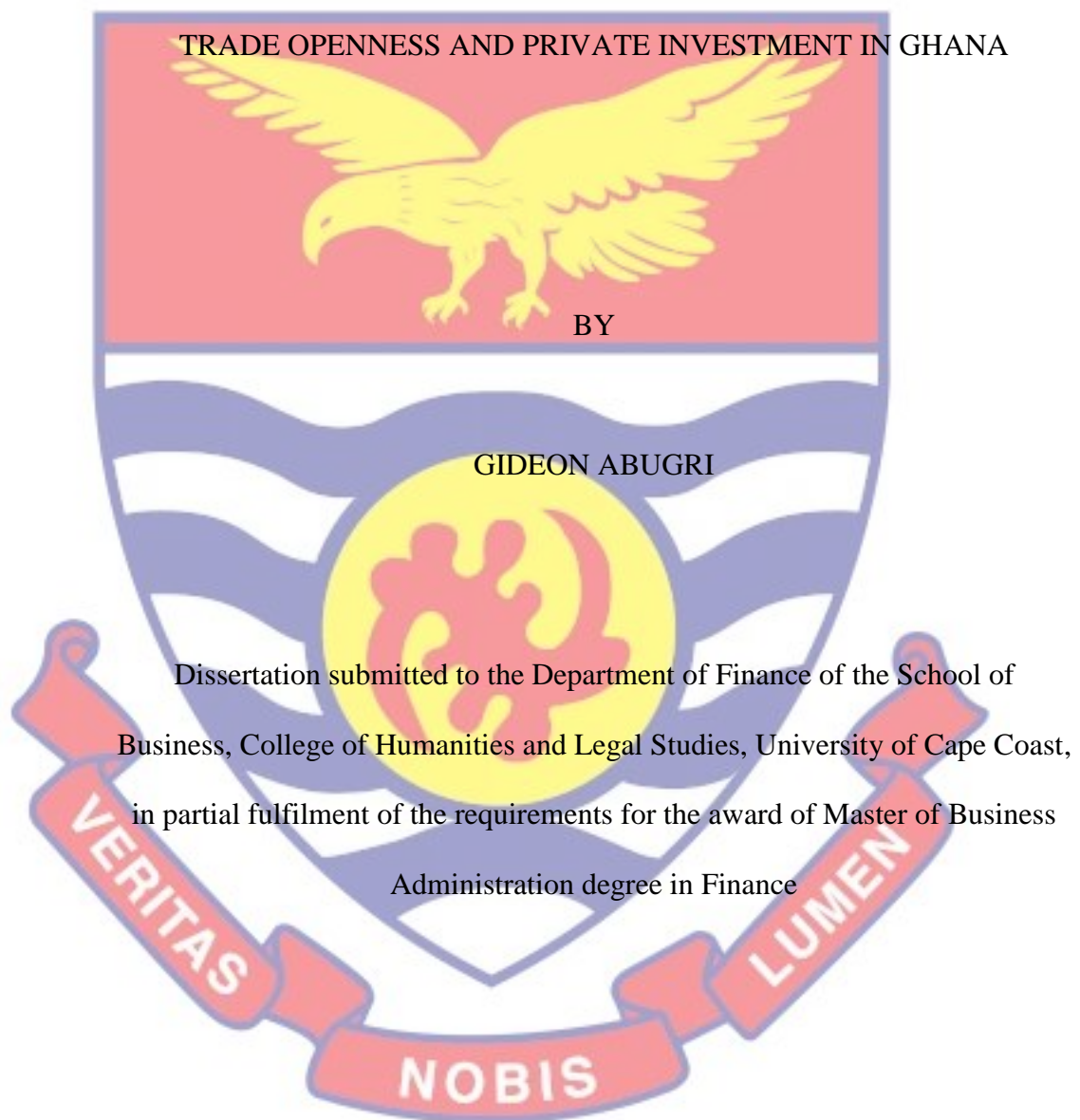


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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

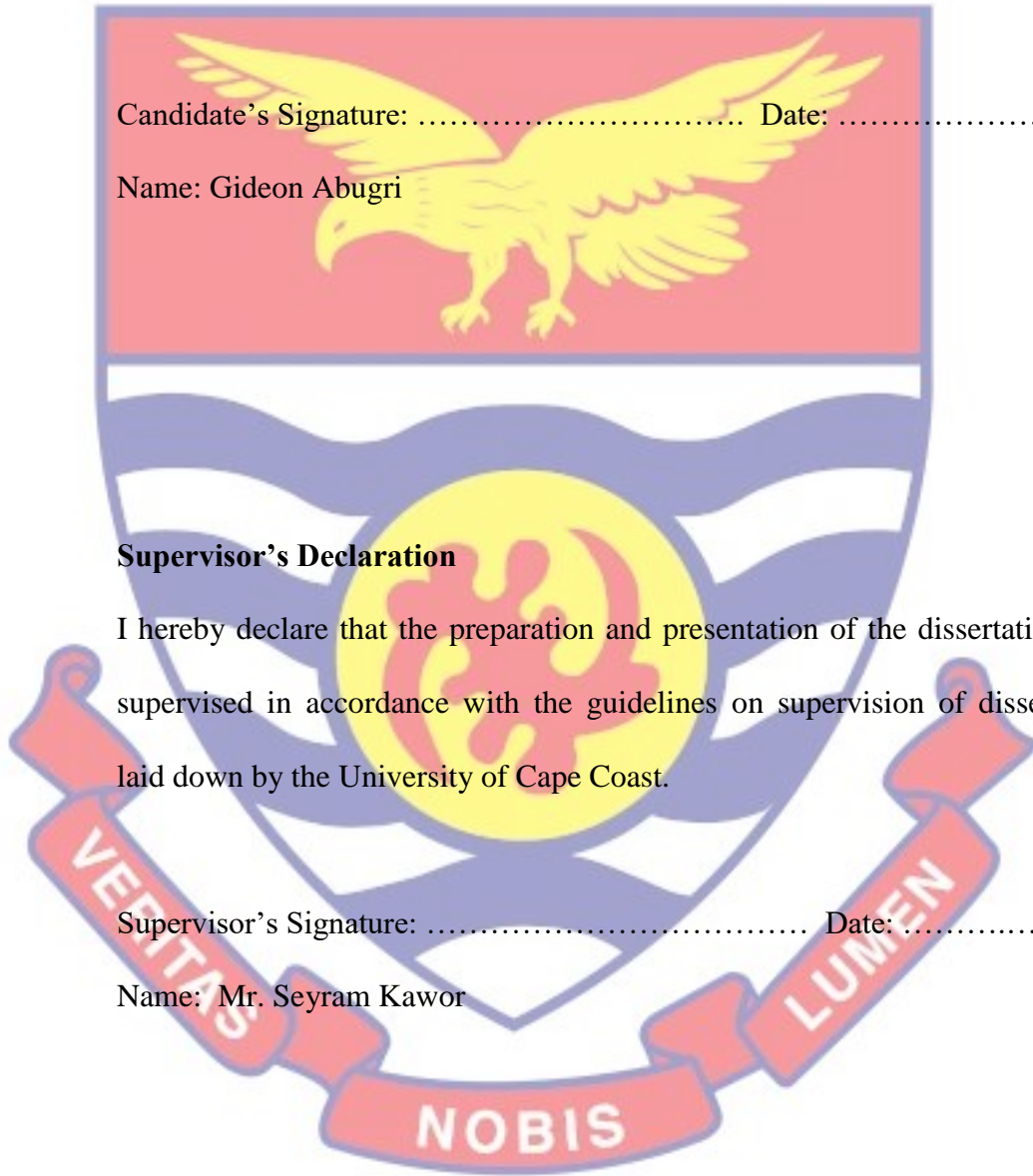
Name: Gideon Abugri

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation was supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

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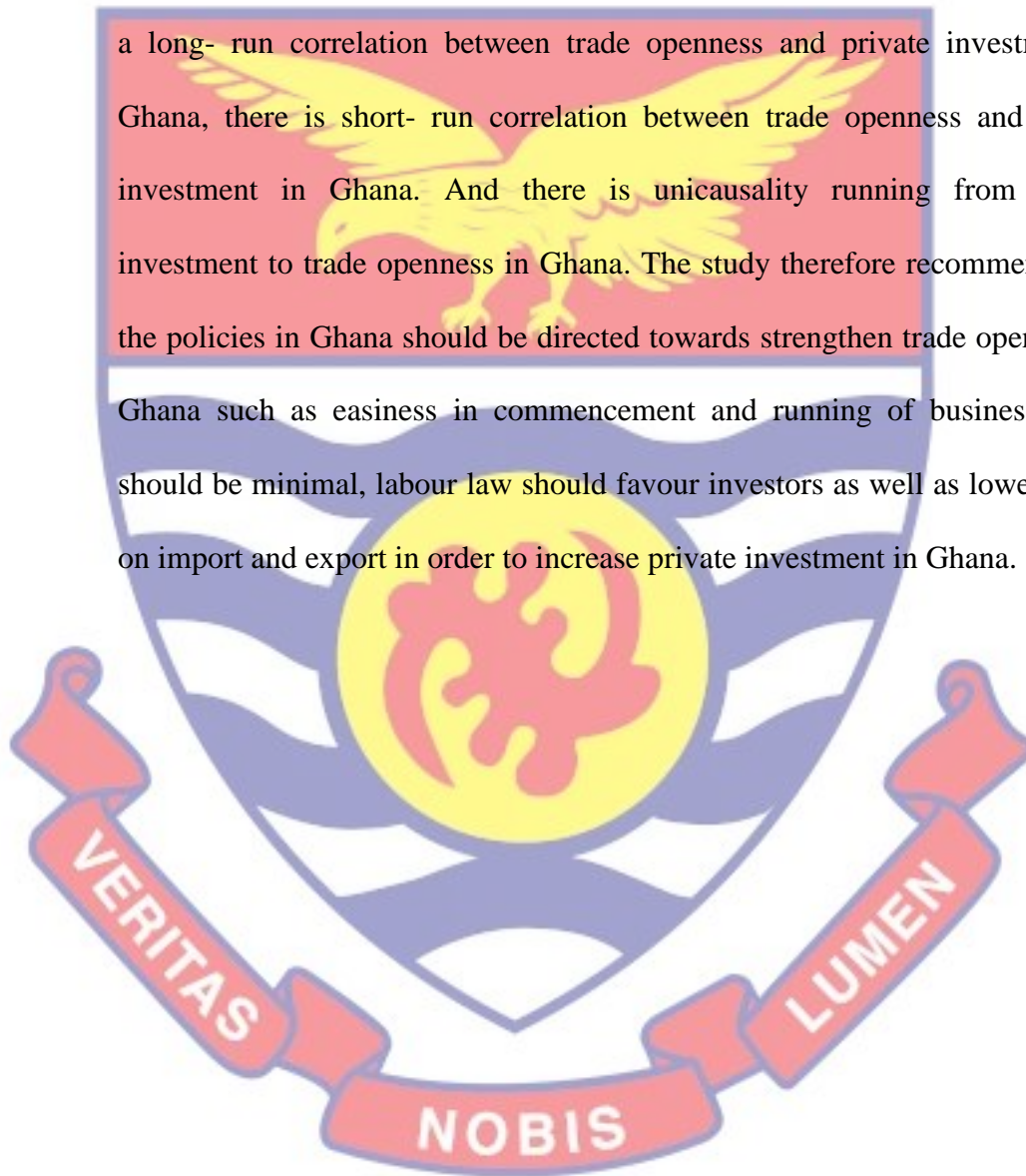
Name: Mr. Seyram Kawor



ABSTRACT

The study seeks to examine the trade openness-private investment nexus in Ghana. It adopted Autoregressive Distributed Lag (ARDL) Bound testing cointegration technique to examine the correlation between trade openness and private investment in Ghana. The findings of the study are as follows: there is

a long- run correlation between trade openness and private investment in Ghana, there is short- run correlation between trade openness and private investment in Ghana. And there is uncausality running from private investment to trade openness in Ghana. The study therefore recommends that the policies in Ghana should be directed towards strengthen trade openness in Ghana such as easiness in commencement and running of business, taxes should be minimal, labour law should favour investors as well as lower duties on import and export in order to increase private investment in Ghana.



KEY WORDS

Ghana

Private investment

Trade openness



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DEDICATION

To my wife and children for their unflinching support.



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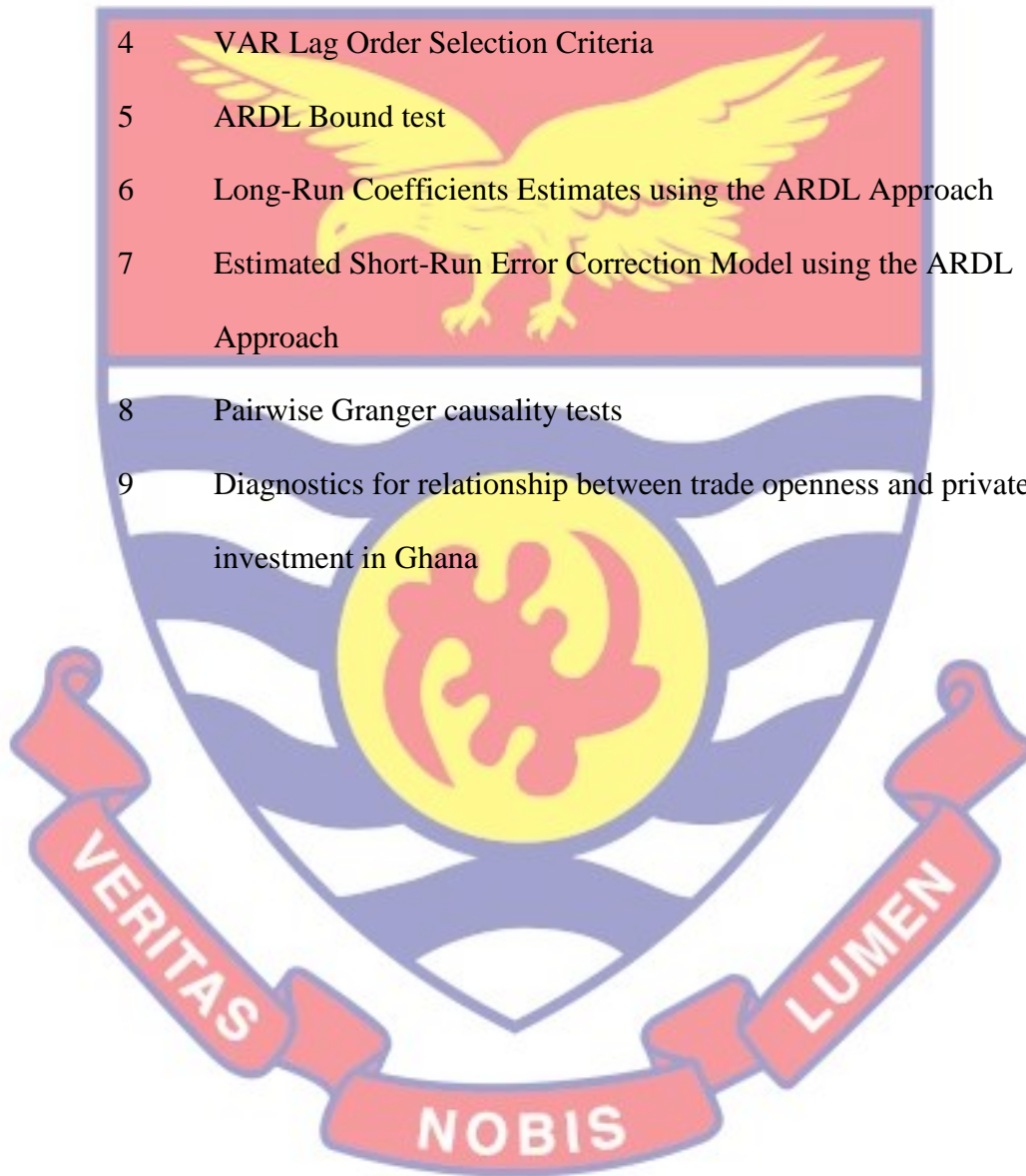
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CHAPTER ONE

INTRODUCTION

Private investment (PINV) is a key booster of economic growth (Mohsen, 2015). As a result, Ghana would do all possible to increase private investment in the country. The World Bank (2018) defines private investment as the private sector's (profit-making and private nonprofit agencies) gross outlays in addition to its fixed domestic assets. This study find that the one way private investment can increase in Ghana is through trade openness. Trade openness can be described as how restrictive a country's policy is on trade between countries (World Bank, 2018). Intuitively, if the trading environment in a country is friendly, it in turn encourages both domestic and foreign private investment.

Background to the Study

Every nation's goal should be to encourage private investment and create an appealing investment environment because investment contributes to growth by providing income, output, skills, and employment (Mohsen, 2015). Due to these numerous benefits of private investment, Ghana has adopted strategies which seek to rebalance the roles of private and public businesses and, thus, highlight the advancement of private businesses. This standard is to inspire private investment in order to improve private sector growth in Ghana (Naa-Idar, Ayentimi & Frimpong Magnus, 2012).

Another expansion strategy used to advance economic happenings in developing countries is private sector growth. This would help boost poverty reduction efforts as well as growth (Ouattara, 2004). Currently, there is enough evidence that the private sector has a more robust positive influence on

economic growth than the public sector. This is because mostly private businesses are comparatively more effective than businesses that are public (Frimpong & Marbuah 2010).

The private sector investment substantially fights against poverty when it comes to sub-Saharan economies (OECD, 2006). This means private investment is acknowledged as relevant to promoting constant growth that will help drive poverty away. This implies that countries that have low private investment are in danger of having low economic growth.

For nearly two decades, the rise in private investment in developing economies has been inspiring. According to the IMF 2018, the increase in private investment is influenced by factors such as macroeconomic conditions, the yearning for portfolio risk diversification, structural reforms, higher profits, and trade openness in evolving countries. Investors have become much more astute and show a preference for countries with fewer restrictions when it comes to investment (Frimpong et al., 2010).

Even though Ghana has been doing quite well in development over the last two decades, the contribution of private investment in Ghana is still insignificant. It is necessary to achieve a continuous growth path in policies in order to boost private investment. This condition poses a serious threat to causing growth in our economy that can revive the living standards of the people, which would result in sufficient employment and an increase in income level (Asante, 2000). For a country like Ghana, private investment has become necessary because the public sectors have failed over the years to address economic issues such as unemployment and poverty (World Bank, 2017). Thus, it has become relevant for the government of Ghana to adopt a

strategy that would encourage private investment because, according to Mohsen (2015), among other things, the way the government can encourage private investment is through trade openness.

There are a number of factors that boost private investment in Ghana. Because trade openness is a big problem for investors, the study's approach to it is also a major concern. According to the World Bank (2018), trade openness can be described as how restrictive a country's policy is on trade between countries (World Bank, 2018). When restrictions on setting up a business are friendly, it creates a conducive trading environment that encourages both domestic and foreign private investment. In addition, trade openness can stimulate private investment by reducing export and import processes, which would then lead to an increase in private investment and production in the country.

Statement of the Problem

For a country like Ghana, private investment has become necessary because the public sectors have failed over the years to address economic issues such as unemployment and poverty (World Bank, 2017). Thus, it has become relevant for the government of Ghana to adopt a strategy that would encourage private investment because, according to Mohsen (2015), one of the ways the government can encourage private investment is through trade openness.

Many studies have been conducted around private investment in Ghana (Sakyi, Boachie & Immurana, 2016; Obeng, Akoto & Acquah, 2015), however, none of them has established trade openness - private investment nexus. For instance, Sakyi et al., (2016) asked the question in his study, does

financial development influence private investment in Ghana while Obeng et al., (2015) analysed globalization, democracy and private investment in Ghana.

The studies that can be closely associated with this study are the trade openness-foreign direct investment nexus in Ghana. Yet, private investment is broader than foreign direct investment because it includes domestic investment. Therefore, this study seeks to examine the trade openness-private investment nexus in Ghana.

Purpose of the Study

The purpose of this work is to examine the trade openness-private investment nexus in Ghana.

Research Objectives

Precisely, the study seeks to:

1. Analyse the long-run relationship between trade openness and private investment in Ghana.
2. Examine the short-run relationship between trade openness and private investment in Ghana.
3. Assess the causality between trade openness and private investment in Ghana.

Research Hypotheses

The hypotheses tested were influenced by objectives two and three.

1. H₀: There is no long-run relationship between trade openness and private investment in Ghana.
2. H₀: There is no short-run relationship between trade openness and private investment in Ghana.

3. H₀: There is no causality between trade openness and private investment in Ghana.

Significance of the Study

This study in the view of the researcher could be useful for the policy makers in Ghana to provide suitable policies that can encourage investment that are private. Specifically, the tariff and non-tariff restriction on trade should be reduced in order to boost private investment. In addition, there is no studies that employed time-series on trade openness and private investment in Ghana, thus, it will add to literature. Finally, it will close the gap that is in the literature. Again, other studies can build on this study when conducting future researchers on variables relating to this study in Ghana.

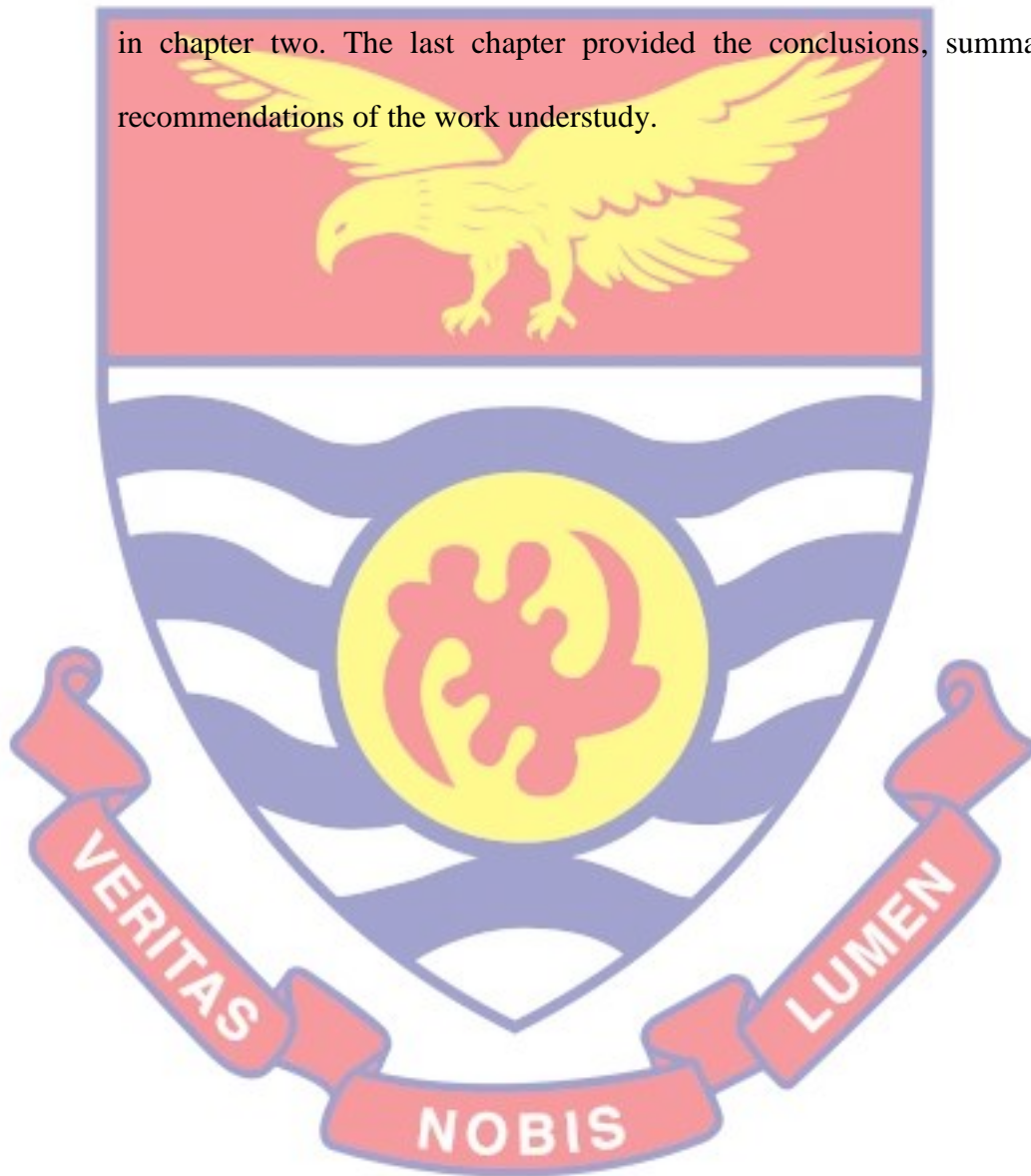
Delimitation of the Study

This study examined the trade openness-private investment nexus in Ghana using time series captured in years of private investment and trade openness from 1992 to 2019 by World Development Indicators (WDI). The study is limited to Ghana and the data is from 1992 to 2019. Therefore, the data points were not enough for research. However, the data was converted from annual data to quarterly data. This increased the data points and thus met the requirement for quantitative analysis. To be very sure the data does not create a problem during analysis, the study adopted Autoregressive Distribution Lag (ARDL), which is suitable for small data points.

Organization of the Study

This research is ordered into five chapters. It begins with introduction, followed by background to the study, then statement of the problem, purpose of the study came next, the hypotheses, significance, delimitation of the study

as well as organization of the study to form chapter one. Chapter two contains the related works; theoretical and empirical works related works that underpins trade openness- private investment nexus in Ghana. Chapter three gives the detail of the research method that guided this study. Chapter four scrutinizes and deliberates the findings with reference to the studies reviewed in chapter two. The last chapter provided the conclusions, summary and recommendations of the work understudy.



CHAPTER TWO

LITERATURE REVIEW

Introduction

The general reason for this aspect is to elaborate related works on trade openness-private investment nexus in Ghana. That is, getting related theory and empirical review for the work. This chapter is ordered into two main segments. The first deliberates on theoretical literature on trade openness - private investment nexus. The second section presents a review of prior empirical studies on the effect of trade openness - private investment nexus in Ghana.

Theoretical review

Eclectic theory

The eclectic paradigm is one of the theories attempting to clarify why companies decide to invest in foreign countries (Abbas & El Mosallamy, 2016). Dunning (1977) developed eclectic theory also known as OLI paradigm where the "OLI" stands for Ownership, Location and Internalization; three possible reasons that would make a firm decide to be a multinational. Ownership advantages indicate why particular organizations go abroad yet others do not, it explains that a successful multinational company has some firm-specific advantages which allow it to become successful in foreign economies. Location advantages focus on which location (country) to choose. Lastly, internalization advantages affect the way a company chooses to operate in another country.

Locational advantage is one reason among three reasons given by the eclectic paradigm (OLI paradigm) to explain why a country is chosen for

investment (Abbas & El Mosallamy, 2016). It was developed by Dunning (1977), where he gave ownership, location, and internalization as three possible reasons that would make a firm decide to be a multinational. The focus of this study would be on the locational advantages.

Location advantage implies that an investor would consider investing in a country when certain factors, such as trade openness, are in his interest (Dohse, Hassink & Klaerding, 2012). If the business environment in a country is friendly (meaning, fewer restrictions and taxes), investors are encouraged to set up private businesses (Nutassey, 2019).

Over the years, researchers have tagged this theory with only foreign direct investment (Nutassey, 2019). However, this study argues that this theory can also be used for private investment which combines both foreign investment and domestic investment. This study seeks to clarify that, it not only foreign investors who are attracted by locational advantages such as trade openness, all investors consider it.

Therefore, this theory underpins this study because all private investor considers the trade friendliness of a country when investing. If a country is not friendly, even the citizen would move to foreign country to invest there.

Empirical Review

This section present overviews of previous studies that are related to this study and indicate how this study differ from them. This was done based on the above objectives.

Sallam (2019) worked on determinants of investment that are private in Egypt. The analysis was influenced by the Q theory of investment (Tobin, 1969). The variables employed were the index of the average q, the investment

rate, the prices of long-term goods, and external and internal finance. The study was achieved by employing the dynamic average Q. This involved the testing of unit root and cointegration analysis in the long run. Random shocks that affect Egypt's private investment determine the level of investment. The indication of instinct feedback in VECM demonstrates that a single shock in the standard deviation of the business worth has a positive impression on investment. Shocks that are stochastic for finance that is external and finance that is internal have a minor positive impact on the level of investment. Also, it shocks that stochastic investment has a positive but decreasing effect on itself. Nevertheless, shocks that are stochastic to capital goods prices have an adverse bearing on investment.

Also, Mensah, Asamoah and Ahiadorme, (2019) examined how real exchange rate uncertainty relate to private investment in Ghana and this was done empirically. The work was guided by accelerator theory to from the economic perspective of a reliance of Ghanaian on import. The work implemented the ARDL model of cointegration and found positive long-run correlation between real exchange rate (REER) ambiguity and private investment. The short-run evidence give reaffirmation on the effect of trade, inflation as well as uncertainty REER on private investment. Precisely, indicated a positive mediating effect from uncertainty in REER to private investment decision in resource provision. Credit rate and trade term had negative influence on private investment in the long and short run. The study recommended that evolving countries to consider the effect of REER and terms of trade in their polices to enhance private investment.

Again, Obeng et al. (2018) undertook a study titled "The Effects of Globalization and Democracy on Ghanaian Private Investment, Employing the ARDL Bounds Test." The outcomes revealed that public investment and globalization intensify private investment, while trade openness and exchange rate instability decrease private investment in both the short and long run. In addition, interest rates and national income reduce private investment in the short-run. Also, investment, trade openness, and exchange rate volatility decline private investment, whereas public investment and credit to the private sector upsurge private investment in both the long and short run. Finally, interest rates and national income levels both lower private investment in the short-run. The results provided relevant data for policies in Ghana.

Moreover, Bonga and Nyoni (2017) did an empirical scrutiny of the causes of Zimbabwe's private investment. The study investigated the factors that influence private investment in Zimbabwe. The findings revealed that public and GDP are powerful influencing factors for private investment in Zimbabwe. The study suggested that all the employed causes should be properly improved to enhance private investment. Therefore, the government of Zimbabwe should increase investment in the public sector as well as activities that can improve GDP, so it has to boost private investment.

Furthermore, Sakyi, Boachie, and Immurana (2016) investigated the influence that financial development has had on Ghana's private investment between the years of 1970–2014. The measurement is used to determine whether the impact of financial development has depended on the measurement on Ghana's private investment. There are various measures for financial development; thus, can the effect of financial development on private

investment differ based on the indicator of financial development used? Ghanaian financial development is not always a good booster for Ghanaian private investment. This is because it reflects relevantly during the early stages, but as the period long, its impact is insignificant. Again, the measure that is used to measure financial development determines whether it is relevant to private investment or not. Based on the finding, other research should note that the type of measure used for financial development when determining its impact on private investment is very relevant. In addition, the need for financial development in private investment is just for a short period.

In addition, Kilindo (2017) studied the determinants of private Tanzanian investment from 1970 to 2015. Their study conducted empirical analysis and assessment of macroeconomic indicators that influence the investment decisions made by private people in Tanzania. Prior works and theories were taken into account as part of private investment activities. It found that private investment is influenced by aggregate demand as proxied by output. Again, it established that credit flow and public investment have a positive effect on the gathering of capital, whereas inflation and debt that is external have opposing effects. To avoid spurious results, there was the need to test stationarity as well as co-integration before the main analysis. The result of the ECM indicates that private investment is co-integrated with the variables. It advocates the relevance of credit markets, inflation, and investment that are public in the growth of private Tanzania investment.

Moreso, Mohsen (2015) attempted to investigate the influence of GDP, population, and trade openness on Syria's investment from 1980 to 2010. It indicated that all the variables employed have a significant positive influence

on Syria's investment. A bidirectional causality was revealed after using granger causality among GDP, population, trade openness, and investment in the short period. However, their study indicates unidirectional causality in a longer period from trade to investment as well as bidirectional causality from population, GDP, and Syria's investment in a longer period.

Similarly, Michael and Aikaeli (2014) conducted a study on the causes of Tanzania's private investment. Their study deliberated on the factors of Tanzania's private investment. The finding demonstrates that investment that is captured as public growth in GDP and credit to the private sector are very central to private investment, but there is no weight on the cost of credit, exchange rate, and openness in the economy having a bearing on investment captured as private.

Again, Ajide and Lawanson (2012) assess the elements that caused private investment to be generated in Nigeria from 1970 to 2010. It adopted ARDL techniques. The result indicated that differences exist between short- and long-run determinants. The main indicators of private investment generated within are real GDP, state investment, cost of credit, credit to the private sector, exchange rate, terms of trade, reform dummy, and external debts, while real GDP, public investment, and terms of trade are significantly relevant in the short run. The recommendation is that essential infrastructure should be put in place to complement domestic private investment.

Yet again, Hassan and Salim (2011) studied the causes of investment made by private people in Bangladesh using the normal time series. The results of prior studies support the flexible accelerator hypothesis. This is because the cost of borrowing is not all that imperative in influencing private

investment, while the country's production is very imperative in the long term. Further, total government expenditure has a significant influence on private people's investment decisions, both in the long and short term. Expenditures made by the government crowd out private investment. However, the effect is minimal as the investment is not interest-receptive. Consequently, expenditure made by the government can be effectively used to lift production. Also, monetary policy is not efficient in a downturn because reducing the cost of borrowing cannot be improved.

Likewise, Majeed and Khan (2008) studied the effects of several factors on private investment in Pakistan. They discovered that all of the factors have an impact on private investment in Pakistan indicating that net private sector capital inflows, total sources of funds, past capital stock, and bank credit all have a significant impact on Pakistan's private investment. It also indicated that public investment has a substitutable effect on private investment. Furthermore, the financial and physical resources used by the public sector have a relevant effect on the investment of private investors. Since private investment is relevant to the growth of Pakistan, it is very important that all the above-mentioned indicators are improved for the betterment of private business.

From the literature review, it can be seen that none of the studies mentioned above has revealed the exclusive nature of Ghanaians' trade openness and private investment. Thus, this study is needed to be able to come up with the needed policy that would help private investment in Ghana.

Conceptual Framework

This framework indicated the link between trade openness and private investment in Ghana. Precisely, it demonstrates that making trade in Ghana open increases private investment. Based on literature, the study chose other variables to serve as control variables (GDP per capita growth, real effective exchange rate, inflation rate, and financial development).

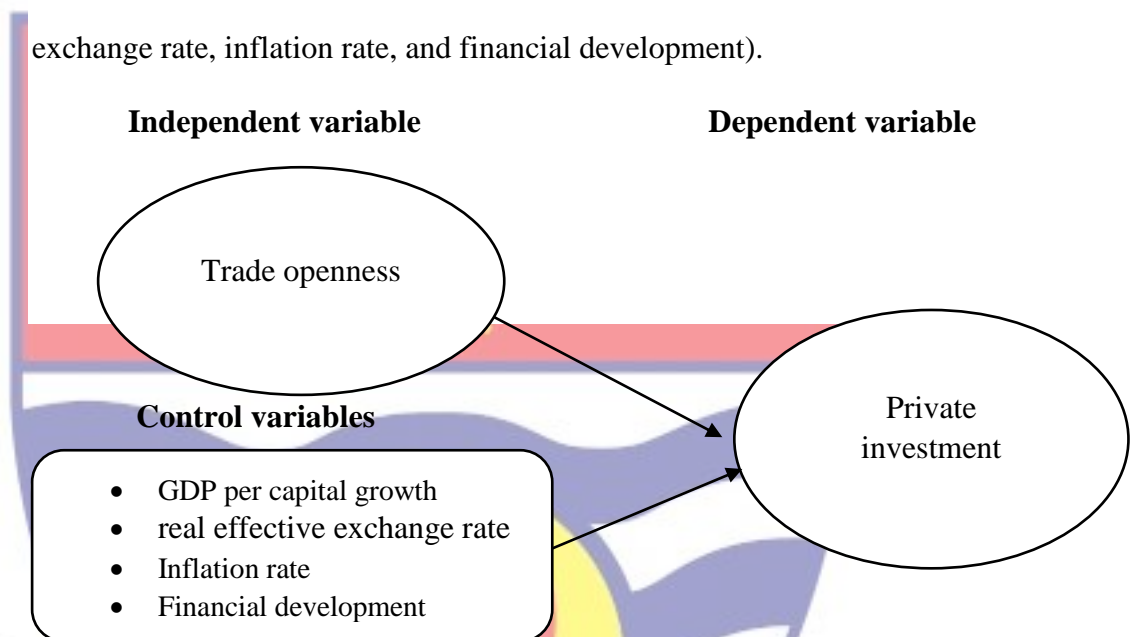


Figure 1: Conceptual framework
Source: Field Survey, (2021)

Chapter Summary

This chapter started by reviewing theories that underpin the relationship between trade openness and private investment. Specifically, the study reviewed the locational advantage theory, which explains how trade openness influences private investment. The second section also concentrated on empirical review, that is, studies related to this study that were conducted earlier. After reviewing the studies above, it was realized that no study has yet been conducted in Ghana on the trade openness-private investment nexus. Thus, this study intends to contribute to the literature by conducting this study in the setting of Ghana.

CHAPTER THREE

RESEARCH METHODS

Introduction

This part gives detailed information of the research methods to be used in the study. Precisely, approach, design, specification of the model, measurement and definition of variables, estimation techniques, sources of the data in the study, tools for data analysis and chapter summary.

Research Design

The research design employed in this work was both explanatory. The explanatory research is used since the study looks at how one variable predicts the other. That is, how independent(s) (one or more variables) predict the dependent in a model developed. Explanatory research design is deployed in this study because this study is examining the prediction of trade openness on private Ghanaian investment in both short period and long period in addition to causality between them. To achieve this hypothesis was tested during the analysis, in order to established whether there was a significant prediction from trade openness to private Ghanaian investment as well as causality between these variables of interest.

Research Approach

There are two key methods in research; quantitative and qualitative. In some cases, mixed method is added (Adam, 2015). Quantitative approach lend itself to objective and numeric analysis as well as generalization of finding (Crowther & Lancaster, 2008). Hence, quantitative approach is suitable for this study since it would develop a mathematical model and objective analysis. This is because implementing a quantitative method gives results that could be

condensed to statistics; allowing statistical comparison between entities; findings are specific, definitive and standardize (Sukamolson, 2005).

Model Specification

There are two widely used model, namely, time series and panel model (Adom,2015) This model are developed owing to the features of the data collected (time series). This study is considering a number of variables over a period of time. When a number of variables is considered a unit over a period of time, then time series is deemed appropriate for that study. Therefore, following Mohsen (2015), the time series model specifically, ARDL is stated as:

$$PINV = f(TO, GDPCG, REER, FD, INF, \mathcal{E}) \quad (1)$$

Where $PINV$ is private investment, TO is trade openness, $GDPCG$ is gross domestic production per capita growth and $REER$ is real effective exchange rate, and FD is financial development. These variables are all secondary data form World Development Indicator.

$$\begin{aligned} \Delta PINV_t = & \alpha_0 + \sum_{i=1}^n \beta_i \Delta PINV_{t-i} + \sum_{i=0}^n \phi_i \Delta TO_{t-i} + \sum_{i=0}^n \Phi_i \Delta GDPCG_{t-i} \\ & + \sum_{i=0}^n \Phi_i \Delta REER_{t-i} + \sum_{i=0}^n \Phi_i \Delta FD_{t-i} + \sum_{i=0}^n \Phi_i \Delta INF_{t-i} \\ & + \partial_1 PINV_{t-1} + \partial_2 TO_{t-1} + \partial_3 GDPCG_{t-1} + \partial_4 REER_{t-1} \\ & + \partial_5 FD_{t-1} + \partial_6 INF_{t-1} + \varepsilon_t \end{aligned} \quad (2)$$

Measurement of Variables

For the objectives of this work, the following measurement was used for the variables being examined. These variables were guided by literature and theory.

Dependent variable

Private investment

It was measured by gross fixed capital formation as percentage of GDP. It is published in World Development Indicator (WDI), and it comprises private sector (profit making and private nonprofit business) gross outlays, and fixed domestic assets. It has been adopted by researchers such as Sakyi et. al., (2016) and Obeng et. al., (2015) to measure private investment.

Independent variable

Trade Openness (TO)

According to Pradhan, Arvin, Hall and Norman (2017), Le, Kim and Lee (2016) and Das and Rishi (2010), their results show that trade openness is one of the main influencers that boost financial development. Trade openness is proxied by trade as a percentage of GDP which is explained by World Bank (2017) as the both importations and exportations of services and goods as measured as a segment of GDP. This study is expecting positive trade openness - financial institution nexus. Therefore, this study expects positive correlation between trade openness and financial institutions in Ghana.

Control variables

This section presents other variables studies have established trade openness - private investment nexus. Specifically:

Gross domestic product per capita growth (GDPCG)

GDP is explained to be the worth the entire market and some nonmarket services and good produced in a certain country (World Bank, 2019). It is used to quantify a country's economic output. Intuitively, when an economy grows, it should cause positive increase in the financial institutions

of that economy. Therefore, this study expects positive effect of gross domestic product per capita growth on employment.

Real effective exchange rate (REER)

It is a comparative assessment of price of the local economy's services and goods and the prices of services and goods of another economy. This is good variable to consider because foreign investment is part of private investment and foreign business consider REER before making the decision to invest in a location. In addition to that local business might be into importing raw material or exportation of finish goods and therefore, REER might be of much importance to the continuation of their business (Afari, 2004; Nyugen & Haughton, 2002). The study anticipates positive real effective exchange rate – private investment nexus.

Financial development

Financial development was proxied with domestic private sector to GDP. Domestic credit to private sector is denoted as financial resources given to the private business by financial institution, this includes credit, purchases of bond, and credit buying and others, which requires repayment (World Bank, 2020). Previous studies have proven that financial development affect private investment (Bonga et al, 2017; Lesotlho, 2006; Ribeiro &Teixeira, 2001)

Inflation (INFL)

It is explained as a continued growth in the over-all prices level for services and goods. The proxied the percentage variation in the cost to the average customer of obtaining a fixed basket of services and goods at precise intervals, such daily, monthly and yearly (WDI, 2020). Speedy upsurges in the overall price level of the countries may result in doubt about the future

performance of private business. This is because, advanced prices of consumer goods and services may diminish demand for services and goods in the economy and for this reason, the income in the economy would ultimately impact the activities of investor. The study expects an adverse effect of inflation on private investment.

Sources of Data

This study considered secondary because of the variables of interest: Trade openness, private investment and the control variables (gross domestic product per capita, real effective exchange rate, financial development and inflation). These variables are labeled secondary because they are already in existence. These variables adopted in the models were guided by prior works reviewed on the topic, The time period covered in the study was from 1992 to 2019 and quarterly time series data was used. The period chosen was guided by the date currently available and the current state of affairs in the countries under consideration. All data was obtained from (WDI, 2020).

Estimation Technique

The study adopted Autoregressive Distributed Lag (ARDL) Bound testing cointegration (Pesaran, Shin & Smith, 2001) technique because the data size is small. Also following Mensah et al, (2019), the study suspects that some of the variables adopted will stationery at level while others will be stationery at 1st difference. Before the study used ARDL Bound testing cointegration by Pesaran, Shin and Smith (2001) technique, unit roots tests was conducted on all the variables via the Augmented Dickey-Fuller (ADF) to ascertain their integration order. This was done in order to avoid spurious

regression. Also, Lag length was tested in order to know how many quarter back the independent variables influence the dependent variable.

The study further tested causality among the variables in order to accomplish the third objective which read to assess the causality of trade openness and private Ghanaian investment. Based on the order of integration

Eagle and Granger (1987) would be employed. All estimations were done using Eview 9.0.

Model Diagnostics

ARDL model, comes along with other relevant tests such as functional form, serial correlation, heteroskedasticity, structural stability and normality tests. This is to established that should ARDL model is normal and has no autocorrelation indicating that the error is distributed normally. Furthermore, it should pass the heteroskedasticity (white test) and the correct specification (RESET test).

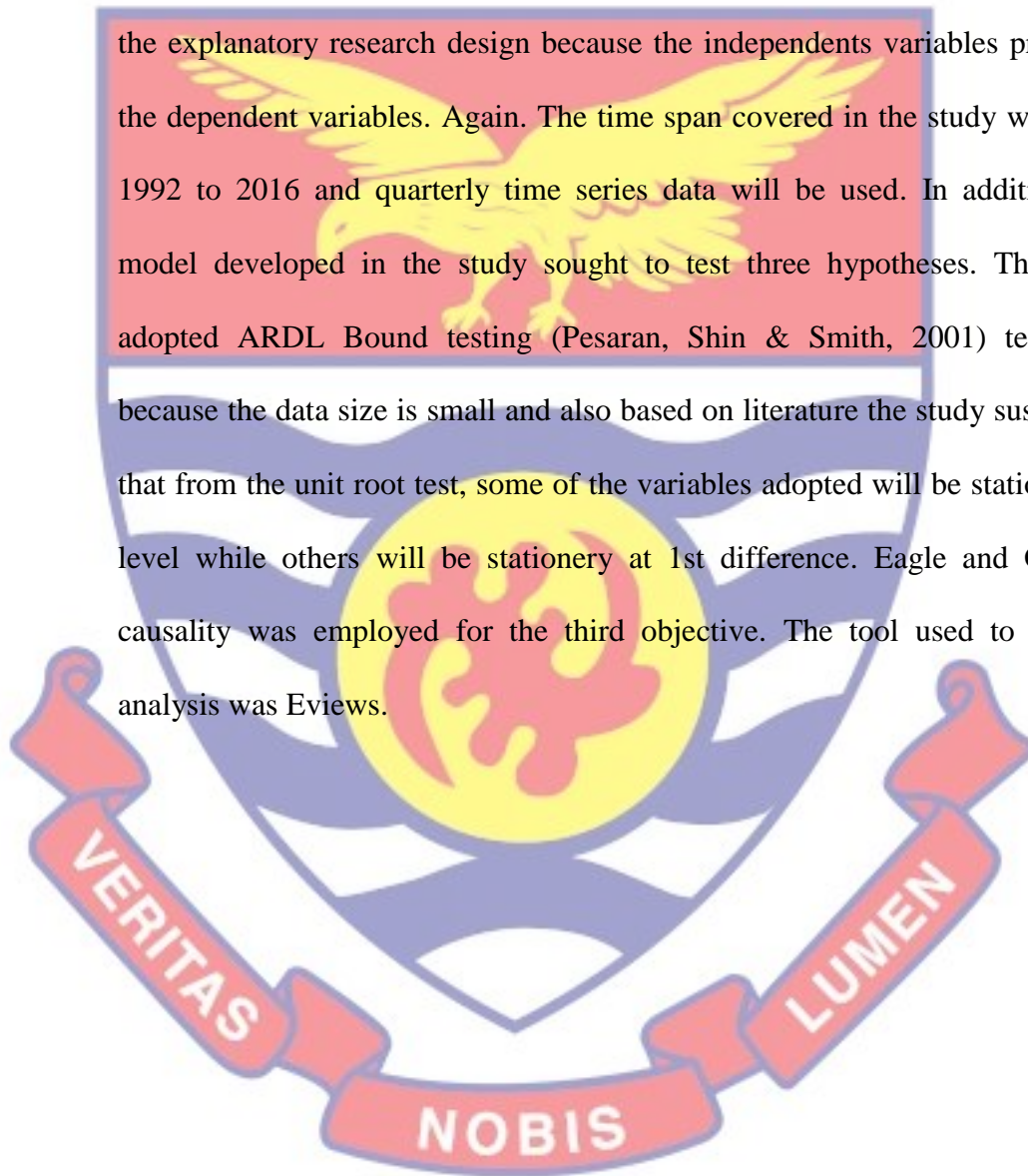
Precisely;

1. The probability value of the F- statistic of the serial correlation should be greater than 0.05, that means, the study failed to reject the null hypothesis of no serial correlation, then the model is reliable
2. The P- value of the F- statistic of heteroscedasticity should be more than 0.05, which implies, this study failed to reject the hypothesis that no heteroscedasticity, ganrantly reliability
3. The p- value of the F-statistic of Ramsey reset should be more than 0.05. This fail to reject the null hypothesis of “the restricted model is correctly specified which stresses on the model reliability

4. The Durbin – Watson stat value should be close to 2, which implies, the is absence of autocorrelation.

Chapter Summary

This chapter presents the research methods involved in undertaking this study. This study was purely quantitative in its approach. It also employed the explanatory research design because the independents variables predicted the dependent variables. Again. The time span covered in the study was from 1992 to 2016 and quarterly time series data will be used. In addition, the model developed in the study sought to test three hypotheses. The study adopted ARDL Bound testing (Pesaran, Shin & Smith, 2001) technique because the data size is small and also based on literature the study suspecting that from the unit root test, some of the variables adopted will be stationary at level while others will be stationery at 1st difference. Eagle and Granger causality was employed for the third objective. The tool used to run the analysis was Eviews.



CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This part gives the findings of the work as well as the discussion of the results. The results were given in figures and tables. This chapter outlines the results in line with the hypotheses to be tested. Specifically, the study did the analysis based on data from 1992 to 2019. It started with the descriptive statistics, then correlation analysis, unit root test, lag length test and finally, ARDL test for the study which was presented based on hypotheses.

Descriptive Statistics

The variables employed with their descriptive statistics are presented in Table 1. These descriptive captures six variables with a time period of twenty-four (24) years of quarterly data. It gives a report on the standard deviation, mean, maximum and minimum values, and observations for the variables of the study. The mean measures the average values of the variable, but the standard deviation measures the dispersion. The maximum and minimum values capture the range of variables. The observations are 71.

The dependent variable, private investment (PINV), has a standard deviation of 3.4379, which is lower than the central tendency, mean of 13.1155, which means there is high fluctuation around the mean between a range of 2.4487 to 17.000. Also, the independent variables of trade openness (TO) have standard deviations of 16.8945, which is less than the mean of 77.7308. This means there is low fluctuation around the mean of trade openness within a range of 45.9936 to 116.0484.

Again, the descriptive statistics of control variables were presented as follows: Gross domestic product per capita (GDPC) in the range of -0.1139 to 11.3155 shows a standard deviation of 2.4458, which is less than its mean of 2.9782, which demonstrates low fluctuation around its mean. The standard deviation of the real effective exchange rate (REER) is 24.4270, and the mean is 101.5678; thus, these variables show a low fluctuation around the mean in a range of 64.6282 to 147.3423. Financial development (FD), also in a range of 4.8382 to 15.8820, has a standard deviation of 3.7284, which is higher than its mean of 11.9641, indicating high fluctuation around the mean. Inflation too has a standard deviation of 11.9940, which is lower than the mean of 18.6163. This shows a low fluctuation around the mean in a range of 7.1264 to 59.4616.

Table 1- Descriptive Statistics of variables

	PINV	TO	GDPCG	REER	FD	INF
Mean	13.1155	77.7308	2.9782	101.5678	11.9641	18.6163
Med.	14.9345	72.9266	2.0590	96.3453	12.7295	14.9672
Max	17.0000	116.0484	11.3155	147.3423	15.8820	59.4616
Min	2.4487	45.9936	-0.1139	64.6282	4.8382	7.1264
SD	3.4379	16.8945	2.4458	24.4270	3.7284	11.9940
Obs	71	71	71	71	71	71

Source: Field Survey, (2021)

Correlation Analysis

The link among the indicators employed in this study is given in Table 2. Correlation analysis was tested in order to identify variables that could cause multi-collinearity built on time series data. The correlation coefficient between the dependence variable (private investment (PINV)) and the independent variable (trade openness) is positive (0.3794). This implies that

the two variables are correlated and that the relationship can be tested between them.

For control variables in table 2, the correlation shows a significant and positive association between PINV and gross domestic product capita growth (GDPCG) with a coefficient of 0.3794. It also indicated a negative correlation

between private investment and REER with a coefficient of -0.6555. Furthermore, the correlation matrix indicated a positive correlation between private investment and financial development with a coefficient of 0.7811. Finally, the correlation matrix indicated an adverse correlation between private investment and inflation with a coefficient of -0.4182. Therefore, the variables employed as the control variables are related to the dependent variable (private investment) and, hence, appropriate to be employed as control variables.

Since then, the coefficient of the correlation matrix between the independent variable and the control variables was as follows: trade openness and gross domestic product capita growth is 0.1057; trade openness and real effective exchange rate is -0.1459; trade openness and financial development is 0.4189; and trade openness and inflation is -0.0055. The coefficient between the independent variable and the control variables was all below 0.7. This means there is no multi-collinearity between the independent variables and control variables. Also, among the control variables, the coefficient is below 0.7 (See table 2), which again indicates that putting the control variables together in a model is justified because there is no multicollinearity.

Table 2- Correlation Analysis

	PINV	TO	GDPCG	REER	FD	INF
PINV	1.0000					
TO	0.3740	1.0000				
GDPCG	0.3794	0.1057	1.0000			
REER	-0.6555	-0.1459	-0.2075	1.0000		
FD	0.7811	0.4189	0.3961	-0.6245	1.0000	
INF	-0.4182	-0.0055	-0.4099	0.3039	-0.5494	1.0000

Source: Field Survey, (2021)

Unit Root Tests

At this point, it is necessary to execute these tests in order to confirm whether the variables above order one (absence of I(2)) do not produce spurious correlation. Hence, before employing the ARDL Bounds test, unit root was tested to assess the stationarity features of the data. Due to this, the variables were observed using the ADF in levels and in the first difference to be able to officially declare their integration order. In order to declare the order of integration, the test was done with time and intercept in the models. The P-values in the outcome were used to declare the unit root verdict (which is, the series failed to reject or reject the unit root as per the hypothesis) and hence conclude at a similar decision as the critical values.

The outcomes of the ADF test for unit root with intercept for all the variables in the model are demonstrated in Table 3. The hypothesis (null) is that either the series contains a unit root or is non-stationary. Based on the critical values and the probability values, the null hypothesis was rejected (MacKinnon, 1991).

Table 3- Unit Root Test: ADF Test

Levels			First Difference			
Variables	ADF-Statistic	Lag	Variables	ADF-Statistic	Lag	<i>I</i> (0)
PINV	-5.4810 (0.0007)***	6	Δ PINV	-7.4559 (0.0000)***	6	<i>I</i> (0)
TO	-2.5824 (0.2902)	5	Δ TO	-5.1578 (0.0017)***	6	<i>I</i> (1)
GDPCG	-3.3070 (0.0865)*	6	Δ GDPCG	-6.0824 (0.0002)***	4	<i>I</i> (1)
REER	-2.9140 (0.1739)	6	Δ REER	-4.5768 (0.0061)***	6	<i>I</i> (1)
FD	-1.5476 (0.7868)	5	Δ FD	-6.4037 (0.0001)***	6	<i>I</i> (1)
INF	-3.8791 (0.0274)**	6	Δ INF	-5.5674 (0.0012)***	5	<i>I</i> (0)

Note: ***, ** and * designat 1%, 5% and 10% level of significance respectively and Δ denotes first difference. P- value is used for the parenthesis. Source: Field Survey, (2021)

From table 3, the null hypothesis for the variables' levels was rejected since the P-values of the ADF statistic are statistically significant at 1% and 5% conventional levels of significance. This is because, at these levels, private investment (PINV) and the inflation rate (INF) are stationary, whereas trade openness (TO), gross domestic per capita growth (GDPCG), the real effective exchange rate (REER), and financial development (FD) are not. Therefore, as per the unit root test (variables are stationery at levels and 1st difference), ARDL bounds testing cointegration is appropriate for this study (Nkoro & Uko, 2016).

Lag length tests

Lag length was tested in order to know how many quarter back the regressors influence the dependent variable.

Table 4- VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-989.46	NA	19532.24	29.74	29.98	29.84
1	-139.34	1497.21	8.10e-07	5.83	7.67	6.56
2	31.68	265.47	2.22e-08	2.19	5.64	3.56
3	53.53	29.35	5.65e-08	2.10	8.06	5.00
4	83.08	33.52	1.30e-07	3.58	10.26	6.22
5	380.78	275.48*	1.22e-10	-3.84	4.45*	-0.56
6	460.97	57.45	1.06e-10*	-4.78*	5.13	-0.86*

* Specifies selected lag order by the criterion

Source: Field Survey, (2021)

Having done the unit root test, Vector Autoregressive (VAR) was used to assess the optimal lag length for the ARDL model. Based on the Schwarz information criterion (SC), 5 was chosen as the optimal lag length (see Table 4).

ARDL test

This section presents the ARDL tests as per the study hypotheses. Long-term and short-term hypotheses would be developed based on Ghana's trade openness and private investment nexus measures. This section would start with the testing of a long-run hypothesis for the trade openness–private investment nexus in Ghana. It would continue with the testing of a short-run hypothesis for the correlation between trade openness and private investment

in Ghana. It would then end with a causality test for TO and private investment in Ghana.

H_0 : There is no long run relationship between trade openness and private investment in Ghana.

This section presents the long-run estimation results from the ARDL bounds test between trade openness and private investment in Ghana with the null hypothesis that no long-term relationship exists.

Table 5- ARDL Bound test

Test Statistic	Value	K
F-statistic	12.54	5
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.08	3
5%	2.39	3.38
2.5%	2.7	3.73
1%	3.06	4.15

Source: Field Survey, (2021)

This study rejected the null hypothesis that there is no long-run linkage between trade openness and private investment because the F-statistics figure of 12.54 is more than both the critical lower bounds value and the critical upper bounds value at 1%. Therefore, there is a long-run correlation between trade openness and private investment at 1% of the critical value of the lower and upper bounds.

Table 6- Long-Run Coefficients Estimates using the ARDL Approach

ARDL				Dependent
(2,5,1,1,5,5)				variable: PINV
Regressors	Coefficient	Std. Error	T-Statistic	P- Value
Constant	47.8910	29.3501	1.6311	0.1102
TO	0.3549	0.1524	2.3293	0.0270**
GDPCG	0.2018	0.0313	6.4551	0.0000***
REER	0.0513	0.1834	0.2910	0.7703
FD	0.3269	0.1031	3.1716	0.0036***
INF	-0.1107	0.0238	-4.6454	0.0001***

Source: Field Survey, (2021)

As shown in Table 6, the long-run correlation between trade openness (the variable of interest) and private investment is statistically significant and positive (= 0.3549; Sig = 5%). Thus, improvement in trade openness will have a long-term impact on PINV in Ghana. Hence, this study rejected the null hypothesis that there is no long-run relationship between trade openness (TO) and private investment. In other words, there is a long-term relationship between trade openness and private investment in Ghana. This is not surprising because, intuitively, when trade is open and friendly in a country, investors are encouraged to set up business. This is because the commencement of business is made easy as well as the operation of private businesses in the long run. This is supported by Dunning (1997), stating location advantage indicates that an investor would consider investing in a country when certain factors, such as trade openness, are present because trade is relatively easy. Similarly, Dohse et al. (2012) stated that if the business

environment in a country is friendly (meaning, fewer restrictions and taxes), then investors are encouraged to set up private businesses. Mohsen (2015) indicated a long-run causality relationship running from trade openness to private investment. Likewise, Boachie, Ruzima, and Immurana (2020) concluded that trade openness promotes private PINV.

Again, the coefficient of GDP per capita growth is statistically significant and positive ($\beta = 0.2018$; Sig = 1%), indicating that in Ghana, economic growth affects the level of private investment established in the long run. It rejected the null hypothesis that there is no long-term relationship between Trade openness and private investment in Ghana. Thus, a unit upsurge in GDP per capita growth would lead to a 0.2018 increase in private investment in Ghana. This is supported by Ari and Koc (2020).

Furthermore, the coefficient of REER is not statistically significant, implying that in Ghana, REER has not influenced private investment for a long time. It therefore failed to reject the null hypothesis that there is no long-run correlation between REER and private investment in Ghana. As much as this result is in line with Michael et al. (2014), it contradicts the discoveries of Mensah et al. (2019), Obeng et al. (2018), and Ajide et al. (2012).

Furthermore, financial development has a positive, significant relationship with private investment ($\beta = 0.3269$; Sig = 1%). Meaning, it rejected the null hypothesis, which states that there is no long-term relationship between FD and private investment in Ghana. Hence, a unit increase in FD would cause a 0.3269 increase in private investment in Ghana. Sallam (2019) and Bonga et al. (2017) support the finding, but Sakyi et al. (2016) do not.

In addition, the inflation rate has a negative significant association with private investment in Ghana ($=-0.1107$; Sig = 1%). Meaning, there is a long-standing correlation between the inflation rate and private investment in Ghana. An increase in inflation would cause a 0.1107 decline in private investment in Ghana at a significant level.

Since long run relationship existence has been established between private investment and the regressors (see table 6), the ARDL method is then used to evaluation long-run parameters. Implying that any instability in the system due to a shocking activity can be rectified in the long-run by the error correction term. Thus, the error correction term predicted in the short-run adjustments to steadiness is created as below: $Cointeq = PINV - (0.3549*TO + 0.2018*GDPCG + 0.0513*REER + 0.3269*FD - 0.1107*INF + 47.8910)$.

H_0 : There is no short-run relationship between trade openness and private investment in Ghana.

This section also presents the short-period estimation results which addressed the second null hypothesis to be tested, the correlation between trade openness and private investment in Ghana. The variables' lag values are presented in this section. The correction error term (ECT_{t-1}) represents the linear combination found in the ARDL model. Table 7 presents the finding of the predicted correction error model of private investment in Ghana by employing the ARDL technique.

Table 7- Estimated Short-Run Error Correction Model using the ARDL Approach

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Δ (PINV(-2))	0.8843	0.0648	13.6512	0.0000***
C	0.02213	0.0123	1.7969	0.0759*
Δ (TO(-1))	-0.0709	0.0294	-2.4137	0.0179**
Δ (TO(-2))	0.0975	0.0308	3.1700	0.0021***
Δ (GDPC(-1))	0.0330	0.0168	1.9616	0.0530*
Δ (GDPC(-2))	-0.0641	0.0170	-3.7776	0.0003***
Δ (REER(-1))	0.0492	0.0187	2.6344	0.0100***
Δ (REER(-2))	-0.1060	0.0189	-5.6122	0.0000***
Δ (FD(-1))	0.0073	0.0042	1.7611	0.0818*
Δ (FD(-2))	-0.0049	0.0043	-1.1327	0.2605
Δ (INF(-1))	-0.0350	0.0328	-1.0669	0.2890
Δ (INF(-2))	0.0120	0.0317	0.3793	0.7054
ECT(-1)	-0.7380	0.1599	-4.6168	0.0000***

*, **, and *** represent significance level at 10%,5% and 1% respectively. Δ is the first difference.

Source: Field Survey, (2021)

The results from Table 7 indicate that the first difference and the second lag of private investment have a statistically relevant positive relationship with PINV in the short run in Ghana (= 0.8843; Sig = 1%). which proposes that the ultimate effect of the two preceding quarters' value of private investment on recent values of private investment in the short-run is positive and statistically significant at 99 percent confidence level in Ghana. Simply, a unit increase in private investment in the two previous quarters will increase the recent private investment in Ghana by 0.8843.

Furthermore, the first difference of first lag trade openness indicated that there is a negative significant relationship with private investment in Ghana in the short run ($= -0.0709$; Sig = 5%). that a unit increase in the previous quarter of the difference in trade openness causes a reduction in private investment in Ghana by 0.0709. Therefore, it denies that there is no short-term relationship between TO and private investment in Ghana after the immediate previous quarter. Whereas in Ghana, the first difference between the second lag of trade openness has a positive significant relationship with the employment rate ($= 0.0975$; Sig = 1%). that a unit increase in the second previous quarter of TO difference will increase private by 0.0975. This result is supported by Mohsen (2015). Therefore, it also rejected the null hypothesis that there is no short-run link between trade openness and private investment in Ghana.

Again, the coefficient of the first difference of the first lag of GDPCG is statistically significant and positively correlated with private investment in Ghana ($= 0.0330$; Sig = 10%), whereas the coefficient of the first difference of the second lag of GDP per capita growth is statistically significant and negatively correlated with private investment in Ghana ($= -0.0641$; Sig = 1%). From the results, a unit increase in the first difference between the first and second lag GDP per capita growth will increase private investment by approximately 0.0330 in the short-run in Ghana. However, a unit increase in the first difference and second lag GDPC growth will lead to a 0.0641 reduction in private investment in Ghana.

In addition, the coefficient of the first difference of both first and second lag of REER has a positive and negative impact on PINV in Ghana in

the short-run ($\beta = 0.0492$; Sig= 1%, $\beta = -0.1060$; Sig= 10%), respectively. The mean, an increase in the first difference of the first lag REER would increase private investment by approximately 0.0492 while that of the first difference of the second lag of real effective exchange rate would reduce private investment by 0.1060.

Furthermore, the first difference of the first lag of FD has a positive influence on PINV in Ghana in the short-run at ($\beta = 0.0073$; Sig = 10%). Whereas the first difference, the second lag of financial development has no significant effect on private investment in Ghana in the short-run.

Finally, the difference in the first and second lags of the inflation rate has no significant impact on private investment in Ghana. Thus, the immediate and previous quarter's inflation rate are insignificant to employment and private investment in Ghana.

The outcomes also exhibited the anticipated negative sign of correction error term lagged by one period (ECT_{t-1}). It is also very significant at a 1% level. Hence, the endorsement of the presence of the cointegration relationship within the variables used in the model. This ECT opinion on the rate of adjustment to reinstate firmness in the dynamic model following a variation - 0.7380 is the ECT coefficient indicating that the significant ECT submits that a deviation from the long-run equilibrium succeeding to a short-run shock is rectified by about 73.80% at the close of each quarter within a year. The rules state that the higher the ECT in absolute terms, the quicker the variables stabilize in the long-run when shocked.

H_0 : There is no causality between trade openness and private investment in Ghana.

Table 8: Pairwise Granger causality tests

Null Hypothesis:	Obs	F-Statistic	Prob.
SMD does not Granger Cause PINV	108	0.21	0.96
ER Granger Cause TO		0.80	0.04**

Source: Field Survey, (2021)

From Table 8, this study rejected the null hypothesis that there is no causality between trade openness and private investment in Ghana. Meaning, private investment does cause trade openness, but trade openness does not cause private investment. Thus, the study accepted the notion that private investment is a good predictor of trade openness, but trade openness has no effect on the private. Tapa et al. (2016) support this result because in their study they concluded that there is a uncausality running from private investment to trade openness. Intuitively, when private investment increases in a country, they can come together and fight for policies that can help reduce trade restrictions in the country. This government is likely to comply because every government wants to keep existing investment in their country in order to boost economic growth.

Model Diagnostics

To establish that the ARDL model is correct, diagnostics including functional form, serial correlation, normality, structural stability, and heteroskedasticity of the model were tested. As shown in Table 8, the model is passing all diagnostic assessments in the first stage. From the diagnosis, there is no autocorrelation and the model again passed the normality test, demonstrating that the error is normally spread. Furthermore, the model met

the white test for heteroskedasticity as well as the RESET test for correct specification based on the probability values in parentheses. Below are the details.

Table 9- Diagnostics for relationship between trade openness and private investment in Ghana

Residual Test	F-statistic	P- value	
Serial Correlation LM (Breush– Godfrey)	0.4477	0.8137	
Heteroskedasticity	1.1485	0.3255	
Reliability Test			
Ramsey RESET	3.0130	0.0548	
R-squared	0.7581	Mean dependent var	-0.0579
Adjusted R-squared	0.7243	S.D. dependent var	0.1244
S.E. of regression	0.0653	Akaike info criterion	-2.4973
Sum squared resid	0.3669	Schwarz criterion	-2.1565
Log likelihood	136.6158	Hannan-Quinn criter.	-2.3594
F-statistic	22.4593	Durbin-Watson stat	1.6941
Prob(F-statistic)	0.0000		

Source: Field Survey, (2021)

- The P- value of the F- statistic of the serial correlation test is 0.8137 which is greater than 0.05. Thus, the study failed to reject null hypotheis of no serial correlation. This mean the model is reliable.
- The P- value of the F- statistic of heteroscedasticity test is 0.3255 which more than 0.05. Hence, this study failed to reject the hypothesis that no heteroscedasticity. This mean the model is reliable.

- The p- value of the F-statistic of Ramsey reset test is 0.0548 which more than 0.05. This failed to reject the null hypothesis of “the restricted model is correctly specified”. This mean the model is reliable
- The Durbin – Watson stat value is 1.6941 which is close to 2. Therefore, the is absence of autocorrelation.

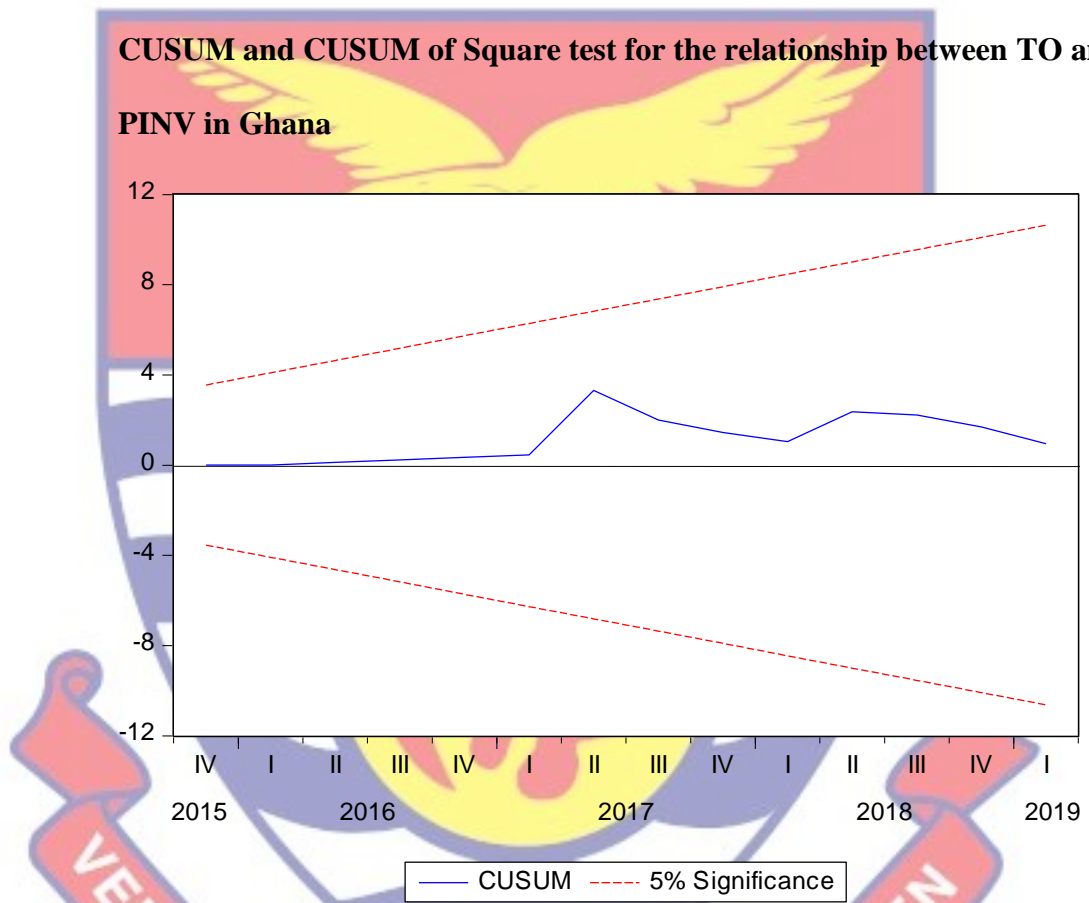


Figure 2: CUSUM test
Source: Field Survey, (2021)

It can also be observed from figure 2 that the plot of the CUSUM stays with the critical bounds at 5 percent significance. This confirms the long-term relationship between TO and PINV in Ghana.

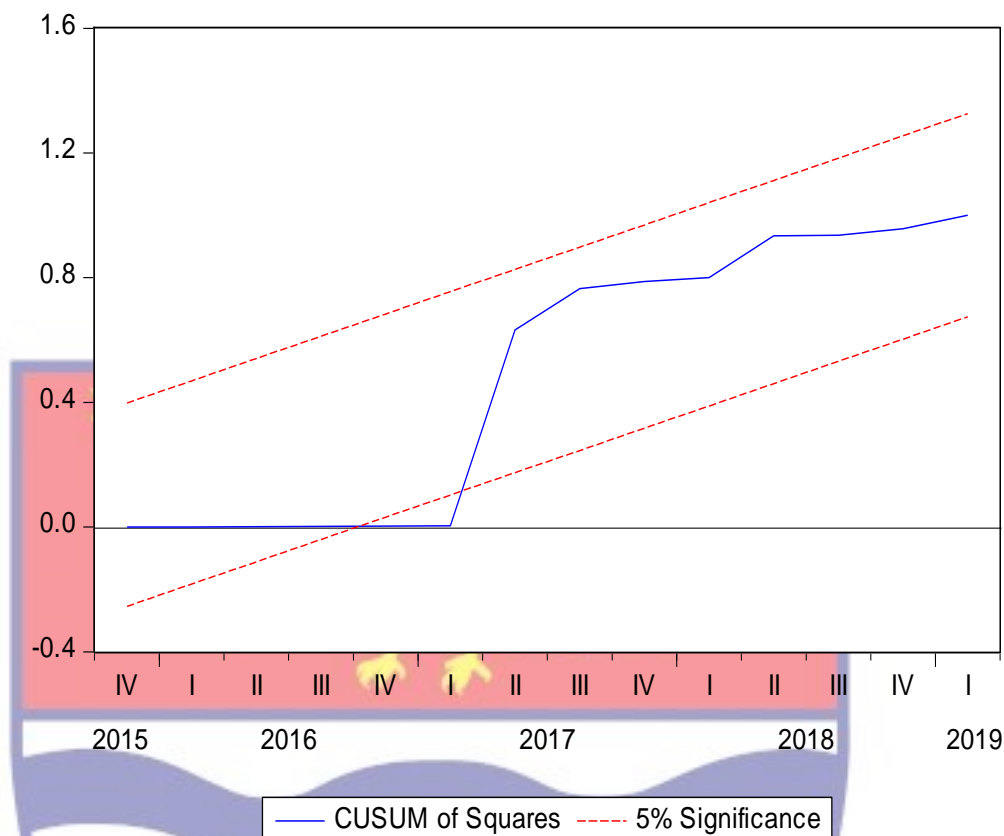


Figure 3: CUSUM of Square test
Source: Field Survey, (2021)

It can again be seen from figure 2 that most of the plot of the CUSUM of the square test stays within the critical bounds at 5 percent significance. Even though there is some level of instability, the model is more stable.

Chapter Summary

In light of the purpose of the study, to examine the relationship between trade openness and private investment in Ghana, This study addresses three specific objectives. It began with the first goal of determining the long-term relationship between trade openness and private sector participation in Ghana. Based on the ARDL bound test, the study rejected the hypothesis that there is no significant long-run relationship between trade openness and private in Ghana (see table 6). Also, the coefficient test for the short-run relationship indicated a significant positive relationship between trade

openness and private investment in Ghana (see table 7). And the study indicates a causality between trade openness and private investment in Ghana (see table 8). The study passed all the diagnostics requirements by the bound test ARDL (see table 9, figures 2 and 3).



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introductions

This presents the final chapter of the work. It contains the major outcomes after running the analysis based on the specific objectives. The chapter also presents a summary of conclusions and recommendations, as well as suggestions for further research.

Summary of the Study

For countries like Ghana, private investment has become necessary because the public sectors have failed over the years to address economic issues such as unemployment and poverty (World Bank, 2017). Thus, it has become relevant for the government of Ghana to adopt a strategy that would encourage private investment because, according to Mohsen (2015), the one way the government can encourage private investment is through trade openness.

Many studies have been conducted around private investment in Ghana (Sakyi, Boachie & Immurana, 2016; Obeng, Akoto & Acquah, 2015). However, none of them has established a trade openness-private investment nexus. For instance, Sakyi et al. (2016) asked the question, "Does financial development influence private investment in Ghana?" while Obeng et al. (2015) analysed globalization, democracy and private investment in Ghana. The studies that can be closely associated with this study are the trade openness-foreign direct investment nexus in Ghana. Yet, private investment is broader than foreign direct investment because it includes domestic

investment. Therefore, this study seeks to examine the trade openness-private investment nexus in Ghana.

Location advantage theory was employed because it indicates that an investor would consider investing in a country when certain factors such as trade openness is in his interest (Dohse, Hassink & Klaerding, 2012). If the business environment in a country is friendly (meaning, less restrictions and taxes) than investors are encouraged to set up private business (Nutassey, 2019). Also, from the literature review, it can be seen that none of the studies above has revealed the exclusive nature of Ghanaians' trade openness and private investment. Thus, this study would help to come out with the needed policy that would help the private investment in Ghana.

The study adopted ARDL Bound testing cointegration (Pesaran, Shin & Smith, 2001) technique because the data size is small and also based on literature the study suspected that for the unit root test, some of the variables adopted will be stationary at level while others will be stationary at 1st difference.

Summary of Findings

With reference to the main purpose of this study, indicating that trade openness predicts private investment in Ghana, specifically, the study sought to: analyse the long-run correlation between trade openness and private investment in Ghana; examine the short-run relationship between trade openness and private investment in Ghana; and assess the causality between trade openness and private investment in Ghana.

To analyse the long run correlation between trade openness and private investment in Ghana

The first objective analyzed the long-run correlation between trade openness and private investment in Ghana with the hypothesis that there is no significant association between long-run trade openness and private investment in Ghana. Based on the ARDL bound test, the study rejected the hypothesis that there is no significant long-run relationship between trade openness and Ghana's private investment (see table 6). This implies that there is a strong link between trade openness and private investment in Ghana. This was achieved after employing the ARDL technique.

To examine the short run relationship between TO and PINV in Ghana

Likewise, the second objective examined the short-run relationship between trade openness and private investment in Ghana. Similarly, the coefficient test for short-run relationships rejected the hypothesis that there is no significant short-run correlation between trade opening and private in Ghana (see table 7). Hence, there is a significant relationship between the coefficient of trade openness and private investment in Ghana. This was likewise achieved by ARDL techniques.

Assess causality between trade openness and private investment in Ghana.

Finally, the study assessed the causality between trade openness and private investment in Ghana. It rejected the hypothesis that there was no significant causality between trade openness and private investment in Ghana. Therefore, there is a causality from private investment to trade openness in Ghana (see table 8).

Conclusions

Based on the findings, the study concluded that trade openness has both long-run and short-run correlations with private investment as well as bi-causes between trade openness and private investment in Ghana. Below are the precise conclusions.

- In Ghana trade openness predict private investment in the long run.
- In Ghana trade openness predict private investment in the short run.
- In Ghana causality run from private investment to trade openness.

Recommendations

Guided by the findings from the study, the subsequent recommendations were put forward to help enhance trade openness so that it would translate into more and better private investment in Ghana. Ghana's policies should be directed towards strengthening trade openness in order to increase private investment in Ghana. Particularly

- The government of Ghana should ease commencement and running of business requirement and procedure.
- The government of Ghana should reduce taxes in order to encourage investment.
- The government of Ghana should make labour laws that favour investors.
- The government of Ghana should reduce duties on import and export in order to encourage trade.

Suggestions for Further Research

Other study can consider into details the relationship between private investment and trade openness in Ghana. This suggestion is based on the results in this study indicating causality running from private investment to trade openness.



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