used a Granger causality test to examine the impact of FDI on economic growth in a pre and post-deregulated Nigerian economy from 1970-2010. The result shows that in the pre-deregulation era (1970-1986) economic growth causes FDI, but in the postderegulation era (1986-2010), the result shows that there is no causality between economic growth (GDP) causes FDI. However, between 1970 and 2010, the result shows that economic growth drives foreign direct investment inflow into the country. Furthermore, Mencinger (2003) examined the impact of FDI on economic growth in eight Central and Eastern European Countries and found a negative correlation between FDI and economic growth. From these studies, it is revealed that the impact of FDI on growth is either negative or positive or non-significant.

2.3.2. FDI and Poverty Reduction

Gohou & Soumare (2012), with panel data and controlling for endogeneity, used the 2-stage least square regression to analyze the impact of FDI on poverty in a sample of 52 African countries between 1990 and 2007. In their study, they used HDI and GDP per capita as proxies for poverty and their result revealed a strong and significant positive relationship between FDI and poverty reduction - with respect to both measures of poverty. Similarly, in a sample of five African free trade areas, which constitute five custom unions and monetary unions, their result showed that the impact of FDI on poverty was significantly different among African regions. FDI was found to have a positive and significant impact on poverty reduction in Central and East Africa. These results are consistent with Fowowe and Shuaibu (2014), that used Generalized Methods of Moments (GMM) to examine the effect of FDI on the poor in a sample of 30 African countries with pooled data from 1981 to 2011. In their study, the World Bank poverty headcount was used as a proxy for poverty, and they found that FDI is significantly good for the poor. Their analysis showed that the positive impact of FDI on poverty reduction was found to be high in poor countries with a high incidence of poverty. In the case of Nigeria, Anigbogu et al. (2016) used Ordinary Least Square to investigate the effect of foreign direct investment on poverty reduction in Nigeria from 1980-2014, and their findings show that FDI inflows significantly improved poverty reduction in Nigeria. The Absolute number of poor people living under the poverty line was used as a proxy for poverty reduction.

Mahmood & Chaudhary (2012), using Autoregressive Distributed Lag (ARDL) approach, investigated the effect of FDI on poverty reduction in Pakistan between 1973 and 2003. The poverty headcount was used as a proxy for poverty. Based on their analysis, FDI was found to have significantly reduced poverty in Pakistan. This result is in line with Shamim et al. (2014) and Fowowe & Shuaibu (2014), that also examined the impact of FDI on poverty in Pakistan from 1973 to 2011 using poverty headcount as a proxy for poverty. Furthermore,

Uttama (2015), using a spatial panel data model and spatial data from 1995 to 2011, investigated the determinants of FDI and other related factors in the ASEAN countries. The result revealed that a positive and significant relationship exists between FDI and poverty reduction in the sample countries. Hemmer & Phuong Hoa (2002), based on panel data covering 61 provinces of Vietnam and the 1990-2000 period, investigated the impact of FDI, and economic growth on poverty reduction in Vietnam using a pooled regression. The poverty headcount was used as a proxy for poverty. The result shows that the direct impact of FDI works through employment creation, but the impact was negatively insignificant, while the FDI's indirect impact through economic growth exerts a negative and significant effect on the rate of poverty. This implies that FDI significantly impacted on poverty indirectly in Vietnam while the direct effect remains insignificant. Topalli et al. (2021) investigated the impact of FDI inflows on poverty reduction in six Western Balkan countries and also considered other country characteristics using a generalized method of moments (GMM) estimator for panel data models with fixed effects during the period from 2002 to 2021. The poverty headcount was used as a proxy for poverty. Their results show that FDI significantly contributed to poverty reduction in the Western Balkan countries.

Huang et al. (2010) found that FDI has a significant negative impact on poverty reduction in their analysis of the effect of FDI on poverty reduction in 12 countries in East and Latin America between 1970 and 2005 using unbalanced panel data. The mean income of the poorest quintile of the population was used as proxy poverty. This result is in line with Ali et al. (2010) that found FDI inflows have a negative impact on poverty reduction in Pakistan in both the short and long run in their investigation of the relationship between FDI and poverty reduction using Autoregressive Distributed Lag (ARDL). They measured poverty using poverty headcount. Similarly, Remla (2012), using Cointegration and Vector Error Correction approaches, investigated the effect of FDI and poverty reduction in Ethiopia from 1970-2009. The result reveals that real per capita GDP responded negatively to FDI in the long run. Real per capita GDP was used as a proxy for poverty. Furthermore, Agarwal et al. (2017), found that FDI has a negative and significant impact on poverty reduction in India using data from 1981-2011, while FDI has a positive and significant effect on poverty reduction in Nepal and Sri Lanka. This shows that poverty reduction has deteriorated.

Tsai & Huang (2007), using time series data from 1964 to 2003, examined the effect of inward FDI on poverty reduction in Taiwan and the study reveals that FDI has an insignificant impact on the average income of the poor. In the study, the mean income of the bottom quintile was used as a proxy for poverty. Gohou & Soumare (2012), found that FDI's impact on poverty reduction is insignificant in the Southern and Northern regions of Africa in their investigation of the impact of FDI on poverty in a sample of 52 African countries between 1990 and 2007 using panel data and two-stage least square regression method. The Human Development Index and Gross Domestic Product per capita were used as proxies for poverty. In Nigeria, Ogunniyi & Igberi (2014), using the Ordinary Least Squares, investigated the relationship between FDI and poverty reduction in Nigeria between 1980 and 2012 and they found an insignificant relationship between FDI and poverty reduction in Nigeria. In his own part, Akinmulegun (2012), using the Vector Autoregression method, examined the effect of FDI on welfare in Nigeria, using data from 1986 to 2009, and found a similar result to Ogunniyi & Igberi (2014).

The literature reviewed shows mixed results on the relationship between FDI on poverty reduction. Some scholars (Uttama, 2015; Topalli et al., 2021) have found FDI to reduce poverty, while others (Ali et al., 2010; Agarwal et al., 2017) have found FDI to worsen poverty. Also, another set of scholars (Akinmulegun, 2012; Ogunniyi & Igberi, 2014) found FDI to have an insignificant impact on poverty reduction. Many techniques, different proxy variables for poverty, different sample sizes, and time-frames were used in analyzing the effect of FDI on poverty reduction in the previous studies. Furthermore, many of the studies (such as Akinmulegun, 2012; Ogunniyi, Igberi, 2014; Topalli et al., 2021) focused on the direct impact of FDI on poverty reduction, while other studies (Hemmer & Phuong Hoa, 2002) looked out the indirect and direct channels through which FDI influence poverty reduction. These conflicting results have raised a number of questions in the minds of scholars and policymakers about the benefits of FDI inflows. Therefore, it becomes imperative to examine the channels through which foreign direct investment impacts poverty reduction in Nigeria, thereby contributing to the existing literature.

3. Method of Analysis

3.1. Data and Sources

The data for this study were sourced from the World Bank's PovcalNet database, macrotrends.net, the World Bank's World Development Indicators (WDI), and the Central Bank of Nigeria Statistical Bulletin. The data covered the period 1981-2019. In investigating the effect of FDI on poverty reduction in Nigeria, the study adopted Hemmer & Phuong Hoa (2002) approach, but with modification. This study differs from Hemmer & Phuong Hoa (2002) in the area of variables, types of data, and place. Hemmer & Phuong Hoa (2002) focused on Vietnamese provinces, while this study focuses on FDI and poverty in Nigeria. To measure poverty, this study followed Hemmer & Phuong Hoa (2002) by using the headcount index, which measures the percentage of the population living on less than US\$ 1.90 per day at 2011 PPP term. Also, Hemmer & Phuong Hoa (2002) used a panel data in their analysis, while this study uses time-series data. In modelling the relationship between FDI and poverty reduction, Hemmer & Phuong Hoa (2002) modelled the relationship between FDI and poverty reduction indirectly and directly, using endogenous and simple models, respectively. In terms of analysis, Hemmer & Phuong Hoa (2002) used panel data pooled regression and therefore applied the cross-section weighting and white covariance estimation methods to correct for between-section and within-section heteroskedasticity while this study models the relationship between FDI and poverty reduction indirectly and directly using time series data and Autoregressive Distributed Lag (ARDL) framework.

Analytically, the ARDL approach is adopted over other approaches, such as Johansen & Juselius (1990), because it is relatively more appropriate and efficient for a small sample size (< 100). Secondly, irrespective of whether the underlying variables are I(0) or I(1), or a combination of both, the ARDL approach can still be applied. Also, endogeneity is less of a problem, since each of the underlying variables stands as a single equation (Nkoro & Uko, 2016).

The base estimation models are given as:

FDI and Economic Growth Model

The objective of this model is to explore the impact of FDI on economic growth.

$$LnEGRt = \beta 0 + \beta 1LnFDIt + \beta 2LnGDinvt + \beta 3LnHCSt + \beta 4LnTOTt + \mu t$$
(1)

Where LnEGR is the log of annual GDP growth rate, LnFDI is the log of the ratio of foreign direct investment to GDP. LnGDinv is the log of the ratio of adjusted gross fixed capital formation to GDP, which is used as a proxy for gross domestic investment. The adjusted gross fixed capital formation is arrived at by subtracting FDI from the total gross fixed capital formation. LnHCS is the log of the ratio of social capital expenditure to GDP, which captures human capital stock, and LnTOT measures the trade openness, while μ_t is the random error term, which is assumed to be randomly and independently distributed. Equation one is transformed into ARDL model.

The ARDL model approach to cointegration testing is:

$$\Delta LnEGRt = \beta 0 + \beta 1LnEGRt - 1 + \beta 2LFDIt - 1 + \beta 3LnGDinvt - 1 + \beta 4LnHSCt - 1 + \beta 5LnTOTt - 1 + \sum_{k=1}^{k} \beta 6\Delta LnEGRt - 1 + \sum_{k=0}^{k} \beta 7\Delta LnFDIt - 1 + \sum_{k=0}^{k} \beta 8\Delta LnGDinvt - 1 + \sum_{k=0}^{k} \beta 9\Delta LnHCSt - 1 + \sum_{k=0}^{k} \beta 10LnTOTt - 1 + \mu t$$
(2)

Economic Growth, FDI and Poverty Reduction Model

Given the empirical postulation of the FDI-Economic growth relationship, as well as the growth impact on poverty, model 3 focuses on the channel through which FDI influences poverty reduction. This means that model 3 examines the growth impact (FDI's indirect impact) and, FDI's direct impact (employment impact) on poverty reduction in Nigeria. Thus:

$$LnPOVt = \psi 0 + \psi 1LnEGRt + \psi 2LnFDIt + \psi 3LnWt + \psi 4LnPSCt + \varepsilon t$$
(3)

Where LnPOV is the log of headcount, which measures the percentage of the population living on less than US\$ 1.90 per day at 2011 PPP term. LnEGR is the log of the annual GDP growth rate. LnFDI denotes the log of the ratio of foreign direct investment to GDP. LnW is the ratio of employees' compensation to GDP, which captures wages, and LnPSC is the ratio of private sector credit to GDP, while ε_i is the random error term, which is assumed to be randomly and independently distributed. Equation 3 is transformed into ARDL model.

The ARDL model approach to cointegration testing is:

$$\Delta LnPOVt = \psi 0 + \psi 1LnPOVt - 1 + \psi 2LnEGRt - 1 + \psi 3LnFDIt - 1 + \psi 4LnWt - 1$$

+ $\psi 5LnPSCt - 1 + \sum_{k=1}^{k} \psi 6\Delta LnPOVt - 1 + \sum_{k=0}^{k} \psi 7\Delta LnEGRt - 1$
+ $\sum_{k=0}^{k} \psi 8\Delta LnFDIt - 1 + \sum_{k=0}^{k} \psi 9\Delta LnWt - 1 + \sum_{k=0}^{k} \psi 10\Delta LnPSCt - 1 + \varepsilon t$ (4)

Before estimating the models, the properties of the variables were examined to avoid order two integration, I(2), and to confirm the long-run relationship between the underlying variables. In the case of the unit root, the Augmented Dickey-Fuller (ADF) was used to test the order of integration of each variable. To test the hypothesis of no long-run relationship between FDI and the underlying variables, we imposed zero restriction on the coefficients of the one-period lagged-level (lag 1) variables in the unrestricted error correction models (UECM) (equations 2 and 4) and a joint significance test was carried out on the one-period lagged-level (lag 1) variables in equations 2 and 4. The long-run relationship tests followed the bound test procedure, which is based on F-statistic. If the F-statistic of the restricted coefficients falls above the Pesaran et al. (2001) upper bound critical value, reject the null hypothesis on no long-run relationship and vice versa.

4. Results and Discussion

4.1. Unit Root Test

Table 1 reveals the result of the Augmented Dickey-Fuller (ADF). All the variables are stationary at order I(1) except LnEGR, which is stationary at order I(0). Hence, the long-run relationship among the variables in equations 1 and 3 was examined using ARDL bound cointegration test.

Table 1

Variable	Constant/Trend	Level	First Difference	Order of Integration
LnEGR	Constant	-4.158068*	-	I(0)
LnFDI	Constant and Trend	-	-7.960562*	I(1)
LnGDinv	Constant and Trend	-	-4.955784*	I(1)
LnHSC	Constant	-	-11.63772*	I(1)
LnTOT	Constant and Trend	-	-6.729668*	I(1)
LnPOV	Constant and Trend	-	-3.843890**	I(1)
LnW	Constant and Trend	-	-8.465748*	I(1)
LnPSC	Constant and Trend	-	-4.095089**	I(1)

The ADF Unit Root Test Result

Note: *, ** and *** indicate significant at the 1 percent, 5 percent and 10 percent level of significance, respectively. *Source: Author's Computation.*

4.2. ARDL Cointegration Bounds Test

In testing the hypothesis of no long-run relationship between FDI and the underlying variables, first, the ordinary least squares (OLS) method was used to estimate equations 2 and 4 and the results of the unrestricted error correction models (UECM) are presented in Tables 2 and 3. As indicated in panel B, Tables 2 and 3, the estimated UECM scaled through the post-estimation tests such as Breusch-Godfrey Serial Correlation LM test, ARCH test, the Ramsey RESET test, and the stability test. After which a zero restriction was imposed on the coefficients of the one-period lagged-level (lag 1) variables in equations 2 and 4, and joint significant tests were carried out. The results of the joint significant tests as shown in Table 4 are the long-run cointegration of the variables. The long-run relationship tests followed the bounds test procedure, which is based on F-statistic. Since the sample size is small (<100)

observations), the study employed the critical bounds values provided by Narayan (2005) as against the critical values provided by Pesaran et al. (2001).

FDI Impact on Economic Growth in Nigeria

Table 2

Impact of FDI on Economic Growth in Nigeria, 1981-2019 Panel A

Dependent Variable: D(LNEGR) Method: Least Squares Sample (Adjusted): 1987 2019 Included observations: 25 after adjustments Variable Coefficient Std. Error t-Statistic Prob. 21.38179 4.024428 5.313002 0.0130 С LNEGR(-1) -2.683815 0.281358 -9.538800 0.0024 LNFDI(-1) 2.486775 4.405901 0.0217 0.564419 0.960380 -7.518177 0.0049 LNGDinv(-1) -7.220310LNEDU(-1) 3.798308 0.621380 6.112702 0.0088 0.457075 LNTO(-1) -0.471231 -1.030971 0.3784 D(LNEGR(-1)) 0.726215 0.143363 5.065581 0.0149 D(LNFDI) 2.989070 0.395330 7.560944 0.0048 D(LNFDI(-1)) 1.097910 0.253323 4.334038 0.0227 D(LNFDI(-2)) 1.202180 0.279139 4.306750 0.0230 D(LNFDI(-3)) 1.433479 0.179955 7.965781 0.0041 D(LnGDinv) -1.670771 0.546702 -3.056088 0.0552 D(LNGDinv(-1)) 6.696467 1.173835 5.704776 0.0107 D(LNGDinv(-2)) 1.864790 0.854091 2.183362 0.1170 D(LNGDinv(-3)) -2.8777950.810015 -3.5527690.0380 D(LNEDU) 0.471975 0.189711 2.487862 0.0887 D(LNEDU(-1)) -2.712274 0.484839 -5.594171 0.0113 D(LNEDU(-2)) -1.4399540.293036 -4.913906 0.0161 D(LNEDU(-3)) -0.9505000.231987 -4.097206 0.0263 D(LNTOT) -2.409114 0.449710 -5.357039 0.0127 D(LNTOT(-1)) -0.485154 0.280578 -1.729123 0.1822 D(LNTOT(-2)) -1.466966 0.309595 -4.7383410.0178 R-squared 0.997919 Mean dependent Var 0.174646 Adjusted R-squared 0.983352 S.D. dependent Var 1.431839 S.E. of regression 0.184745 Akaike info criterion -0.899949 Sum squared resid 0.102392 Schwarz Criterion 0.172661 Log likelihood 33.24937 -0.602453 Hannan-Quinn Criter. F-statistic 68.50663 Durbin-Watson Stat 2.463076 Prob(F-statistic) 0.002486 Panel B Post Estimation Tests Breusch-Godfrey Serial Correlation LM Test F- Stat 3.226[0.214] ARCH Test F-Stat 0.001[0.974] Ramsey RESET Test F- Stat 8.380[0.102] Panel C Coefficient Restrictions Test/Bound Test F-statistic 42.776 [0.0000]

Note: The LM test for serial correlation, ARCH test for heteroscedasticity, RESET test for functional form and CUSUM and CUSUMSQ for structural stability. The Breusch-Godfrey LM-test, ARCH test, and RESET test are based on F-statistics.

Source: Author's Computation.

Economic Growth and FDI Impact on Poverty Reduction in Nigeria

Economic Growth and FDI Impact on Poverty Reduction in Nigeria
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Table 3

		Panel A		
Dependent Variable: D(LN	PHC)			
Method: Least Squares				
Sample (Adjusted): 1986 20)19			
Included observations: 28 a	fter adjustments			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.478677	0.110562	4.329475	0.0005
LNPHC(-1)	-0.123320	0.025228	-4.888124	0.0001
LNEGR(-1)	-0.007457	0.002697	-2.764604	0.0133
LNFDI(-1)	0.019539	0.003333	5.862701	0.0000
LNW(-1)	-0.028934	0.004778	-6.056036	0.0000
LNPSC(-1)	-0.072930	0.011439	-6.375722	0.0000
D(LNEGR)	-0.003704	0.001805	-2.051442	0.0560
D(LNFDI)	0.015629	0.003771	4.144932	0.0007
D(LNW)	-0.010340	0.005653	-1.829113	0.0850
D(LNPSC(-1))	0.045858	0.011015	4.163288	0.0007
D(LNPSC(-2))	0.067625	0.012881	5.249923	0.0001
R-squared		0.888889	Mean dependent Var	-0.011009
Adjusted R-squared		0.823530	S.D. dependent Var	0.019924
S.E. of regression		0.008370	Akaike info criterion	-6.441668
Sum squared resid		0.001191	Schwarz Criterion	-5.918302
Log likelihood		101.1834	Hannan-Quinn Criter.	-6.281670
F-statistic		13.60005	Durbin-Watson Stat	2.240275
Prob(F-statistic)		0.000003		
		Panel B		
	Po	st Estimation Te	sts	
Breusch-Godfrey Serial Con	rrelation LM Test		F-Stat 1.106[0.357]	
RCH Test F- Stat 0.031[0.862]				
Ramsey RESET Test			F-Stat 2.209[0.157]	
		Panel C		
	Coefficient I	Restrictions Test	/Bound Test	
F-statistic		24.938 [0.0000]		

Note: The LM test for serial correlation, ARCH test for heteroscedasticity, RESET test for functional form and CUSUM and CUSUMSQ for structural stability. The Breusch-Godfrey LM-test, ARCH test, and RESET test are based on F-statistics.

Source: Author's Computation.

The results in Table 4 reveal that there is a long-run relationship among the variables in the models, given that the F- statistics of the restricted coefficients fall above the upper bound critical value provided by Narayan (2005). Hence, the hypothesis of no long-run relationship between FDI and the underlying variables is rejected at the one percent level of significance. The results of the long-run models (of equations 1 and 3) are derived by normalizing the estimates of the cointegrating equations. The short and long-run estimates of the cointegrating equations are presented in Tables 5 and 6.

Table 4

ARDL Cointegration Bound Test			
Model	F- Statistics		
Panel A: LnEGR = f(LnFDI, LNGDinv, LnHCS, LnTOT)	F-Stat = 42.776*		
Narayan (2005)	k = 4, n = 40		
Critical Value	Lower Bound Upper Boun	d	
1%	4.428 6.250		
5%	3.202 4.544		
10%	2.660 3.838		
Panel B: LnPOV = f(LnEGR, LnFDI, LnW, LnPSC)	F-Stat = 24.938*		
Narayan (2005)	k = 4, n=40		
Critical Value	Lower Bound Upper Boun	d	
1%	4.428 6.250		
5%	3.202 4.544		
10%	2.660 3.838		

Notes: *, **, and *** denote significance at 10%, 5%, and 1% levels, respectively. Critical values are obtained from Narayan (2005).

Source: Author's Computation.

According to Khan (2007), to derive the short-run coefficients from UECM (Tables 2 and 3), the significant values of the lagged differenced coefficients of each variable are summed up, while the long-run coefficients are derived through the normalization of the coefficients of lagged-level variables by the dependent variable. Therefore, the short and long-run results of FDI impacts on economic growth, and economic growth and FDI impact on poverty reduction are presented in Tables 5 and 6, respectively.

Table 5

Short and Long-Run Coefficients of FDI Impact on Economic Growth in Nigeria

Panel A Short Pup Coofficients	Panel B
Short Kun Coefficients	Long Kun Coefficients
21.382**	-
3.734**	2.487*
2.148**	-7.220*
-4.631**	3.798*
-3.876**	-0.471
	Panel A Short Run Coefficients 21.382** 3.734** 2.148** -4.631** -3.876**

Note: *, ** and *** indicate significance at the 1 percent, 5 percent, and 10 percent level of significance, respectively. The long-run coefficients are derived through the normalization of coefficients of lagged level variables by dependent variable from equation 2. The short-run is derived by summing the significant values of the lagged differenced coefficients of each variable from equation 2.

Source: Author's Computation.

Table 5, the result reveals that FDI has a significant positive impact on economic growth in the short and long run. This implies that FDI inflows significantly contributed to increasing economic growth in Nigeria. That is FDI is a major source of economic growth in Nigeria through its spillover effects which stimulate productivity. This finding supports Apergis, Lyroudi, & Vamvakidis (2008); Hemmer & Phuong Hoa (2002) Agrawal (2015), Bouchoucha & Ali (2019) but contradicts Olusanya (2013), Mencinger (2003). The gross domestic investment exerts positive and negative impacts on economic growth in the short and long-run, respectively. The long-run negative impact of a gross domestic investment may be due to a lack of sustenance of existing infrastructure, which in turn may have contributed to a fall in productivity. This effect, to an extent, is a reflection of the high level of

infrastructural decay and neglect in the country. Also, the presence of multinationals may have crowded out domestic investment, in the long run, thereby affecting the impact of domestic investment. Human capital stock has significant negative and positive effects on economic growth in the short and long run, respectively. The short-run negative effect of human capital stock on economic growth may be attributed to the time lag between investment in human capital and productivity. As posited by growth theory, human capital is a long-run economic growth determinant. Trade openness exerts a significant and nonsignificant negative influence on economic growth in the short and long run, respectively. These negative effects of trade on growth may be due to over-dependence on imports. Also, this could be attributed to the fact that Nigeria's exports are mainly natural resources or raw materials (crude oil and agricultural products), which are less competitive.

Based on the significant positive impact of FDI on growth, the economic growth impact, as well as the FDI's direct impact on poverty reduction, were examined, and the results are presented in Table 6.

Table 6

Short and Long-Run Coefficients	of Economic	Growth a	and FDI	impact	on P	overty
	Reduction					

Variable	Panel A Short Run Coefficients	Panel B Long Run Coefficients
Constant	0.479*	-
LnEGR	-0.004***	-0.007**
LnFDI	0.016*	0.020*
LnW	-0.010*	-0.029*
LnPSC	0.113*	-0.073*

Note: *, ** and *** indicate significance at the 1 percent, 5 percent, and 10 percent level of significance, respectively. The long-run coefficients are derived through the normalization of coefficients of lagged-level variables by the dependent variable from equation 2. The short-run is derived by summing the significant values of the lagged differenced coefficients of each variable from equation 2.

Source: Author's Computation.

Table 6, the result shows that economic growth has a significant negative impact on the rate of poverty in the short and long run. This growth-poverty relation represents FDI's indirect effect on poverty through capital formation, thereby raising economic growth. This result implies that FDI exerts a significant positive impact on economic growth and economic growth, in turn, brings about a fall in poverty headcount in Nigeria. Thus, FDI reduces poverty indirectly through economic growth in Nigeria. This result is in line with Hemmer & Phuong Hoa (2002), Topalli et al. (2021). Wage exerts a significant negative impact on poverty in the short and long run. This implies that a wage increase will bring about a fall in the rate of poverty. Thus wage plays a significant role in poverty reduction in Nigeria. Private sector credit has a significant positive and negative effect on poverty in the short and long run, respectively. The positive impact of private sector credit may be attributed to the low level of financial sector development in Nigeria in the 1980s. This may have lowered the private sector credit allocation in the short run, thereby increasing the level of poverty. The lower the level of financial sector services to the poor the higher the level of poverty. However, in the long run, a higher level of financial sector development brings about a fall in the poverty level. This is evident in the result of Table 6. Foreign direct investment has a

significant positive impact on the rate of poverty both in the short and long run. This FDIpoverty relation represents FDI's direct effect on poverty which is expected to work through employment creation in the local entities. However, the result shows that FDI directly raised unemployment which in turn increased the rate of poverty in Nigeria. This result is in line with Huang et al. (2010), Ali and Nishat (2010), but contradicts Shamim et al. (2014). Fowowe & Shuaibu (2014), Anigbogu, et al. (2016), Topalli et al. (2021). This adverse effect of FDI on poverty may be due to the excessive unskilled labour in Nigeria, given that most of the FDIs are capital intensive, thereby inducing low relative income. In this case, foreign enterprises provide the unskilled workers with income that would not have been accepted by many of them or income that remains unchanged and eroded as the local enterprises compete with foreign enterprises, while the income of the skilled labour increases because of its limited supply. With this, FDI will have an adverse effect on employment as well as the poverty level. This result could also be attributed to foreign enterprises relying more on imported inputs and foreign distributors and service agents in the production and distribution of their goods and services rather than using the backward and forward linkage entities (local entities). This may imply that foreign firms are not implementing the local content requirement law. Furthermore, this may be attributed to the fact that foreign enterprises outcompete local enterprises with their advanced technologies as against local enterprises labour intensive. This is evident in Nigeria's construction sector, where foreign enterprises are outcompeting local enterprises. In this case, workers are laid off and the rate of poverty deteriorates. The implication of this is that the more the foreign enterprises neglect or outcompete the local entities the higher the rate of unemployment and this, in turn, leads to an increase in poverty.

5. Concluding Remarks

This study examined the channels through which foreign direct investment (FDI) inflows impact on poverty reduction in Nigeria over the period 1981-2019. The poverty headcount was used as a proxy for poverty. Analytically, the ordinary least squares (OLS) method was used to estimate the Autoregressive Distributed Lag (ARDL) model. To validate the efficiency of the parameter outcomes, post-estimation tests such as: the Breusch-Godfrey Serial Correlation LM test, ARCH test, the Ramsey RESET test and CUSUM were carried out. Based on the analysis, the study found:

- That FDI significantly improved economic growth and economic growth, in turn, significantly enhanced poverty reduction in Nigeria. This implies that FDI indirectly contributes to poverty reduction via economic growth in Nigeria. The advanced technologies provided by foreign enterprises in Nigeria bridged the investment gap, thereby stimulating economic growth.
- That the direct impact of FDI is adverse on employment and poverty. This is because of the relatively low income of the excessive unskilled workers and the outcompeting of local enterprises.
- The estimated models scaled through the post-estimation tests. This implies that the models are efficient and the estimates are reliable.

Therefore, the study concludes that the FDI indirectly contributes to poverty reduction in Nigeria through its significant impact on economic growth.

Given the foregoing, the study recommends as follows:

- There is a need to insist on foreign enterprises to apply and sustain the local content requirement law recently enacted. With this, employment in the local backward and forward linkage entities will improve and this will enhance poverty reduction. However, this can only be possible if the local enterprises improved their capability to meeting up the demand of their foreign counterparts.
- For FDI to enhance poverty reduction, there is a need for the development and sustainability of the domestic absorptive capacities- human development, financial sector development, political stability, and regulatory reforms. Inadequate domestic absorptive capacities will make it impossible for local enterprises to fully compete with their foreign counterparts. In this case, the local entities will be outcompeted, hence this will be adverse to employment and poverty.
- Policymakers should sustain the existing policies as well as come up with new ones that promote FDI in capital and labour-intensive sectors. This is because neglecting any may be adverse to employment or growth and poverty. For instance, if a country focuses on promoting FDI in the capital-intensive industry in the desire to rapidly develop by abandoning the labour-intensive industry may bring about an increase in the poverty level.

However, the results of the study are somewhat limited by: data inconsistency and a limited number of observations, which are common in developing countries. Nevertheless, this study contributes to the literature on the FDI-poverty reduction relationship.

References

- Agarwal, M., Atri, P., Kundu, S. (2017). Foreign Direct Investment and Poverty Reduction: India in Regional Context. South Asia Economic Journal, 18(2), pp. 135-157. 10.1177/1391561417713129.
- Agrawal, G. (2015). Foreign Direct Investment and Economic Growth in BRICS Economies: A Panel Data Analysis. Journal of Economics Business and Management, Vol. 3(4).
- Akinmulegun, S. O. (2012). Foreign Direct Investment and Standard of Living in Nigeria. Journal of Applied Finance & Banking. London. Vol. 2, pp. 295-309.
- Ali, M., Nishat, M., Anwar, T. (2010). Do Foreign Inflows Benefit Pakistan Poor?. The Pakistan Development Review, 48(4).
- Anigbogu, T. U., Edoko, T. D., Okoli, I. M. (2016). Foreign Direct Investment and Poverty Reduction in Nigeria. International Journal of Business and Management Invention. Vol. 5, N 6, pp. 19-28.
- Apergis, N., Lyroudi, K., Vamvakidis, A. (2008). The Relationship between Foreign Direct Investment and Economic Growth: Evidence from Transition Countries. – Transition Studies Review, 15(1), pp. 37-51. doi: 10.1007/s11300-008-0177-0.
- Borensztein, E., De Gregorio J., Lee J.W., (1998). How Does Foreign Direct Investment Affect Growth?. Journal of International Economics, Vol. (45), pp. 115-135.
- Bouchoucha, N., Ali, W. (2019). The Impact of FDI on Economic Growth: Evidence from Tunisia. Journal of Smart Economic Growth, Vol. 4, N 3.

Central Bank of Nigeria (CBN) Statistical Bulletins.

Chowdhury, A., Mavrotas, G. (2006). FDI and growth: What Causes What?. – The World Economy, 29(1), pp. 9-19. doi: 10.1111/j.1467- 9701.2006.00755.x.

- Ford, T., Rork, J., Elmslie, B., (2008). Foreign Direct Investment, Economic Growth, and The Human Capital Threshold: Evidence from US States. – Review of International Economics, Vol. 16 (1), pp. 96-113.
- Fowowe, B., Shuaibu, M. I. (2014). Is Foreign Direct Investment Good For The Poor? New Evidence from African Countries. – Economic Change and Restructuring, 47(4), pp. 321-339. doi: 10.1007/s10644-014-9152-4.

Gohou, G., Soumare, I. (2012). Does Foreign Direct Investment Reduce Poverty in Africa and Are There Regional Differences. – World Development, No. 40(1), pp. 75-95. doi: 10.1016/j.worlddev.2011.05.014.

Hanim, W. (2011). Gender Equality and Economic Growth. Indonesia: PRESS UNPAD Bandung.
 Hemmer, H., Phuong Hoa, N. T. P. (2002). Contribution of Foreign Direct Investment to Poverty Reduction: The Case of Vietnam in the 1990s. Entwicklungsökonomische Diskussionsbeiträge, No. 30, Justus-Liebig-Universität Gießen, Professur für Volkswirtschaftslehre und Entwicklungsländerforschung, Gießen.

Huang, C.-H, Teng, K.-F., Tsai, P. L. (2010). Inward and Outward Foreign Direct Investment and Poverty: East Asia Vs. Latin America. – Review of World Economics, 146(4), pp. 763-779. doi: 10.1007/s10290-010-0069-3.

IFC (International Finance Corporation). (2000). Paths out of Poverty: The Role of Private Enterprise in Developing Countries, http://www.ifc.org/publications/paths_out_of_poverty.pdf.

Insah, B. (2013). Foreign Direct Investment Inflows and Economic Growth in Ghana. – International Journal of Economic Practices and Theories, Vol.3 (2), pp. 115-121.

Iqbal, Z., Abbas, K.(2015). An Econometric Analysis of Foreign Direct Investment and Economic Growth of Pakistan. – Developing Country Studies, 5(11), pp. 16-25.

Johansen, S., Juselius, K. (1990). Maximum Likelihood Estimation and Inference on Cointegration – With Application to the Demand for Money. – Oxford Bulletin of Economics and Statistics 52, pp. 169-210.

Khan, M. A. (2007). Foreign Direct Investment and Economic Growth: The Role of Domestic Financial Sector. – Pakistan Institute of Development Economics Islamabad (PIDE) Working Papers 2007:18.

Klein, M., Carl, A., Hadjimichael, R. (2001). Foreign Direct Investment and Poverty Reduction. – Policy Research Working Papers. US, June 2001.

Klein, M., Aaron, C., Hadjimichael, B. (2000). Foreign Direct Investment and Poverty Reduction. – Policy Research Working Paper 2613, World Bank.

Klein, M., Aaron, C., Hadjimichael, B. (2001). Foreign Direct Investment and Poverty Reduction. Development Research Group, International Trade Team, The World Bank.

Mahmood, H., Chaudhary, A. R. (2012). A Contribution of Foreign Direct Investment in Poverty Reduction in Pakistan. – Middle East Journal of Scientific Research, No. 12(2).

Mencinger, J. (2003). Does foreign Direct Investment Always Enhance Economic Growth?. – Kyklos, 56(4), pp. 491-508. doi: 10.1046/j.0023-5962.2003.00235.x.

Narayan, P. K. (2005). The Saving and Investment Nexus in China: Evidence from Cointegration Tests. – Applied Economics, 37(17), pp. 1979-1990. http://dx.doi.org/10.1080/00036840500278103.

Nkoro, E., Uko, A. K. (2016). Autoregressive Distributed Lag (ARDL) Cointegration Technique: Application and Interpretation. – Journal of Statistical and Econometric Methods, Vol.5(4), pp. 63-91.

Ogunniyi, M. B., Igberi, C. O. (2014). The impact of foreign direct investment on poverty reduction in Nigeria. – Journal of Economics and Sustainable Development, No. 5(14).

Ohiorhenuan, J. F. E. (1990). The Industrialization of Very Late Starters: Historical Experience, Prospects and Strategic Options for Nigeria. – Institute of Development Studies. Discussion Paper No. 273.

Olusanya, S. O. (2013). Impact of Foreign Direct Investment Inflow on Economic Growth in a Pre and Post-Deregulated Nigeria Economy. A Granger Causality Test (1970-2010). – European Scientific Journal, 9(25), pp. 335-356.

Omoniyi, M. B. I. (2013). The Role of Education in Poverty Alleviation and Economic Development: A Theoretical Perspective and Counselling Implications. – British Journal of Arts and Social Sciences, 15(2), pp. 176-185.

Pesaran, M. H., Shin, Y., Smith, R. J. (2001). Bounds Testing Approaches to the Analysis of Level Relationships. – Journal of Applied Econometrics 16, pp. 289-326.

Remla, K. (2012). The Impact of Foreign Direct Investment on poverty Reduction in Ethiopia: A Cointegrated VAR Approach. Addis Ababa University, Ethiopia. December, 2012.

Shamim, A., Azeem, P., Naqvi, M. A. (2014), Impact Of Foreign Direct Investment on Poverty Reduction In Pakistan. – International Journal of Academic Research in Business and Social Sciences, No 4(10).

Topalli, M., Meri Papavangjeli, M., Ivanaj, S., Blerta, F. (2021). The Impact of Foreign Direct Investments on Poverty Reduction in the Western Balkans. De Gruvter.

Tsai, P., Huang, C. (2007). Openness, Growth and Poverty: The case of Taiwan. - World Development, No.35(11).

United Nations Conference on Trade and Development (UNCTAD). (2005). The Locations Most Favoured by the Largest TNCs. UNCTAD Investment Brief, No. 4. New York and Geneva.

UNCTAD. (2006). World Investment Report 2006. Geneva.

UNCTAD. (2009). Investment Policy Review of Nigeria. New York and Geneva.

UNCTAD. (1999). World Investment Report: Foreign Direct Investment and the Challenge of Development. New York, Geneva.

Uttama, N. P. (2015). Foreign Direct Investment and Poverty Reduction Nexus in South East Asia. – In: Silber, J. Poverty Reduction Policies and Practices in Developing Asia.

World Bank. (2000/2001). World Development Report: Attacking Poverty, Washington DC.

World Bank's PovcalNet Database, http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx. World Bank's World Development Indicators (WDI).