

FOREIGN TRADE AND POVERTY IN NIGERIA, 1981-2019

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ABSTRACT

The study investigated the aftermath effect of foreign trade on poverty in Nigeria. Data range 1981-2019 sourced from World Bank, Central Bank of Nigeria National Bureau of Statistics. Autoregressive Distributed Lag (ARDL) was deployed for analysis of econometric architype, 93%. The outcome attests fickle were of order $I(1)$ and $I(0)$. ARDL bound test observation attest to a long-run convergence of the fickle. It was determined that net export has a positive sign, but inconsequential aftereffect on poverty both for shut and long run. Trade liberalization was compelling and decisive and connected to poverty in the short and long run. The exchange rate has confidence after effect on lack on the short and negative effect on poverty in the long run. EDB has pessimistic after effect on poverty in the short run and confident aftereffect in the long run. These impacts are not symbolic on the shut and long run. The long-run friendship conforms to the theoretical postulation. This result implies then short-run as Nigeria improves on world EDB ranking could deteriorate and poverty remain a challenge.

Keywords: Openness, Poverty, Exchange Rate, Trade Liberalization, Nigeria

1.0 INTRODUCTION

The debate on consequences of international trade on poverty was triggered by the growing volumes of trade across national boundaries propelled by lowering of tariff barriers and relaxing of trade restrictions. Over time, conventional international trade theories advanced by scholars had argued that expanding market opportunities, technology transfer, innovation, increased productivity and poverty reduction some gains of international trade, which culminates to overall growth and development of any economy. In addition the increase in exports can translate into an increase in wages of unskilled and low-skilled workforce poor economies, which are distinguished by labour-abundance (Acharayya, 2006). Since unskilled and skilled workers are probably within the poverty threshold, more exports for developing countries mean a drop in poverty. Despite the predictions of typical trade theorists, the aftereffect of trade on poverty has not been resolved (UNCTAD, 2013). Empirical evidence seems to point toward the direction developing economies have not been able to judiciously use the openings created by trade liberalization or opening of trade gate to poor economies market, (Goff & Singh, 2014).

No economy is an island unto itself (Gbosi, 2005). The reality of this is that countries are endowed with different resources and one country cannot conveniently reduce and consume all that its citizen's want or need (Adeleye, Adeteye & Adewuyi, 2015). Therefore, the best approach to expand the range of choices is to participate in international trade. A country that cheaply produces and exports the goods, services, and capital such as an economy own comparative advantage. The revenue generated from the trade is channelled to finance infrastructures, hospitals, schools and imported items which is not in their trade basket.

Several policies have been initiated by successive Nigerian governments to tactfully approach getting the economy and take advantage through manufacturing, refining our petroleum plus information technology didn't deliver any significant returns. Available evidence has reported fluctuations in Nigeria's exports, revealed the shock that is embedded in exports, table 1. In 1981, Nigeria's import value stood at N12.84 billion, earnings from exports N11.02 billion acquiescing to commerce shortfall N1.82 billion CBN, 2019. This same year TOP stood at 18.17 percent while 30% of Nigerians lived below the poverty level with Naira rate at N0.61 to \$1 USD. In 1985 import stood at N7.06 billion; export value was N11.72 billion; TOP held at 10.3 percent; the exchange was N0.89 to \$1; while lack stood at 46.3 percent. Improvements were recorded in 1990 as exports increased to N109.84 billion and the poverty rate dropped to 43.9 percent (CBN, 2019), National Bureau of Statistics (NBS), 2019). Between 1994/1995 there were remarkable changes in imports; exports; commerce openness cum poverty level as forex rate remained relatively stable (CBN, 2019). Imports, exports, TOP also lack rate took an upswing from N162.79 billion, N206.06 billion, 23.06 percent, and 42.5%, in 1994 to N755.13 billion, N950.66 billion, 39.53% and 59.0% jointly, 1995. In 2002, N120 was exchanged for \$1 USD while poverty rate increased to an all-time high of 72 percent, despite the boost in trade which stood at N1,774.18 billion, while imports also commerce TOP peaked at N1,512.70 billion, and 40.04% reciprocally CBN, 2019. Surprisingly, in 2019, Nigeria's imports were N20,448.92 billion, exports were N19,909.75 billion, trade openness shrinks to 31%, Naira exchanged at N360 for one (1) USD, and poverty declined to 40.1 percent (CBN, 2019; NBS, 2019). Nigeria was ranked 131st in the EDB 170th position occupied in 2015. The logic for these changes remains that Nigeria EDB ranking was deteriorating over the years. This work examined the aftereffect of foreign trade on poverty in Nigeria.

Table 1: Nigeria's Trade Performance in Relation to Poverty

Year	Import N' Billion	Export N' Billion	Trade Openness (%)	EXR (N, \$)	Poverty Headcount (%)	EDB Ranking
1981	12.84	11.02	18.17	0.61	30	0
1985	7.06	11.72	10.39	0.89	46.3	0
1990	45.72	109.89	30.92	8.04	43.9	0
1994	162.79	206.06	23.06	21.89	42.5	0
1995	755.13	950.66	39.53	21.89	59	0
2002	1,512.70	1,744.18	40.04	120.97	72	0
2015	11,076.07	8,845.16	21.33	193.28	67.7	170
2019	20,448.92	19,909.75	31.00	360	40.1	131

1.1 Aims

The specific aims of the study include:

- Evaluate the input of net export to lack reduction
- Ascertain the extent at which trade openness helps in lowering poverty headcount;
- Analyze the clout exchange rate exact on poverty level; and
- Critically examine how ease of doing business contributes to lack mitigation in Nigeria.

1.2 Hypotheses

The following hypotheses were tested.

H01: Net export does not retard poverty in Nigeria.

H02: Trade openness has no impact on poverty headcount in Nigeria.

H03: Forex rate and poverty level do not have symbolic relationship in Nigeria.

H04: Ease of doing business own no compelling effect on lack alleviation in Nigeria

2.0 LITERATURE REVIEW

Scholars have investigated trade cum poverty nexus with results showing peculiarities with existing studies. Figini and Santarelli (2006) undertook to question the route that foreign trade directly affect poverty. Foreign trade is synonymous with globalization measured by indices of TOP, financial openness and independent sector and independent sector dominance in trade. Both relative and absolute poverty indices were proxied for poverty level in selected developing countries. The liaison betwixt commerce and lack was sketched through descriptive statistics and econometric analysis. The conclusion investigation was that relative poverty was not significantly influenced by TOP and financial openness. Instead all two indices contributed to increasing relative poverty.

Balogun and Dauda, 2012, investigated the nexus amid TOP and abjection contraction in Nigeria using quarterly over the period 1985 to 2010. The systems equation was econometrically used to analyze the archetype. The result from the analysis highlighted that contrary to theoretical postulation that TOP exerts positive effects that influence poverty. Poverty level tended to increase despite the positive growth recorded in export earnings. The reason advanced for the unhealthy friendship betwixt commerce openness and poverty was that domestic manufactures and small farmers were penalized by the biased structure of producer incentives. The report stressed disavowal consequence from export shocks were premised on government enforcement of acceptance strategy, which, for one thing, encouraged the influx of foreign companies that are affiliates of multinationals firms. Export led strategy restrained by principles of factor was recommended as a substitute to harnessing the gains from foreign trade.

Berg and Krueger, 2003; Grossman and Helpman, 1991, Lucas, 1988), approached TOP cum poverty from another dynamic context. They reiterated economic growth remains indispensable for the contraction of lack and TOP for increases in output to bolster economic growth. They advanced eradication of TOP, contributes higher motivation for investment, openness to innovation and fresh ideas, benefits of scale and competition and control on rent-seeking activities backed by trade restrictions policy.

Available evaluation posit that globally Small Medium Scale Enterprises (SME) account for over 60% gainful employment in private firms and over 95% of the statistic of companies, Ayyagari et al. (2011), Wymenga et al (2012). They also contribute as much as 45% of total employment and 33% of GDP in developing economies. World Bank (2016) report estimates that in 15years, Sub- Sahara Africa and Asia would need 600 million jobs for their teeming population.

Khan and Bashir (2012) assessed the connection between trade, poverty, and inequality in Pakistan by deploying time series from 1975 – 2000, volume of trade as a ratio of GDP, poverty headcount, and Gini-coefficient were used as measures for trade, poverty, and income inequality. The conclusion examined points towards trade not exerting significant after effect on lack but poverty exerts a negative effect on trade. Additionally, it was reported that trade has increased income inequality among the have not and the wealthy because the gains from foreign trade are not equitably distributed. From the examination of Khan and Bashir (2014), commerce can a benefit to a nation if the level of poverty drops and reduce income disparity amongst the wealthy and the needy.

Okungbowa and Eburajolo (2014) conducted an examination on the aftereffect of opening up of global economies on poverty rate in Nigeria from 1981 -2009. The multiple regression analysis within the error correction architype was employed to analyze the time series that were obtained from published sources. The findings revealed that openness exhibited a positive and significant impact on poverty. In addition, domestic investment and foreign direct investment were reported to exact positive and negative impacts on poverty rate in Nigeria, respectively. The evidence supports the stance that trade liberalization could lead to lack reduction in Nigeria if and only if the government embarks on appropriate commerce openness policies.

Goff and Singh (2014), used the System Generalized Method of Moment (GMM) to examine trade-poverty nexus of thirty African economies using panel data spanning 1981-2000. The estimate of the interdependent of the architype determined that commerce receptiveness contributed to reducing poverty in countries where the financial monetary and fiscal are well developed; high proficiency; and strong institutions. The fallout predicts commerce can bear compelling aftermath effect on poverty when a country financial system is deeply rooted; the labour force is skilled and relatively educated relatively educated; and public institutions function on the corridor of transparency and accountability.

3.0 METHODOLOGY

To determine the effect of commerce on poverty in Nigeria, time-series data gather from the CBN and NBS on poverty POV, NXP, TOP, EXR and EDB from 1981 to 2019. To avoid spurious regression, Augmented Dickey-Fuller (ADF) test was deployed to validate the unit root attributes of the fickle. ARDL bound test determined the long run liaison of the fickle in the archetype. Given the theoretical foundation connecting external commerce and poverty, the practical form of the archetype is represented thus.

$$:POV = f(NXP, TOP, EXR, EDB) \quad 1$$

Equation 1 was expressed in mathematical form to allow for estimation. Numerical Furthermore the error term e_t was further imported into the archetype to arrest variables that might clout poverty, however not added in the o the archetype. Thus the dynamic model is declared as follows:

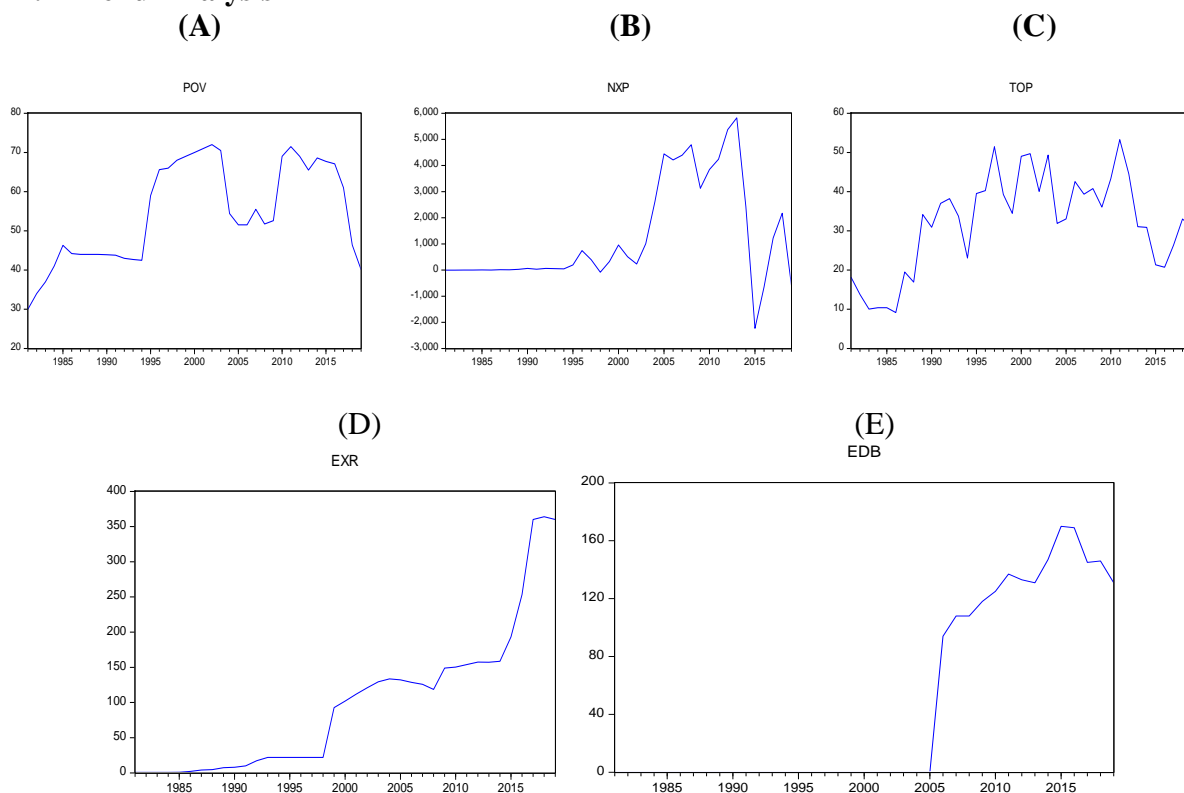
$$POV_t = \beta_0 + \beta_1 NXP_t + \beta_2 TOP_t + \beta_3 EXR_t + \beta_4 EDB_t + e_t \tag{2}$$

Where POV_t = POV headcount at time t, NXP_t =net export at time t. NXP_t = net export at time t, TOP_t =trade openness at time t, EXR =exchange rate at time t. EDB_t = ease of doing business at time t, β_0 = autonomous aspect of poverty, $\beta_1 - \beta_4$ = criterion estimation, and e_t = stochastic term. Note that the innate logarithms of the variables were deployed for analysis.

Pesaran et al (2001). ADRL archetype was utilized to estimate the econometric model of Goff and Singh (2014); however, with considerable modification. ADRL archetype is predicated on the fact that time series are unified in the order $I(0)$ and $I(1)$. Also, the ARDL produces consistent parameter appraisal in the long run regardless of the order of integration. Furthermore, it can yield estimates of high quality even with little sample size and impartial appraisal when the independent variables have endogenous tendencies (Harris & Sollis, 2003).

4.0 RESULTS AND DISCUSSION

4.1 Trend Analysis



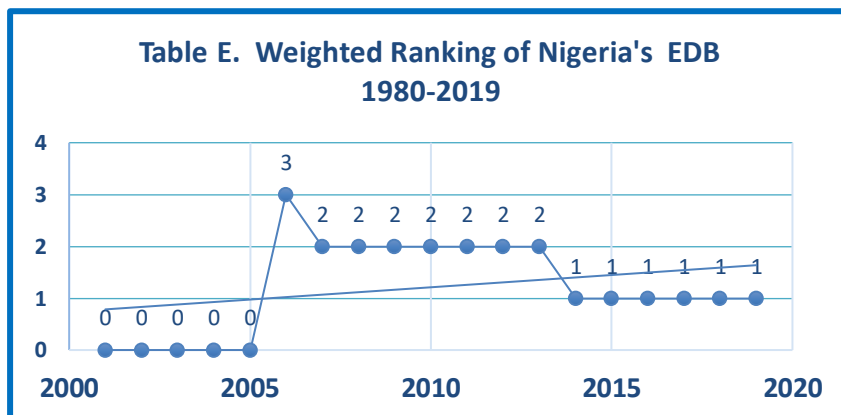
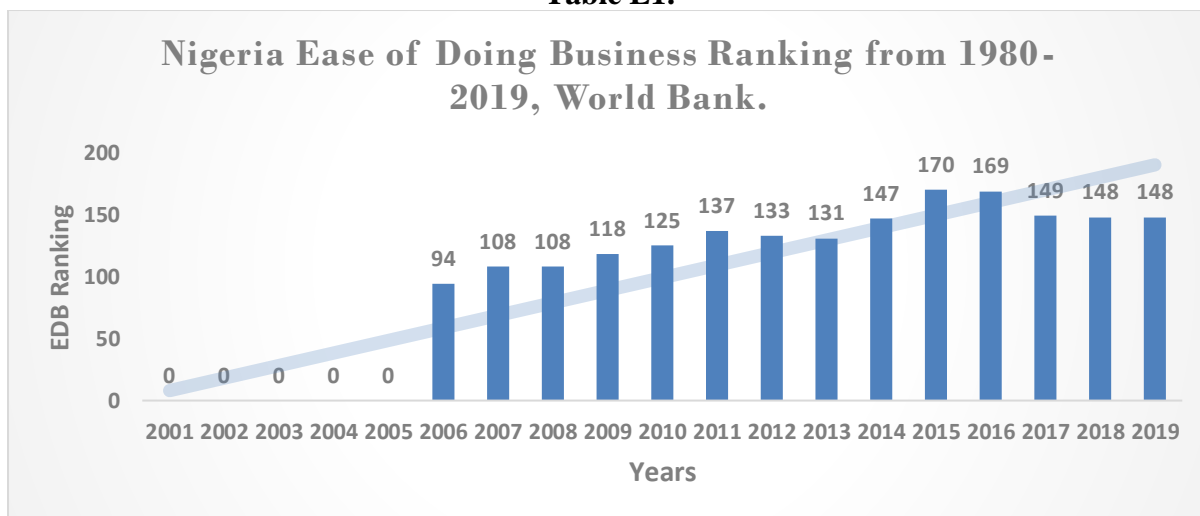


Figure 1: Trend in Poverty, Net Export, Trade Openness, Exchange Rate and Ease of Doing Business Graphs

Figure 1 Depicts poverty trend, NXP, FX, TOP and EDB. Panel A graph shows the poverty trend. It presents poverty at its lowest in 1981, peaked in 1985, then dropped steadily to its minimum in 1994 at 42.5 percent. Thereafter, it took a steady upswing and got to its all-time high in 2002. Beyond 2002, poverty declined steadily until 2010. The graph in panel B depicts the trend analysis for net export. It indicates net export was steady from 1980 to 1989. Net export was at its peak in 1990 and declined steadily until 1994. Between 1995 and 2008, net export showed a steadily increasing trend and peaked in 2013. Beyond, 2013, net export declined consistently recording a trade deficit in 2019. Panel C graph represents the trend in trade openness. It shows the inconsistent height in trade liberalization policies of Nigeria. It demonstrated that TOP exhibits a varying degree of openness. The minimum drop in TOP in 1996 when the Structural Adjustment Program was introduced by the military administration. The highest degree of openness was recorded in 2011 at 53.28 percent. Graph D depicts the fluctuation of exchange rate Naira against 1USD which is the reference trade currency. The trend presents naira performed relatively well compared to the USD between 1981 and 1985. The FX rate increased at a steady rate and remained relatively stable from 1993 to 1998. From 2002 to date the FX rate USD has demonstrated a steady upswing.

The graph in panel E shows Nigeria’s global ranking in the ease of doing business. Figure E shows that the rankings Nigeria ease of doing business started in 2006. Nigeria was ranked 94th in 2006, 108th in 2007 & 2008, 118th (2009), 125th (2010), 137th 2011, 133rd (2012) and 131st position in 2013. The lowest rankings occurred in 2015 (170th), 2016 (169th), 2017 (149th), 2018 and 2019 were ranked (148th).

Table E1.



Source: Author’s WB Rating of Nigeria’s EDB, 2019.

Plotted as ranked by World Bank EDB, the graph misrepresents Nigeria's deteriorating rankings, group and weight the rankings and then replot as categorized into four Groups, Excellent, Very Good, Average and Below Average.

Table E2. Weighted Ranking of Nigeria EDB 1980-2019

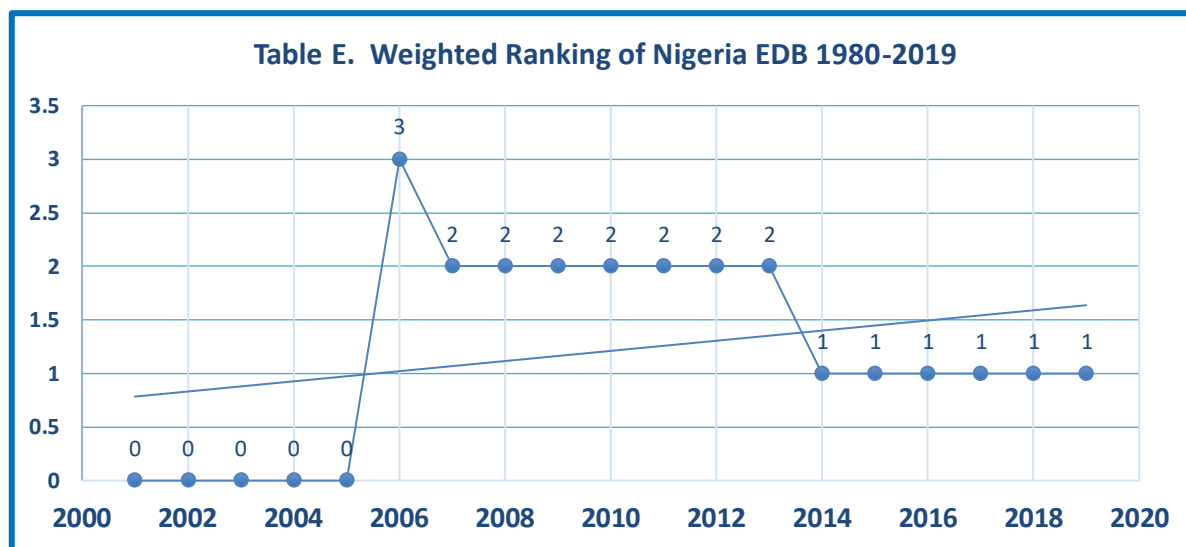
Group Names	Grouped Ranking EDB	EDB Rating	EDB Weighted
Excellent	1 to 49	Very Friendly	4
Very Good	50 to 99	Friendly	3
Average	100 to 149	Moderately Friendly	2
Below Average	150 to 195	Not Friendly	1

Source: Author’s Grouping, Rating and Weighting of Economies, (Egbuche A. A 2018).

Table 4.1 above illustrates how all ranked economies are then grouped into four groups; Excellent, Very Good, Average and Below Average. In "excellent" economies, ranked 1-49, ease of doing business is Very friendly and assigned the highest weight, four (4). In "very good" economies, ranked 50-99 and weighted (3), ease of doing business is friendly in these economies. The "Average" and "Below Average" economies ranked and weighted 100-149 weighted (2) and 150-195 weighted (1) have "Moderately Friendly" and "Not Friendly" EDB policies.

In 2006, the World Bank report on Ease of Doing Business ranked Nigeria 94th and weighted (3) connotes, Simple to do business in Nigeria in 2006. In 2007 and 2008 Nigeria dropped 14 steps and ranked 108th (weighted 2), suggesting that the EDB environment was just Not friendly.

Table E3. The plot of Nigeria’s EDB Weighted (1980-2016)



Source: Author’s Grouping, Rating and Weighting of Nigeria’s EDB, (Egbuche A. A 2018).

From then on it deteriorated in 2009, 2010, 2011, 2012, appreciated marginally in 2013 ranked 118, 125, 137, 133 and 131 (weighted 2) respectively indicating a further deteriorating EDB environment. The lowest EDB ranks recorded were in 2015 and 2016 weighted (1), not friendly as the country ranked 76 steps behind the 2006 ranking of 94th illustrated in figure E3 above. Since 2007 until the year-end of 2019, Nigeria's EDB ranking deteriorated from friendly to Not friendly.

World Bank EDB (2016); measured regulatory quality and efficiency, ranked Nigeria on ease of registering property that is (Procedures, time and cost to register commercial real estate) 181st out of 189 countries measured, while the regional average for Sub-Sahara Africa is 50.98. According to data collected by World Bank Doing Business, it requires 12 procedures, takes 70 days to process and costs 10.5% of the property value to register. On getting construction permits, Nigeria is globally ranked 175th out of 189, while the regional average for Sub-Sahara Africa (SSA) is 58.77. Dealing with construction permits has 16 procedures, takes 106 days to process and costs 24.40% of warehouse value. For same construction permit, the UK ranked 23rd, South Africa 98th, Kenya 149th, and India 183.

Other rankings of Nigeria on EDB of 189 other economies are equally poor; beginning an enterprise 139th, resolving insolvency 143rd, enforcing contracts 143rd, trading across borders 182nd, paying tax 181st and getting electricity 182nd. However, compared with other economies overall business environment the UK is ranked 6th, South Africa 75th, Kenya 108th, India 130th and Nigeria 169th in 2016. Nigeria ranked 20th and 59th on protecting minority investors and getting credit respectively.

Bank of Industry (BOI) CEO, August 2015 in a Guardian publication admitted that BOI's rejection rate of loan applications coming from SMEs is above 90 %. One wonders what proportion of these applicants were rejected. Applications were turned down on the grounds of inadequate security. The proposals he said did not contain enough clue to guide BOI appraise their requests for funding. To manage this problem, however, they initiated a scheme called Business Development Service Providers (BDSPs,), appointed 122 service providers

whose jobs are to package loan applications and mentor MSMEs ensuring proper utilization and repayment of funds extended to them.

4.2 Descriptive Statistics

Table 2: Summary of Descriptive Statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
POV	39	54.73692	12.67337	30.00000	72.00000
NXP	39	1278.023	1982.109	-2230.900	5822.600
TOP	39	32.24923	12.35542	9.140000	53.28000
EXR	39	98.49487	103.3850	0.610000	364.0000
EDB	39	47.74359	65.89574	0.000000	170.0000

Source: Author’s Computation 2020 (Eviews 9.0)

Table 2 depicts statistics for Poverty (POV), Net export (NXP), Trade openness. Outcome attests average poverty headcount was 54.73 percent, net export averaged N1278.02 billion, TOP averaged 32.24 percent, the exchange rate stood at N98.49 to \$1 USD, while EDB was 47.74 percent. Poverty level was at its minimum at 30.0 percent and topped at 72 percent. NXP own a deficit value of N2230.9 billion and a maxed value of N5822.6B. The minimum trade openness was 12.3 percent and 53.28 percent recorded as the maximum. The margin and peak values for FX N0.61 and N364 to 1USD respectively. The lowest position for Nigeria 170th position. The standard deviations for poverty and TOP were minimal standard divergence for net NXP, EXR and ease of doing business were minimally high connoting poverty and TOP have been consistent as against net export, exchange rate, and ease of doing business time.

Table 3: Summary of Correlation Matrix

Variable	POV	NXP	TOP	EXR	EDB
POV	1				
NXP	0.28	1			
TOP	0.64	0.43	1		
EXR	0.35	0.30	0.23	1	
EDB	0.34	0.44	0.13	0.79	1

Source: Author’s Computation 2020 (Eviews 9.0)

The table presents the interrelationship with the variables deployed for the study. The outcome parades the existence of weak confident interrelationship amid poverty and net export. However, poverty and trade openness bear a significant positive association. Exchange rate and poverty own weak positive correlation. Interrelationship amid poverty and ease of doing business remains confident, however fragile. Commerce openness also net export have a weak but positive correlation. Ease of doing business also net export exhibit a weak but positive correlation. Also, the exchange rate and ease of doing business have both weak and active interrelationship amidst trade openness. Exchange rate and ease of doing business own substantial and decisive correlation.

4.3 Empirical Results

4.3.1 Unit Root Tests

Table 4. To test for unit root, Augmented Dickey Fuller was for assessment.

Table 4: Unit Roots test

Variable	ADF	1%	5%	Order of Integration	Decision
POV	-4.089170	-3.621023	-2.943427	1(1)	Stationary
NXP	-3.368287	-3.670170	-2.963972	1(0)	Stationary
TOP	-7.532202	-3.621023	-2.943427	1(1)	Stationary
EXR	-4.185295	-3.621023	-2.943427	1(1)	Stationary
EDB	-5.160124	-3.621023	-2.943427	1(1)	Stationary

Source: Author’s Computation 2020 (Eviews 9.0)

Table 3 parades net export was immobile at the level. It connotes that null axiom of unit root is denied. Poverty, trade openness, exchange rate, and ease of doing trade at 1st contrast. Thus the null assumption of the unit root was renounced after the time sequences were first differenced. The attainment of stationarity criteria is a pre-requisite for verification long-run movement amid fickle beneath analysis.

4.3.2 Estimated ARDL Model for POV

Table 5: ARDL Result for POV Model

Variable	Coefficient	t-Statistic	Prob.
POV(-1)	0.886798	5.938887	0.0001
POV(-2)	-0.437187	-2.034418	0.0646
POV(-3)	1.032514	3.853315	0.0023
POV(-4)	-0.902488	-4.907149	0.0004
NXP	0.000310	0.473655	0.6442
NXP(-1)	-0.001441	-1.578608	0.1404
NXP(-2)	0.001854	1.481541	0.1642
TOP	0.585824	6.052510	0.0001
TOP(-1)	-0.506330	-5.141255	0.0002
TOP(-2)	-0.110484	-0.940342	0.3656
TOP(-3)	0.172681	1.628435	0.1294
TOP(-4)	0.309432	3.137151	0.0086
EXR	0.015161	0.240446	0.8140
EXR(-1)	-0.078506	-1.626305	0.1298
EXR(-2)	0.044101	0.777139	0.4521
EXR(-3)	0.163597	2.350170	0.0367
EXR(-4)	-0.205929	-3.749640	0.0028
EDB	-0.062357	-1.144972	0.2745
EDB(-1)	0.243485	3.434998	0.0049
EDB(-2)	-0.179339	-3.030452	0.0105

EDB(-3)	0.088150	1.447552	0.1734
EDB(-4)	-0.053407	-0.997031	0.3384
C	8.653233	1.448405	0.1731
R ² = 0.97, R ² -Adjusted = 0.93, F-stat = 24.99, F-prob = 0.00, AIC = 5.13, SC = 6.01, DW = 2.4			

Source: Author’s Computation (Eviews 9.0)

Table 5 shows the estimated from ARDL model. The result depicts at level net export, commerce openness plus currency exchange rate related positively with poverty while ease of doing business exerts contrary aftereffect against poverty, given the clue as regards their respective coefficients. At lag 1 NXP owns pessimistic clout on poverty but at decrease 2 it positively influenced poverty. At lag 1 trade openness and exchange rate, the pair own adverse influence on poverty. At lag 1 and lag 3, ease of doing business had confident aftermath effect on lack, but at lag 2 also 4 it sceptically altered poverty. In the ARDL model, net export, exchange rate, ease of doing business inconsequential aftereffect on poverty at level, while trade openness did. At lag 1, trade openness and ease of doing business own a compelling effect on poverty respectively. The coactive determinant, R² depicts the architype adjusted = 0.93 proves the model strongly specified as 93% variation in lack is elucidated through foreign trade—net export, trade openness, exchange rate, and ease of doing business--while the remaining 7 percent change in poverty is accounted for by variables omitted ARDL architype which is accounted for by stochastic term. Cost of F-statistic affirms compelling relation of the architype. The DW = 2.4 falls amidst the ambit of the absence of linear interrelationship amidst variables

4.3.3 Co-integration ARDL Bounds Test

The ARDL bounds analysis was conducted to analyze long-run association betwixt the independent variable and predictors. See Table six below.

Table 6: Co-integration ARDL Bound Test for POV Model

Test Statistic	Value	K
F-statistic	7.07	4
Critical Value Bounds		
Significance	I(0) Bound	I(1) Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

Source: Author’s Computation 2020 (Eviews 9.0)

Table 6 presents the outcome of co-integration using ARDL. The Bound’s test the co-integration ADRL bounds analysis on the long-run convergence of the variables. The outcome revealed the presence of long-run liaison amid poverty and the levels of the informative variables given that F-statistic=7.07 is higher than analytical bounds values at different levels of integration I(0) and I(1) level of implication.

4.3.4 Estimated ARDL Short Run and Long Run Form Result for POV

Table 7: ARDL Co-integration and Long Run Form for POV Model

Co-integrating Form			
Variable	Coefficient	t-Statistic	Prob.
D(POV(-1))	0.307161	1.686324	0.1175
D(POV(-2))	-0.130025	-0.607012	0.5552
D(POV(-3))	0.902488	4.907149	0.0004
D(NXP)	0.000310	0.473655	0.6442
D(NXP(-1))	-0.001854	-1.481541	0.1642
D(TOP)	0.585824	6.052510	0.0001
D(TOP(-1))	0.110484	0.940342	0.3656
D(TOP(-2))	-0.172681	-1.628435	0.1294
D(TOP(-3))	-0.309432	-3.137151	0.0086
D(EXR)	0.015161	0.240446	0.8140
D(EXR(-1))	-0.044101	-0.777139	0.4521
D(EXR(-2))	-0.163597	-2.350170	0.0367
D(EXR(-3))	0.205929	3.749640	0.0028
D(EDB)	-0.062357	-1.144972	0.2745
D(EDB(-1))	0.179339	3.030452	0.0105
D(EDB(-2))	-0.088150	-1.447552	0.1734
D(EDB(-3))	0.053407	0.997031	0.3384
ECM(-1)	-0.420363	-2.711009	0.0189
Co-inteq = POV - (0.0017*NXP + 1.0732*TOP -0.1465*EXR + 0.0869*EDB +20.5851)			
Long Run Coefficients			
Variable	Coefficient	t-Statistic	Prob.
NXP	0.001721	0.565399	0.5822
TOP	1.073176	2.705816	0.0191
EXR	-0.146485	-1.101462	0.2923
EDB	0.086905	0.615932	0.5494
C	20.585124	2.631613	0.0219

Source: Author’s Computation (Eviews 9.0)

Table 7 reports the co-integrating or short-run and long-run conclusion of ARDL bounds model. From table 5 above) error correction mechanism (ECM) (-I) is equivalent to -0.42 which is rightly signed. The co-efficient ECM (-I) defines the adjustment pace of the archetype on the long-run stability as an outcome of volatility. The ECM (-I) implies that 42% height of disequilibria in poverty adjusted back to stability at a 42% speed. The possible value of ECM (-I) of 0.0189 lower is than 0.05 level of significance, indicative that the ECM (-I) numerically significant and an affirmation of long-run relationship amidst Regressand and Regressor variables.

Table 5 arrays long-run outcomes for net export, trade openness, and ease of doing business own confident clout on poverty. It implies on the long-run net export, trade openness, and ease of doing business will trigger an upswing in the poverty rate for Nigerians, Also, it could be seen that exchange rate own a negative influence on poverty in the long run. On the long-

run foreign trade through the instrumentality of foreign trade, the rate of exchange could set off a contraction in the poverty level in Nigeria. Trade openness has a symbolic effect on lack of the long run, net export, exchange rate and ease of doing business lack compelling aftereffect on poverty in the long run.

4.3.5 Diagnostic Test

Table 8: Summary of Diagnostic Test

Test	F-Statistic	Degree of Freedom	Probability
Breusch-Godfrey serial correlation LM test	1.872176	F(2,10)	0.2039
Heteroscedasticity (Breusch-Pagan-Godfrey)	0.899375	F(22,12)	0.6014
Heteroscedasticity Test (ARCH)	0.450045	F(1,32)	0.5071
Normality Test (Jarque-Bera)	1.032019	F(4,30)	0.5968
Ramsey Reset Test	4.127583	F(1,11)	0.0671

Source: Author’s Computation 2020 (Eviews 9.0)

Table 8 diagnostic tests were used to confirm that data deployed for investigation comply with initial expectations of ordinary least square evaluation. The outcome is indicative of compliance with null hypotheses of the absence of serial correlation, absence of heteroscedasticity absence of error in model specification given the values of the various tests’ probability are greater than 0.05 significance level.

4.3.6 Stability

The study tested the short-run and long-run stability parameter following the suggestion of Pesaran et al (2001) using Cumulative Sum (CUSUM) and Sum of Squares (CUSUMsq) tests to verify the balance of parameters deployed. Balance of the parameters entail variables in ARDL archtype range within 5% critical bounds provided by two (2) straight of which Brown et al (1975)

Figure 2 shows the graphs of CUSUM & CUSUMsq of recursive residual

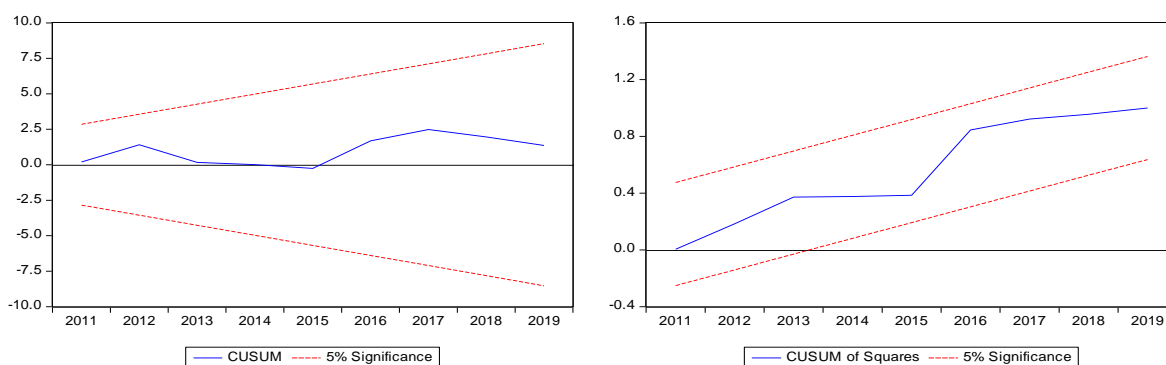


Figure 2: Cumulative Sum and Cumulative Sum of Squares of Recursive Residuals

5.0 DISCUSSION

The discussion is predicated on the Autoregressive Distributed Lag model ARDL short-run and long run outcomes arrayed in table 7. The outcome affirms net export has confident association NXP, but the inconsequential impact on poverty both in the short run and long run. This did not conform to the analytical assumption of the model. The findings showed that as the volume of trade shoots up the level of poverty increases. This result corroborates with outcomes from previous studies by Balogun and Dauda (2012) and Khan and Bashir posited that trade does not contribute to lack of cutback by poor economies. The argument advanced by these scholars is that producers' incentives likely biased, also the aftermath effect is then transmitted to domestic manufacturers and small farms. More so the gain, from trade are usually equitably distributed amongst the poor and the rich.

Commerce open-mindedness positively connected to lack on the abridged run and on the extended time as depicted in table 7. It is however not consistent with the a priori assumption of the archetype. The results remain bright, the increase in liberal trade contributes to poverty proliferation in Nigeria. The trend analysis provides an indicator to this observation. For example in 2011, Nigeria's trade openness reached its peak at 53.28%, and poverty level shot up to 71.5 percent. This outcome is in consonance with that of Dollar and Kraay (2001) and Goff and Singh (2011), Figini and Santarelli (2006). Kpodar and Singh (2011), and Goff and Singh (2014) who found no mathematical proof that commerce liberalization leads to a drop in poverty. The reason presented for the boost in foreign trade not trickling down to the have nots was not farfetched as most low-income economies have low literacy level and low-skilled workforce and public organizations wrapped in high-level corrupt practices.

The array on table 7 portrays that the forex rate is absolute and has a compelling relationship with poverty in the short run. The long-run outcomes complied with theoretical expectation. This implies on the short run that as forex rate takes an upswing the exchange of the Naira vis-a-vis the USD decreases), the height of poverty increases; and as forex rate drops (exchange rate of the Naira vis-a-vis the USD decreases) would spur a reduction in poverty and Vis versa. However on the long run acknowledgement of forex rate The outcome is somewhat aligned with verdict arrayed by Dania and Ogedengbe (2019) who reckoned that exchange rate has contrary liaison poverty its aftereffect on non-oil exports. Although, the consequence of forex rate on lack is an action of the stabilization procedure of the economy. Non-oil exports are principally agricultural produce which could help cut down the level of poverty in Nigeria if appropriate policies are enforced balance forex rate.

The result in Table 7 shows EDB has pessimistic after effect on poverty in the short run and confident aftereffect in the long run. These impacts are not symbolic on the short and long run. The long-run friendship conforms to the theoretical postulation. This result implies then short-run as Nigeria improves on world EDB ranking could deteriorate and poverty remain a challenge.

However, the improvement in ease of doing business, in the long run, will result in a lack of contraction. The thought is that bottleneck to new business registration, electricity, access to cheap startup funds, reduction in Tax and Value Added Tax should be reduced or removed new businesses will come on board, but this business would need time to establish. As time goes on, new businesses will innovate, get shares in the local and foreign markets over time

Analysis of WB percentage GDP expansion rate from 1990-2013 was 2.94% although the moderate population stood at 3.52%. However, the percentage difference of 0.58% does not entirely justify additional 35m more impoverished Nigerians living under \$1.90/day. All populous countries compared reduced their poverty levels significantly except Nigeria. According to Kazeem (2017), Nigeria's failure to reduce the poverty rate during this period anchored on her impotence at allotting oil wealth judiciously. This position substantiates Legatum Institute report, "The African Prosperity Report" 2016, indicted, so to speak, Nigeria for shortchanging her citizens. Maleficence and ineptitude in Nigeria. According to Kazeem, a charity organisation, Global Witness and Finance Uncovered, implied that in 2011 Shell and Eni's payment of USD1.3 billion for a high-value undeveloped oil block never got to the coffers of government, but was instead shared as graft indifference to 86 million Nigerians living under extreme poverty. Legatum Institute based in London measures prosperity delivery to citizens compared to the actual wealth of that nation. Amongst thirty-eight African economies measured, Nigeria was ranked 26th position, reasons being inequitable distribution of oil wealth, unsophisticated commodity trade basket and malfeasances notwithstanding Nigeria's growing wealth, Legatum Prosperity Index rankings (2016) of 38 African countries.

In 2015, violence containment expenditure in Nigeria totalled \$104.4 billion Purchasing Power Parity, IEP (2015). The Institute for Economics & Peace (IEP), report on Global Peace Index, GPI, (2016) on 163 economies, recorded that as at 2008 Nigeria had no internal death arising from internal conflict. However, in the last 10 years, Nigeria has deteriorated in peace by 13% primarily due to deterioration in peace which was attributed to rise in terrorism and higher levels of socio-political instability. Primarily these terrorist activities operate in North-Eastern Nigeria, militancy in South-South, agitation for sovereignty and restructuring in South East and South West of Nigeria. Violence, absence of peace and war contribute negatively to development.

6.0 CONCLUSION AND RECOMMENDATIONS

This paper examined empirically foreign trade and poverty reduction in Nigeria 1981-2019. Regressand used was poverty, while Net export, Trade openness, Exchange rate and ease of doing business proxy as Regressors. Data range 1981-2019 sourced from World Bank, Central Bank of Nigeria National Bureau of Statistics. Autoregressive Distributed Lag (ARDL) was deployed for analysis of econometric archetype. Net export owns a pessimistic but irrelevant association with poverty level. Trade openness has a definite but negligible association with poverty level in Nigeria. The exchange rate has confidence after effect on lack on the short run and negative effect on poverty in the long run. EDB has pessimistic after effect on poverty in the short run and confident aftereffect in the long run.

Recommendations

1. Diversify and industrialize the economy
2. Take agriculture very seriously and process all materials and add value
3. Stabilize the Naira by all means necessary
4. Embrace cryptocurrency
5. Trade on refined petroleum and gas, against deforestation.

6. Time frame within 5-10yrs with proper strategies, tactics, implementation plans and careful management of funds.

REFERENCES

- Acharyya R. (2006), Published Trade liberalization, poverty, and income inequality in India. Resident Mission Policy Brief Series; Asian Development Bank, INRM Policy Brief No.10 <https://www.adb.org/sites/default/files/publication/29369/inrm10-trade-inequality-india.pdf>.
- Adeleye J. O. I., Adeteye, O. S., & Adewuyi, M. O. (2015). Impact of international trade on economic growth in Nigeria (1988-2012). *International Journal of Financial Research*, 6(3), 163-172.
- Ayyagari, M., Demirgüç-Kunt, A. and Maksimovic, V. (2011), Small vs. Young Firms Across The World – Contribution to Employment, Job Creation, and Growth, Policy Research Working Paper 5631 (The World Bank Development Research Group).
- Balogun, E.D. & Dauda, Risikat O. S., (2012), Poverty and Employment Impact of Trade Liberalization In Nigeria: Empirical Evidence and Policy Implications; <https://www.researchgate.net/publication/277760075>, Online at <http://mpa.ub.uni-muenchen.de/41006/> MPRA Paper No. 41006, posted 5. September 2012 14:09 UTC
- Brown R. L., J. Durbin, J. M. Evans Techniques for Testing the Constancy of Regression Relationships over Time Author(s): Source: *Journal of the Royal Statistical Society. Series B (Methodological)*, Vol. 37, No. 2 (1975), pp. 149-192 Published by: Blackwell Publishing for the Royal Statistical Society Stable URL: <http://www.jstor.org/stable/2984889>. Accessed: 13/02/2011 11:50
- Dania Evelyn Ndidi, Ogedengbe Frank Alaba, "Impac tof Exchange Rate Volatility on Non-Oil Export Performance in Nigeria". *OpenJournal of Economics andCommerce* 2019;2(1):32-39. Retrieved From: <https://www.sryahwapublications.com/open-journal-of-economics-and-commerce/volume-2-issue-1/6.php>.
- Dollar D. and Kraay A. (2001). Trade. Growth and Poverty Finance and Development. A Quarterly magazine of the IMF; September 2001, Volume 38, Number 3. Retrieved from: <https://www.imf.org/external/pubs/ft/fandd/2001/09/dollar.htm#author>
- Figini and Santarelli (2006): Openness, Economic Reforms, and Poverty: Globalization In Developing Countries; *The Journal of Developing Areas* Vol 39 No 2 Spring 2006. Pp. 129-151 (25 pages). Published By: College of Business, Tennessee State University. Retried From: <https://www.jstor.org/stable/4193008?seq=1>
- Global Peace Index, GPI (2016), The Institute for Economics & Peace (IEP), Ten ears of Measuring Peace. Retrieved from: http://economicsandpeace.org/wp-content/uploads/2016/06/GPI-2016-Report_2.pdf

Ikechukwu D. N ., Kalu E. U., Gulcay T., (2015); Trade openness and unemployment: Empirical evidence for Nigeria, Volume: 26 issue: 1, page(s): 117-136, <http://oer.funai.edu.ng/wp-content/uploads/2016/11/The-Economic-and-Labour-Relations-Review-2015-Nwaka-117-36.pdf>

Kpodar K. and Singh R.J. (2013); Does Financial Structure Matter? Evidence from Developing Countries. Retrieved from: <https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-5915>

Legatum Institute (2016), The 2016 Africa Prosperity Report. Retrieved from: <https://www.li.com/docs/default-source/publications/2016-africa-prosperity-report-pdf.pdf>

Le Goff, Maëlan; Singh, Raju Jan. 2013. Does Trade Reduce Poverty? A View from

Africa. Policy Research Working Paper; No. 6327. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/12165> License:CC BY 3.0 IGO.”

National Bureau of Statistics (2019) Nigeria’s Trade Performance in Relation to Poverty, 1981- 2019. [https://nigerianstat.gov.ng/elibrary?queries\[search\]=trade](https://nigerianstat.gov.ng/elibrary?queries[search]=trade).

Maëlan Le Goff and Raju Jan Singh, (2014); Does trade reduce poverty? A view from Africa. Science Direct; Journal of African Trade 1 (2014) 5–14; CEPII, 113 rue de Grenelle, 75007 Paris, France b The World Bank, Washington, D.C. 20433, United States , DOI: 10.1016/j.joat.2014.06.001.

Okungbowa and Eburajolo (2014), Globalisation and Poverty Rate in Nigeria: An Empirical Analysis .https://www.researchgate.net/publication/336916846_Globalization_and_Poverty_Rate_in_Nigeria_An_Empirical_Analysis/citation/download

Rana E. A. K. and H. N. Bashir. (2012); Trade, Poverty and Inequality Nexus: The Case of Pakistan. Middle-East Journal of Scientific Research 13 (Special Issue of Economics): 11-15, 2013 ISSN 1990-9233 © IDOSI Publications, 2013 DOI: 10.5829/idosi.mejsr.2013.13.e.13002.

World Bank, Ease of Doing Business Report (2016), Measuring Regulatory Quality and Efficiency: Economy Profile of Nigeria. Retrieved from: Retrieved from: <https://openknowledge.worldbank.org/bitstream/handle/10986/32436/9781464814402.pdf>

UNCTAD 2016, Trade Misinvoicing in Primary Commodities in Developing Countries: The Cases of Chile, Côte d’Ivoire, Nigeria, South Africa and Zambia; Retrieved from: http://unctad.org/en/PublicationsLibrary/suc2016d2_en.pdf.

UNCTAD (2013): United Nations Conference on Trade and Development Report UNTAD/TDR/2013. Comparative output growth performance, selected countries and country groups, 1991–2013 22. 1.6. https://unctad.org/system/files/official-document/tdr2013_en.pdf

Yusuf T.A. and Dansu F. S. (Dec 2013), SMEs, Business Risks and Sustainability in Nigeria. European Journal of Business and Social Sciences, Vol. 2, No.9, pp 76-94, December 2013. P.P. 76 – 94. ISSN: 2235 -767X
URL: <http://www.ejbss.com/recent.aspx>