INTERNATIONAL TRADE, FOREIGN AID AND ECONOMIC GROWTH IN NIGERIA

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DOI: https://doi.org/10.5281/zenodo.11199618

Abstract

Nigeria while engaged in international trade in promoting her growth, also attracts some foreign aid. However, while the adverse effects of foreign aid for growth are much discussed in the literature, aid may enable Nigeria to develop a greater capacity for international trade. On that basis, the present study utilizing data over the period of 1990 to 2021 compares the contributions of international trade and economic growth to Nigeria and also the possibility that aid may boost the capacity of a developing country as Nigeria for trade to support her growth, Utilizing ADF unit root test and ARDL, the study finds that international trade relative to foreign aid is significant for boosting Nigeria's economic growth, while no evidence is found that aid boost Nigeria's capacity to trade in promoting her economic growth. The findings give rise to recommendations that will ensure Nigeria's greater reliance on international trade for her growth.

Keywords: Aid-for-trade, Autoregressive Distributed Lag, Economic growth, International Trade Nigeria.

1 INTRODUCTION

Countries' different resource endowments necessitate them to rely on other countries for their sustenance in terms of economic growth and related to that development. This explains the major reason for countries of the world engaging in international trade which has consequently given rise to globalization with numerous scholars (Such as Ji, Dong, Zheng and Bu, 2022; Nguyen, 2020) highlighting the significance of international trade for the functioning of an economy. Further engaging in international trade enables the most productive usage of natural resources in nations that have an abundance of resources and may promote efficiency in production in line with the arguments of Adam Smith. However, for a country to engage successfully in international trade, it requires in addition to labour for production, capital which is highlighted to be in short supply in less developed countries as those of Sub-Saharan Africa according to economic growth theories as that of Harrod-Domar (Todaro and Smith, 2020). To that effect, foreign aid may augment the dearth of capital in SSA countries such as Nigeria for their economic progress.

Foreign aid and International trade are therefore two aids amongst others to the promotion of economic growth in countries and the context of Nigeria the aforementioned may be argued as critical to the furtherance of her economic progress. This is because while international trade in the presence of a fair trading relation between countries, and efficient utilisation of the receipts from exports, may aid the growth and development of Nigeria's productive capacity, foreign aid received in critical areas especially will enable the inflow of much-needed capital to fill the wide savings-investment gap prevalent in developing countries as highlighted by the two-gap model. Further the World Trade Organisation (WTO) in the realization of the need to strengthen the supply-side and trade capacity of developing countries, especially those that are least developed in supporting their development through greater international trade, launched the Aid-for-Trade initiative at its Hong Kong Ministerial conference in December 2005.

The demerits of international trade despite the aforementioned benefits are all too evident, especially for developing countries such as Nigeria. On the other hand, foreign aid may adversely affect the economy when it is not efficiently utilised (Mitra, Hossein and Hossein, 2015). However, still some literature recognises the potential benefits of foreign aid (Galiani, Knack, Xu, and Zou 2016). Further, an interaction of international trade with foreign aid may impact growth for instance where foreign aid enables the building of capacity of a country to produce consequently boosting their capacity for greater international trade as in the case of the WTO's Aid-for-Trade Initiative.

Nigeria has over the past years been unable to maximize the opportunities presented to her through engagement in international trade as her exports have been heavily reliant on oil which has made the country vulnerable to fluctuations in global energy prices (Central Bank of Nigeria, 2020). In addition, Nigeria has struggled to diversify its exports. CBN (2020) highlights over 95% of the total merchandise exports of Nigeria in 2020 were realized from Oil and gas, while Nigeria's GDP has grown annually at an average rate of 2.9% between 2000 and 2020 according to the World Bank (2021).

Most recent literature relating international trade to economic growth in the context of developing countries and negating possible trade and aid interrelationships (such as Obisike et al, 2020) popularly omit foreign aid measures in regressions. On the other hand, studies relating foreign aid to economic growth (such as Girma and Tilahun, 2022; Nnamaka, 2021), popularly omit international trade in regressions and negate possible trade and aid interrelationships in the process. However, there exist few studies that employ models in which both international trade and foreign aid feature as variables (such as Azam and Feng, 2022; Oziengbe, 2017), with the studies not including the interaction between international trade and foreign aid, and thus possibly underestimating the overall effect of both international trade and foreign aid on economic growth. This is despite a substantial number of developing countries relying on both international trade and foreign aid for growth amongst other external supports, especially in the context of SSA countries in general, and the ongoing aid-for-trade initiative of the World Trade Organization suggesting an interaction between both international trade and foreign aid working together to promote trade capacity which should result in greater growth.

Based on the above, the present study is necessary and features some distinctions from previous studies. First, the study in addition to examining the individual effect of international trade on economic growth in Nigeria, also examines the interaction of international trade and foreign aid that may give rise to the assessment of the net effect of international trade and foreign aid on economic growth in Nigeria and is aimed at testing the validity of the aid-for-trade argument. Second, the present study employs net exports as the measure of international trade rather than other measures of international trade in the literature. The present study will in particular test two hypotheses: First which of foreign aid and international trade have had a greater influence on the economic growth of Nigeria, and second whether the influence of foreign aid interacting with international trade on the economic growth of Nigeria outweighs that of the respective individual effects of foreign aid and international trade.

2 LITERATURE REVIEW

The literature relating international trade and foreign aid to growth highlights some recent studies based on various theories. Further findings relating both international trade and foreign aid to economic growth are mixed, with most studies emphasizing international trade to boost economic growth such as Abendin and Duan (2021) and Chindengwike (2023). However, studies highlighting either an adverse or insignificant effect of international trade on economic growth include Okenna and Adesanya (2020), and Ssekibaala, Ariffin, and Duasa (2022).

Foreign aid may further contribute to growth as found by Girma and Tilahun (2022) in the case of Ethiopia, and Ogbuabor et al (2017) in the case of Nigeria. Also, it may be only in the case of low-income countries as highlighted by Azam and Feng (2022). However, the contribution of aid may be dependent on the sector to which aid is directed as highlighted by Maruta, Banerjee, and Cavoli (2020). Consistent with this, Izevbigie, Isikhuemen, and Ogbeifun (2020) find a positive but negligible impact of foreign aid on economic growth in ECOWAS. Corruption and the quality of institutions in affecting the role of foreign aid for growth are highlighted by Oziengbe (2017). In relation, the effective utilization of foreign aid for development initiatives and the need to encourage the inflow of technical grants for Nigeria to develop the capacity to experience long-term progress is suggested by Nnamaka (2021).

Studies exploring the inter-relationships between international trade, foreign aid and economic growth in the literature are limited, which necessitates the present study. Studies as Adebayo and Beton Kalmaz (2020), and Younsi, Bechtini, and Khemili (2021) while exploring the contributions of both international trade and economic growth negate the potential contribution of international trade interacting with foreign aid for economic growth. Hence the present study is a germane contribution to the literature.

3 METHODOLOGY

The methodology is that of Autoregressive Distributed Lag (ARDL) based on the adaptation of the model of Babalola, Mohd, Ehigiamusoe, and Onikola (2019) and following the performance of Augmented Dickey Fuller (ADF) unit root tests. Two models are estimated in testing the hypotheses of the study:

$$GDPPCGR_t = \alpha_0 + \alpha_1 NETXPTS_t + \alpha_2 FAID_t + \alpha_3 X_t + \varepsilon_t \quad (1)$$

Where, GDPPCGR: GDP per capita growth rate (proxy for economic growth), NETXPTS: Net Exports (proxy for international trade), FAID: Foreign Aid (for which Net official Development Assistance is proxy), X: A vector of control variables (LF, K and INFL).:constant of the model, $\alpha_1 ... \alpha_3$: Coefficients of respective independent variables, ε: Error term, t: period (1990 to 2021)

Similarly, building on equation (1) in testing the second research hypothesis of the study as to whether the influence of foreign aid interacting with international trade on the economic growth of Nigeria outweighs that of the respective individual effects of foreign aid and international trade, equation (2) results

$$GDPPCGR_t = \beta_0 + \beta_1 NETXPTS_t + \beta_2 FAID_t + \beta_3 (NETXPTS * FAID)_t + \beta_4 X_t + \varepsilon_t \quad (2)$$

Where, GDPPCGR: GDP per capita growth rate (proxy for economic growth), NETXPTS: Net Exports (proxy for international trade), FAID: Foreign Aid (for which Net official Development Assistance is proxy), $NETXPTS * FAID$: Interaction of Net exports and foreign aid, X: A vector of control variables (LF, K and INFL).:constant of the model, constant of the model, $\beta_1 ... \beta_4$: Coefficients of respective independent variables, ε: Error term, t: period (1990 to 2021)

Data in respect of all variables are annual data sourced from the World Bank World Development Indicators. Further, on account of heterogeneity in the orders of integration of variables for which orders of zero and one were found following the Augmented Dickey Fuller (ADF) unit root test, the Autoregressive Distributed Lag (ARDL) estimation procedure was performed in estimating the specified models for the present study.

4 ANALYSIS

No cointegration informed the short-run estimation in Table 1 wherein international trade had a positive minute but significant effect on economic growth in Equation (1) while the interaction of international trade and foreign aid was insignificant for economic growth in Nigeria based on Equation (2) as the coefficient of net exports is insignificant although FAID and NETXPTS*AID is significant

Table 1. ARDL Short Run Estimations for Equations (1) and (2)

Equation	**(1)**	**(2)**
Dependent Variable	**GDPPCGR**	**GDPPCGR**
Constant	Yes	Yes
NETXPTS	0.000516*** (0.0544)	-0.000649 (0.2896)
FAID	-0.592 (0.3147)	-8.455** (0.0345)
NETXPTS*FAID		0.00186** (0.0480)
Controls	Yes	Yes
D-W Stat.	**1.779**	**2.171**
Adjusted R-squared	**0.3781**	**0.4574**
F-statistic	**3.519*** **	**3.445*** **
No. of Obs (after adjustment)	**30**	**30**

***, **, *** denotes significance at 10%, 5% and 1%. P-Values in parenthesis**

5 DISCUSSION

The finding of the significant role of exports for growth in Nigeria as found in the present study is supported by the findings of Nwamuo (2019) and Chindengwike (2023) who make similar findings. Indeed, greater exports over imports in international trade benefit the domestic economy and boost growth in various regards including increasing output, employment creation, promotion of innovation, attraction of capital inflows, industry creation and so on.

Furthermore, the finding that foreign aid is insignificant for economic growth in Nigeria is supported by the findings of Nnamaka (2021), although it contrasts with the popular finding of foreign aid boosting growth by Girma and Tilahun (2022). The insignificant finding as regards foreign aid may be on account of Nigeria not being a major recipient of foreign aid, even as foreign aid also tends to be sector-specific (Maruta et al, 2020).

The invalidity of the aid-for-trade argument for growth in the present study as evidenced by the insignificance of the net exports-foreign aid interaction is germane to the economic growth literature as it was omitted by previous studies.

6 CONCLUSION AND IMPLICATIONS

This present study concludes that Nigeria must significantly increase its international trade to boost its economic growth levels, while foreign aid is not necessary for the economy. Future studies may explore alternative forms of capital inflow as FDI and its interaction with international trade for economic growth.

7 LIMITATIONS AND FURTHER STUDIES

The study did not give specific attention to informal sector businesses that may be involved in some international trade or attraction of aid, especially within the context of Nigeria. Future studies may explore how to incorporate informal sector businesses and their attraction of aid into a study s the present one

AUTHOR DECLARATIONS

Author Contributions: Conceptualization, BEO, and OAO; methodology, OAO; software, MCO validation, OAO. and MCO; formal analysis, BEO, and MCO.; investigation, CHU and OAO; resources, BEO; data curation, BEO, and OAO; writing—original draft preparation, BEO, OAO, MCO, writing—

review and editing, OAO and CHU. All authors have read and agreed to the published version of the manuscript.

Data Availability Statement: The data utilized for this study will be made available upon reasonable request.

Conflicts of Interest: The authors declare no conflict of interest.

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