

Trade Openness and Financial Development Nexus in Nigeria: A Bayesian VAR (BVAR) Approach

By

¹Oke, B. O. & ²Adegbite, E. O.

Department of Finance, Faculty of Management Sciences
University of Lagos, Nigeria. boke@unilag.edu.ng, femifunmi1981@gmail.com

Abstract

In the aftermath of the recent global economic crisis, many authors have identified trade as one of the mechanisms through which financial stress is transmitted from the developed economies into emerging economies. Moreover, the financial sector plays a key role in the transmission. This paper examines the link between trade and financial development by applying Bayesian Vector Autoregressive (BVAR) technique with Litterman/Minnesota priors to Nigerian data from 1981 to 2016. We find proof of the existence of a positive significant relationship between trade openness and financial development in Nigeria during the period under review. We thus recommend that the Nigerian government needs to reinforce measures that are already in place to foster trade with the rest of the world for further deepening of the Nigerian financial system.

Keywords: Trade Openness, Financial Development, Financial Openness, Bayesian VAR

1. Introduction

Financial economics literature is almost settled on the issue of the role of financial development (otherwise known as financial deepening) in economic growth. It is generally agreed that financial deepening is a sine qua non for economic growth (Levine, 2005; Demirgüç-Kunt & Levine 2008).

Not well known, however, are the determinants of financial development? Several determinants have been suggested and empirically tested, and while the results concerning some of these determinants seem robust enough others are not so impressive. Among the several determinants of financial development suggested in the literature are: international trade, the legal framework for the financial system in a country, the macroeconomic environment as well as the regulatory environment (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998).

On the issue of trade and financial development, it is argued that the higher the volume of trade (made possible by trade liberalization or openness) the higher the level of financial development tends to be. The transmission mechanism is such that higher volume of trade increases risk as a result of exposure to external shocks and to foreign competition. Such higher risks of trading experienced in the face of greater openness encourage the development of financial markets to diversify the risks and to help small firms sort out the effects of adverse shocks. Hence, development of more varieties of financial institutions, instruments, and market follow from greater trade openness (Huang & Temple, 2005). It is also argued that where countries involved in trade are high investment economies, then greater trade results in greater investment and hence, greater financial development (Levine & Renelt, 1992). Also, international trade that ensures technology transfer and innovation necessarily calls for financial innovation to finance the technology transfer and the technological innovations, and hence ensures greater financial depth. Do and Levchenko (2004) in their own study of 77 countries find evidence that trade openness is associated with faster financial development in wealthier countries and with slower financial development in poorer ones.

Huang and Temple (2005) apply panel data to 40 year dataset for 88 countries, find that trade openness has strong positive effects on financial development in the lower income countries but not on higher income countries. This according to them is evidence that these positive effects persist into the long run and do not simply reflect temporary booms in bank lending.

In the face of these two positions concerning trade openness and financial development in the lower income or poorer countries, we wish to investigate the Nigerian data and find out which of these two positions hold in Nigeria. This investigation is more urgent especially in the face of increasing attempt by government to

liberalize trade and make the economy more open. If more openness results in slower financial growth according to Do and Levchenko (2004), then there may be need for policy review on the part of the Nigerian government. If however, the Svaleryd and Vlachos (2002) position is affirmed then government only needs to reinforce measures that are already in place.

2. Review of Literature

In the literature on international trade, focus of the effects of trade on an economy is usually on competition, technology transfer and productivity. In recent times, some scholars begin to get concerned about the consequences or effects of trade openness on financial development. It has not been easy determining these consequences because there seems to be a two way relationship between trade openness and financial development, hence, disentangling cause and effect in this relationship has been quite a task.

In attempting to identify and measure the relationship between trade and financial development, different scholars have used different approaches. For instance, while Svaleryd and Vlachos (2002) approach this relationship from the point of view of the risks associated with trade, and the need to develop financial institutions to manage the risks which then results in greater depth and breath for the financial system, Do and Levchenko (2004) approach the issue from the point of view of trade openness affecting demand for external finance which then gives the supplier of external finance opportunity to broaden and deepen its financial system while the financial system of the demander of external finance shrinks. Others like Rajan and Zingales (2003) approach this relationship from the point of view of political economy, whereby parochial political and vested business interest groups that do not allow domestic financial systems to thrive have their hold and power broken in the face of foreign competition. This is possible because foreign competition not only provides goods and services that challenge domestic producers but external finance that make domestic suppliers of finance (or financial institutions) begin to work on financial innovations, all of which help to deepen the financial system.

There are also scholars who see finance intensive goods as products that a country can specialize in and exports if the country has comparative advantage in intensive goods. In the face of trade, such an exporter of finance intensive goods will almost always get his financial system broadened and deepened as a result of such trade. The country that is an importer of finance, i.e. an importer of finance-intensive goods, may according to a variant of this school also automatically improve on its financial system as the increased external finance is used to improve the real sector and hence provide greater aggregate demand.

According to another variant of this school, the finance importing country is likely to be affected adversely as the availability of external finance reduces the incentive for the finance importing country to grow its financial sector. Among advocates of the existence of comparative advantage for exporter of finance-intensive goods are Kletzer and Bardhan (1987), Baldwin (1989), and Do and Levchenko (2004).

For those who see the relationship of trade and financial development as a political economy issue, Rajan and Zingales (2003) argue that the historically inherited legal system is very key in this matter, although it is only one among several determinants of financial development, La Porta et al (1998), argue that the origins of the legal code are important for financial development. The fact that financial comparative advantage is relevant to trade patterns is buttressed by the work of Beck (2002), and Becker and Greenberg (2003), among others.

Generally, several studies find a positive relationship between trade and financial development. Beck (2002) studying 65 countries over a period of 30 years show that the higher the level of the countries manufacturing exports the higher their financial development. In the manner of Newbery and Stiglitz (1984), Do and Levchenko (2004) agree that if a country has financial comparative advantage then it will export goods that are financially intensive to countries with financial comparative disadvantage. However, there is a major difference in their conclusions. While Newbery and Stiglitz (1984) conclude that the trading countries in this situation will both benefit in terms of the development in their financial systems, Do and Levchenko (2004) argue that the countries would be affected differently. They believe that while the country that has financial comparative advantage is able to benefit in terms of expansion and improvement of its financial system, the country with the financial comparative disadvantage is likely to lose out after a while. In any case, countries having financial comparative advantage are those with higher levels of wealth,

better financial institutions, better regulatory and legal frameworks. So, they tend to be developed countries while those with comparative disadvantage are countries with lower wealth, poorer financial institutions, and poorer regulatory and legal frameworks.

Moreover, using data compiled by Beck, Demirguc-Kunt, and Levine (2000), Do and Levchenko (2004) studied 77 countries and come to the conclusion that poorer countries trade leads to slower financial development because these countries import financially intensive goods rather than develop their own financial systems. They made three critical assumptions, first, they assume that the quality of a financial system depends on how well the system overcomes information and enforcement frictions. Second, they assume that countries differ in their level of wealth, and that wealth levels determine the direction of financial comparative advantage. Thirdly, that differences in institutions and quality such as enforcement of contracts, property rights, e.t.c, are important in determining the pattern of financial comparative advantage.

On their part, Law and Demetriades (2006) using data for 43 developing countries for the period 1980 to 2001 reveal that the extent of openness of a country as well as the quality of its institutions are important determinants of financial development. They consider openness both in terms of trade and of capital flows and show that openness is important in promoting financial development in middle income countries, but much weaker in lower income countries. In that study, they use two panel data techniques i.e. the generalized method of moments (GMM) and the pooled mean group (PMG). They test the hypothesis that financial development is a function of trade openness, capital flows, institutions and real GDP per capita. They show that the evidence is valid even when they employ other measures of financial development and three indicators of capital market development.

3. Methods

3.1. Research Design

This study employs ex post facto research design to ascertain the effect of trade openness on financial development in Nigeria. The following sections describe the sampling, statistical, and operational designs employed in this study.

3.2. Data and Data Collection Method

Data used in this study were obtained from two main secondary sources: the Central Bank of Nigeria's Statistical Bulletin (2016) and World Bank's World Development Indicators (2016). Importantly, data from 1981 to 2016 on Financial Development, Trade Openness, Financial Openness, Gross Domestic Product, Inflation rate, and Exchange rate were obtained from the Statistical Bulletin while the World Bank database provided data on remittances.

3.3. Model Specification.

The functional relationship between financial development and trade openness is given as:

$$\text{FINDEV}_t = f(\text{TOPEN}, \text{REMMY}, \text{GDP}, \text{INF}, \text{EXR}, \text{FINOPEN}) \quad (3)$$

Following from equation 3 above, the model of relationship is specified as follows:

$$\text{FINDEV}_t = \alpha_t + \beta_1 \text{TOPEN}_t + \beta_2 \text{REMMY}_t + \beta_3 \text{GDP}_t + \beta_4 \text{INF}_t + \beta_5 \text{EXR}_t + \beta_6 \text{FINOPEN}_t + \mu_{it} \quad (4)$$

Where:

FINDEV_t = Financial Development, measured as the ratio of credit to the private sector to GDP

TOPEN_t = Trade Openness, measured as the ratio of trade to GDP

REMMY_t = remittances, measured as personal remittances received.

GDP_t = Gross Domestic Product.

INF = Inflation rate, measured as the percentage change in Consumer Price Index (CPI)

EXR_t = Exchange rate (₦/ \$)

FINOPEN_t = Financial openness, measured by the ratio of foreign assets and liabilities to GDP.

α_0 and β_i , $i = 1, \dots, 6$ are parameters estimated.

μ_{it} = the error term

We expect "a priori", $\beta_1, \beta_2, \beta_3, \beta_6 > 0$ while β_4 , and $\beta_5 < 0$.

The variables are in logarithmic form.

3.4.4. Analytical Variables:

Indicators of trade and Financial Development: In this study, we use the ratio of credit to private sector to GDP as the indicator of financial development (FINDEV). The rationale behind our is that financial systems that funnel more loanable funds to the private sector are more involved in performing the five functions of the financial system than financial systems that simply channel credit to the public sector. As noted by Rajan and Zingales (2003 p. 9), the indicator measures “the ease with which any entrepreneur or company with a sound project can obtain finance”. Also, we employ the ratio of imports plus exports to GDP as our measure of the independent variable, trade openness.

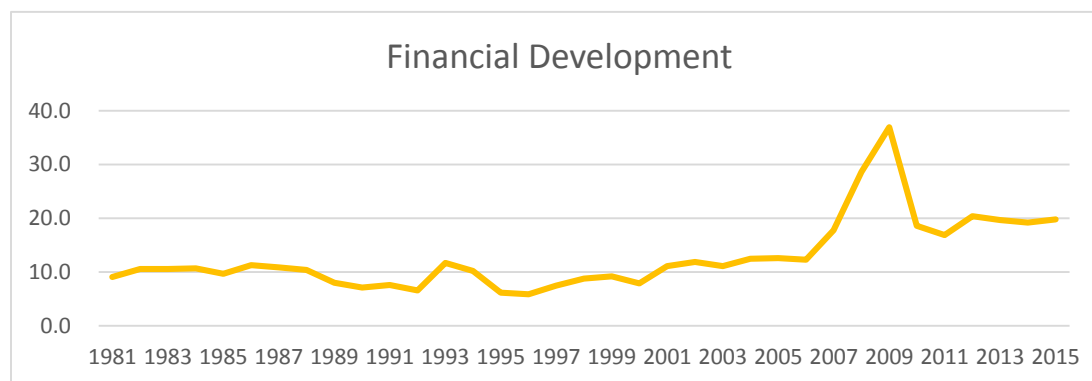
Control Variables: In this study we employ remittances (REMMY), national income (GDP), inflation rate (INF), exchange rate (EXR), and Financial openness (FINOPEN) as control variables (X) because extant literature shows that there are links between these variables and financial development. For instance, Zoli (2007) and Bittencourt (2008) present empirical proof that inflation influences financial development while Dehesa, Druck, and Plekhanov (2007) show that higher real exchange rate volatility results in lower ratios of credit-to-GDP. On their part, Aggarwal, Demirguc-Kunt and Peria (2006) and Gupta, Pattillo and Wagh (2007) provide evidence that remittances has a positive impact on financial development. Moreover, Boulila and Trabersi (2004), and Hurlin and Venet (2008) reveal that GDP influences financial development while Baltagi and Demetriades (2009) show the significance of financial openness to financial development.

3.5. Model Estimation Techniques

In this study, we use time series econometric techniques to ascertain the trade openness and financial development nexus in Nigeria from 1981 and 2016. Specifically, we apply Bayesian Vector Autoregressive (BVAR) modeling to macroeconomic data. Although Vector Autoregressive (VAR) models are commonly used in extant studies, they often suffer from over-parameterization where insufficient observations are used to estimate the parameters of the model. To achieve shrinkage, the Bayesian VAR (BVAR) techniques (Doan, Litterman, & Sims, 1984; Litterman, 1986; Sims & Zha, 1998) use the Bayesian priors to impose parameter restrictions. In BVAR the parameters are viewed as random variables with prior probabilities. We use the Litterman/Minnesota Prior, commonly employed because it provides a very simple way of handling the variance covariance matrix of the VAR coefficients and mirrors the characteristic trending behavior of macroeconomic time series.

4. Results

As is customary with time series analysis, we initially examine the graphical representation of the time series data employed in this study. Fig 1 below shows that both financial development (FINDEV) and trade openness (TOPEN) trended with varying degrees of fluctuations.



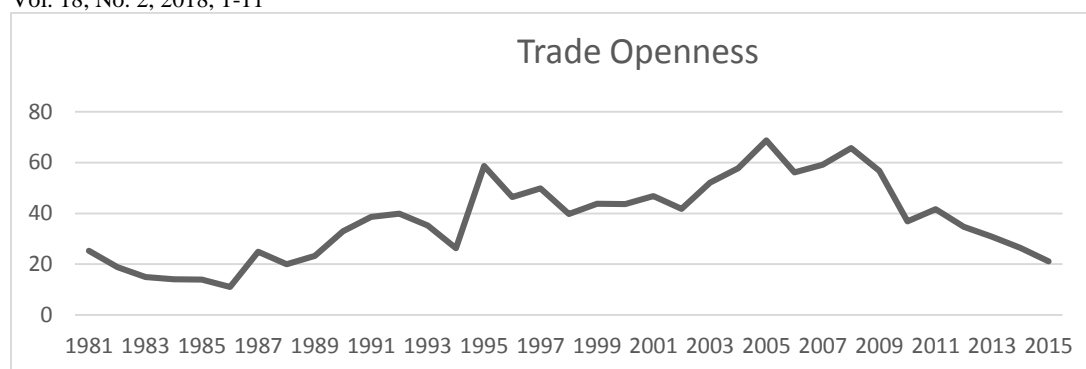


Fig 1: Graphical representation of time series data

Table 1: Unit Root Tests

Variables	ADF Statistics	5 Percent Critical Value	Probability	First Diff ADF Statistics	5 Percent Critical Value	Probability	Order of Integration
FINDEV	-1.861566	-2.948404	0.3458	-5.934536	-2.954021	0.0000	I(1)
TOPEN	2.255210	-2.948404	0.1916	-7.766072	-2.951125	0.0000	I(1)
REMMY	-0.166129	-2.948404	0.9338	-4.498026	-2.951125	0.0010	I(1)
GDP	-2.962745	-2.976263	0.0514	-10.31987	-2.954021	0.0000	I(1)
INF	-3.108055	-2.948404	0.1232	-6.018663	-3.548490	0.0001	I(1)
EXR	1.311052	-2.948404	0.9982	3.669283	-2.951125	0.0093	I(1)
FINOPEN	-1.668047	-2.948404	0.4382	-5.201862	-2.951125	0.0001	I(1)

Source: Authors' computation 2018

Following Granger and Newbold (1974), and Engel and Granger (1987) assertions that many of the variables that appear in time series econometric models are non-stationary (or are integrated variables) we therefore perform unit root tests on the univariate time series to ascertain the stationarity or otherwise of the series. The null hypothesis of a unit root is rejected against the one-sided alternative if the t-statistic is more than the critical value in absolute terms. The results from the Augmented Dickey-Fuller (ADF) test (Dickey & Fuller 1979) are presented in table 1. For all the variables, the ADF tests fail to reject the null hypothesis of a unit root at 5 percent significance level. In other words, the tests indicate that the variables are nonstationary at the level. Further differencing, however, shows that the variables are stationary at their first differences and are thus integrated of order 1 i.e I (1).

Table 2: VAR Lag Order Selection Criteria

Endogenous variables: FINDEV TOPEN REMMY GDP INF EXR FINOPEN

Sample: 1981 2016

Included observations: 34

Lag	LogL	LR	FPE	AIC	SC	HQ
1	-1598.682	NA	3.05e+33*	96.92249*	99.12225*	97.67267*
2	-1559.390	46.22650	7.44e+33	97.49352	101.8930	98.99388

Source: Authors' computation 2018

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

Having established that the variables are I (1), we then ascertain the appropriate lag for estimation of parameters of economic relationship between trade openness and financial development. Using the Akaike information criterion (AIC), Schwarz information criterion (SC) and the Hannan-Quinn information criterion (HQ), commonly employed for lag selection purpose, table 2 above indicates one year lag as appropriate for this study.

Table 3a: Cointegration Tests: (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.815826	174.1357	125.6154	0.0000
At most 1 *	0.716660	116.6120	95.75366	0.0009
At most 2 *	0.648455	73.73439	69.81889	0.0235
At most 3	0.434816	38.19017	47.85613	0.2938
At most 4	0.264097	18.78967	29.79707	0.5081
At most 5	0.179886	8.363335	15.49471	0.4274
At most 6	0.046550	1.620730	3.841466	0.2030

Source: Authors' computation 2018

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Table 3b: Cointegration Tests: Maximum Eigenvalue

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic (λ_{max})	0.05 Critical Value	Prob.**
None *	0.815826	57.52369	46.23142	0.0022
At most 1 *	0.716660	42.87764	40.07757	0.0236
At most 2 *	0.648455	35.54422	33.87687	0.0314
At most 3	0.434816	19.40051	27.58434	0.3842
At most 4	0.264097	10.42633	21.13162	0.7040
At most 5	0.179886	6.742605	14.26460	0.5200
At most 6	0.046550	1.620730	3.841466	0.2030

Source: Authors' computation 2018

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Having established that the variables are I (1), we then carry out the cointegration tests using the Johansen (1992 and 1995) framework. The results of both Trace and Maximum Eigenvalue cointegration tests as shown in tables 3a and 3b indicate the presence of 3 (three) cointegrating equations, thus showing that the variables are cointegrated. This means that there are dynamic long-run causal relationships involving indicators of financial development (FINDEV) and trade openness (TOPEN) as well as the control variables: remittances (REMMY), gross domestic product (GDP), inflation (INF), exchange rate (EXR), and financial openness (FINOPEN) in Nigeria during the period under consideration.

Bayesian VAR Estimation

Table 4 Bayesian VAR Estimates

Dependent Variable: FINDEV

Independent Variables	Coefficient	Std. Error	t-Statistic
D(FINDEV(-1))	0.388826	0.06862	5.66633
D(TOPEN(-1))	0.072693	0.02677	2.71573
D(REMMY (-1))	2.61E-10	1.3E-10	2.01546
D(GDP(-1))	4.55E-05	4.9E-05	0.92719
D(INF(-1))	0.024804	0.01718	1.44369
D(EXR(-1))	-0.001525	0.01512	-0.10090
D(FINOPEN(-1))	0.241195	0.10168	2.37202
R-squared	0.658148	S.E. equation	4.284881
Adj. R-squared	0.584894	Mean dependent	13.17429
F-statistic	8.984480	S.D. dependent	6.650579
Sum sq. resids	514.0857		

Source: Author's computation 2018

Note: (1) *** denotes significance at 1%; ** denotes significance at 5%; * denotes significance at 10%.

(2) Prior type: Litterman/Minnesota

(3) Initial residual covariance: Full VAR

(4) Hyper-parameters: Mu: 0, L1: 0.1, L2: 0.99, L3: 1

Results of the Bayesian VAR estimates of the trade openness and financial development nexus is presented in table 4. The results indicate that *TOPEN* significantly affects financial development in Nigeria at 5 percent level and it is rightly signed. Thus, trade openness promotes financial development in Nigeria. The result thus confirms Svaleryd and Vlachos (2002) findings and rejects the Do and Levchenko (2004) position.

This means that trade with the rest of the world positively affects financial development in the country. In addition, the results show that both remittances and financial openness enter with the right sign and are also drivers of financial development in the country. Other control variables, gross domestic product (GDP), inflation (INF), exchange rate (EXR) however have no effect on financial development, although both GDP and exchange rate enter with the right sign.

Moreover, table 4 shows that R-squared is 0.658148 and the Adj. R-squared is 0.584894. Thus, about 66 percent of variations in financial development is shown to be attributable to changes in the independent variables.

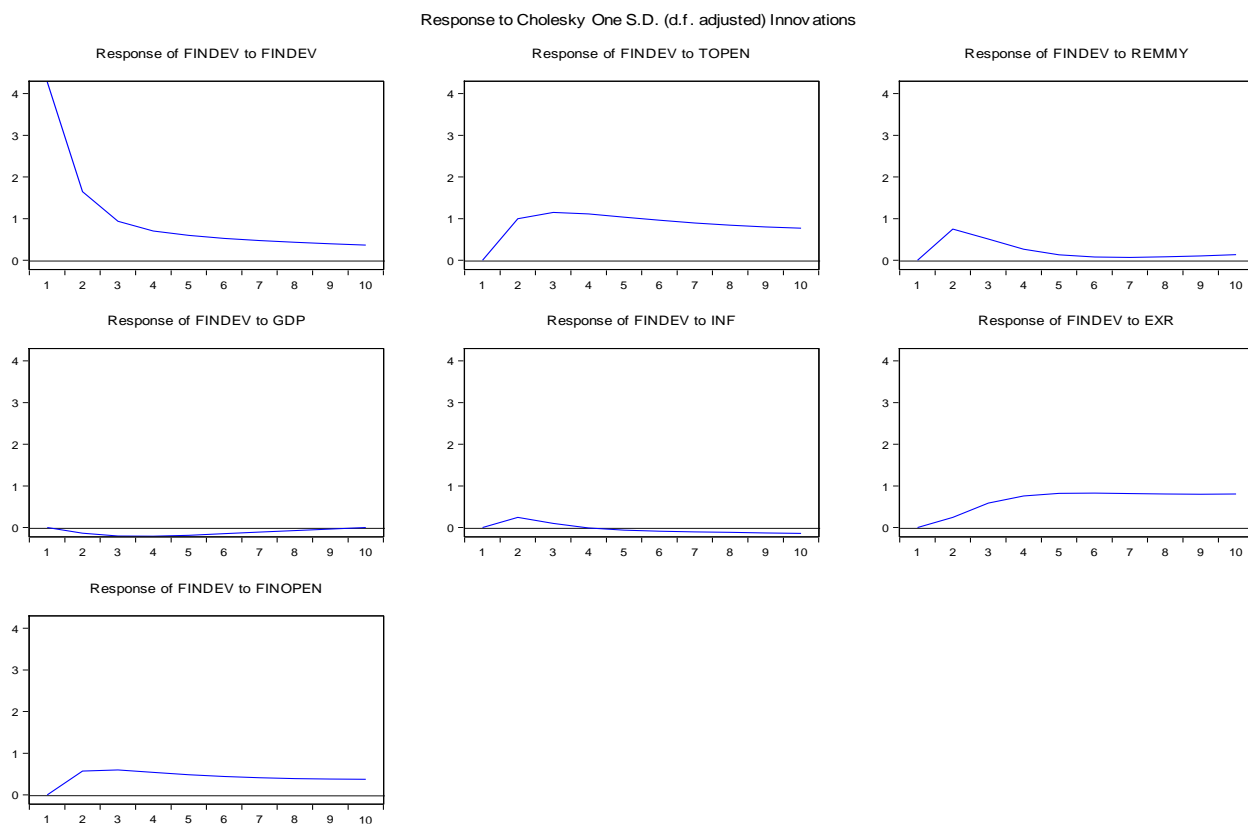


Fig 2: Impulse Response Function Graph

Response of FINDEV to Innovations
using Cholesky (d.f. adjusted) Factors

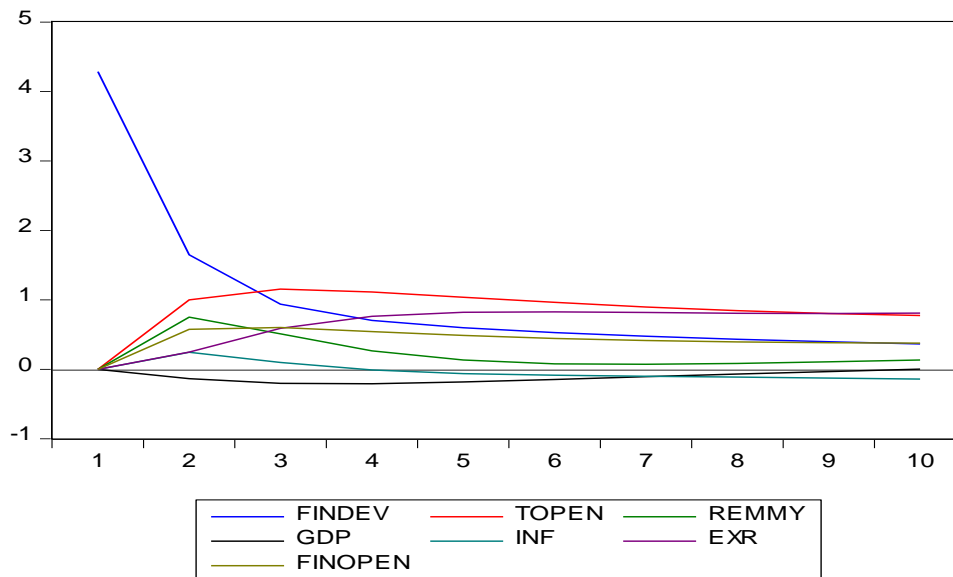


Figure 3: Combined Impulse Response Function Graph

Table 5: Impulse Response Function

Period	FINDEV	TOPEN	REMMY	GDP	INF	EXR	FINOPEN
1	4.284881	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	1.648240	0.997794	0.751435	-0.135808	0.244723	0.247206	0.573637
3	0.937568	1.152125	0.509886	-0.203237	0.098304	0.589503	0.600766
4	0.704393	1.113139	0.264709	-0.208825	-0.008935	0.762307	0.543803
5	0.596794	1.037293	0.131665	-0.183349	-0.061476	0.820333	0.487037
6	0.527906	0.962140	0.078935	-0.146370	-0.086177	0.826369	0.443730
7	0.474974	0.896885	0.070242	-0.107110	-0.100647	0.816010	0.413206
8	0.431441	0.843562	0.083280	-0.069140	-0.112886	0.805798	0.392840
9	0.395101	0.802212	0.106424	-0.033438	-0.125849	0.802459	0.380447
10	0.364986	0.772297	0.134160	6.30E-05	-0.140381	0.808300	0.374539

Cholesky Ordering: FINDEV TOPEN REMMY GDP INF EXR FINOPEN

Source: Authors' computation 2018

Impulse Response Function (IRF)

Figure 2 and 3 above show the individual and combined impulse response function (IRF) graphs respectively. In the former, responses of FINDEV to shocks from individual determinants are shown while the combined graphs in the latter reveals the responses to all the shocks from these variables. Table 5 similarly show these responses with the same results. A major advantage of using the Bayesian VAR is that impulse response functions are more accurate. In the IRFs depicted in graphs 2 and 3 as well as in table 5, the response of FINDEV to trade openness is strong and positive from periods 1 to 3 but slightly diminished from period 4 to period 10. This implies that although the IRFs show consistency with the results earlier presented with the BVAR estimates, the responses to shocks during the period is not robust throughout. With respect to the responses of FINDEV to shocks from other variables, the IRFs further reveal robust responses to innovations from financial openness (FINOPEN), remittances (REMMY) and exchange rate, (EXR). On the other hand, responses of FINDEV to GDP and INF is generally weak except for periods 1 and 2 with respect to the latter.

Historical Decomposition using Cholesky (d.f. adjusted) Weights

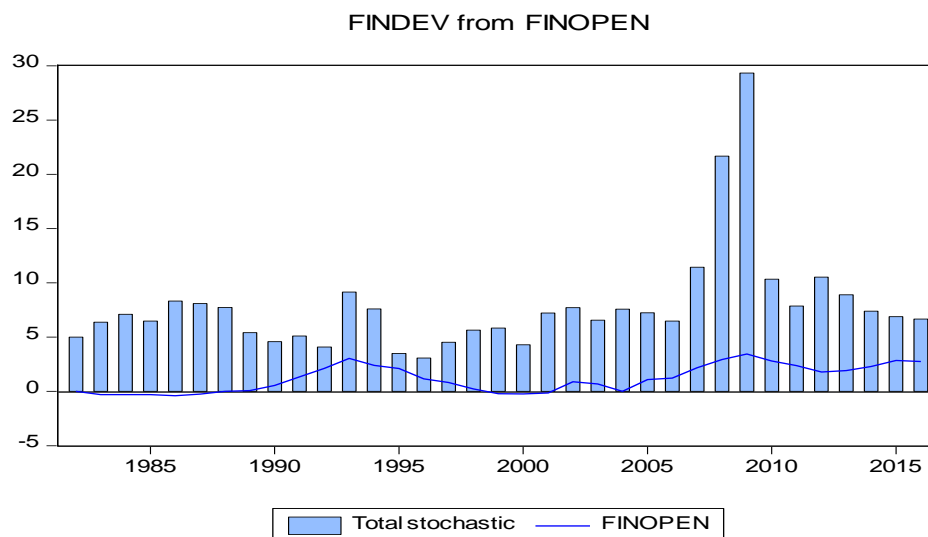


Figure 4: Historical decomposition graph

Figure 4 showing the historical decomposition graph using Cholesky degree of freedom adjusted weights further confirms trade openness as a driver of financial development in Nigeria. The effect of the former on the latter is shown to be pronounced between 2007 and 2009 with the highest impact recorded in 2009.

Variance Decomposition

Table 6 shows the portion of the forecast error variance of each variable that is attributed to its innovation and innovations in another variable. The own shocks of FINDEV constitute a significant source of variation in its forecast error in the time horizon, ranging from 100% to 58.92%. Ten periods later, variation in FINDEV is accounted for by TOPEN (20.61%), implying that the predominant source of variation in financial development are past financial development and trade openness. The result of the variance decomposition thus confirms those of the BVAR estimates and the IRFs earlier presented that trade openness promotes financial development. Other sources of variation in FINDEV are financial openness (FINOPEN), remittances (REMMY) and exchange rate, (EXR). Thus, predominant sources of variation in financial development are past financial development, trade openness, remittances, financial openness, and exchange rate while both gross domestic product and inflation account for a very low variation in FINDEV.

Table 6: Variance Decomposition of FINDEV

Period	S.E.	FINDEV	TOPEN	REMMY	GDP	INF	EXR	FINOPEN
1	4.284881	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	4.806833	91.21967	4.308875	2.443797	0.079823	0.259197	0.264484	1.424154
3	5.131419	83.38287	8.822093	3.131764	0.226911	0.264144	1.551851	2.620364
4	5.390483	77.26836	12.25876	3.079122	0.355699	0.239639	3.406156	3.392270
5	5.608416	72.51233	14.74532	2.899587	0.435468	0.233393	5.286025	3.887883
6	5.794272	68.76521	16.57182	2.735115	0.471793	0.240780	6.986355	4.228930
7	5.955396	65.73074	17.95529	2.603031	0.478956	0.256489	8.490890	4.484603
8	6.098571	63.18114	19.03540	2.500892	0.469585	0.278850	9.842698	4.691437
9	6.229702	60.95154	19.90070	2.425900	0.452905	0.308045	11.09195	4.868965
10	6.353753	58.92471	20.60863	2.376683	0.435392	0.344949	12.28145	5.028180

Source: Authors' computation 2018

5. Discussion.

In this study, we have shown through the Bayesian VAR (BVAR) estimates, impulse response functions (IRF), historical decomposition and the Variance Decomposition that trade openness is positively and significant determinants of financial development in Nigeria. This is consistent with findings of Svaleryd

and Vlachos (2002) as well as Baltagi, Demetriades & Law (2009). The position is affirmed then government only needs to reinforce measures that are already in place.

The historical decomposition graph using Cholesky degree of freedom adjusted weights importantly confirms trade openness has a more robust effects on financial development in Nigeria between 2007 and 2009 with the greatest effect coming in 2009. The effect of trade openness has diminished since then and judging from its importance to financial development, is imperative for the Nigerian government to foster trade with the rest of the world in order to deepen our financial system.

Results of this study is also in line with the Rajan and Zingales hypothesis (Rajan & Zingales, 2003) which stipulates that both trade openness and financial openness are essential for financial development to occur. We have shown here also that both are drivers of financial development in Nigeria. The implication is that, as trade openness enhances financial flows between us and our trading partners, the latter further help to deepen our financial system.

6. Conclusions and Recommendations

In this study we examine the nexus between trade and financial development in Nigeria for the period 1981 to 2016 using the Bayesian Vector Autoregressive (BVAR) technique with Litterman/Minnesota priors. We find evidence of the existence of a positive significant relationship between trade openness and financial development in Nigeria during the period under review. We thus recommend that the Nigerian government needs to reinforce measures that are already in place to foster trade with the rest of the world for further deepening of the Nigerian financial system.

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