DONOR AID AND THE FINANCIAL PERFORMANCE OF RURAL AND COMMUNITY BANKS IN GHANA

BY

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AUGUST, 2019
DECLARATION

I do hereby declare that this work is the result of my own research and has not been presented by anyone for any academic award in this or any other university. All references used in the work have been fully acknowledged.

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CERTIFICATION

I hereby certify that this long essay was supervised in accordance with procedures laid down by the University.

Signature: ........................................ Date: ........................................

Dr. Vera Fiador
(Supervisor)
ABSTRACT

Rural and Community Banks (RCBs) in Ghana play a very important role in the financial intermediation agenda for the rural populace in Ghana. The concept of donor aid has been identified as a key sustainable approach to ending poverty in Africa through the injection of funds and the provision of technical support for the thriving of rural activities such as farming and fishing. An understanding of factors that improve the financial performance of RCBs is important for the achievement of the goal of poverty alleviation. This study therefore discusses the two anti-poverty tools mentioned above by measuring the impact that donor aid has on the financial performance of RCBs in Ghana.

The main objective of the study is to ascertain the impact of donor aid on financial performance of RCBs in Ghana and to make recommendations for policy making. A panel data of 122 RCBs in Ghana was analysed from 2007 to 2018 using a generalised least squares technique to estimate random effect regression models. The dependent variable of financial performance, represented by Return on Asset (ROA) and Return on Equity (ROE), as well as inflation, exchange rate (macroeconomic factors), donor aid, bank capital, bank size and liquidity were incorporated into the regression model.

The result suggests that donor aid has a positive, but not a very, significant impact on the financial performance of RCBs in Ghana. It finds evidence to establish that bank capital and bank size have a positive significant impact on financial performance, whereas liquidity has an inverse relationship on financial performance of RCBs.
DEDICATION

I dedicate this long essay to the memory of my late father, Henry O’brien Otchey, who meant so much to me and taught me the value hard work in life; and to my awesome mother, Emma Araba Gand, for her selflessness.
ACKNOWLEDGEMENTS

I am most grateful to the Almighty God for His guidance and presence throughout the study of this course.

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To Naamwindiwgn Bapouhyele and Gabriel Teye- Ali Nomotsu, thank you for your help in editing my errors and providing tremendous assistance.

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2.10.2 Two gap model .................................................................................................................. 19
2.11 Empirical Review .................................................................................................................... 21
  2.11.1 The Determinants of Donor Aid to RCBs................................................................. 21
  2.11.2 The Relationship between Donor Aid and the Performance of RCBs...................... 22
2.12 Conceptual framework ....................................................................................................... 25

CHAPTER THREE .................................................................................................................... 27
  3.1 Introduction ......................................................................................................................... 27
  3.2 Research Design .................................................................................................................. 27
  3.3 Data Source, Study Population and Sample ...................................................................... 28
  3.4 Description of the Variables ............................................................................................. 28
    3.4.1 Dependent Variables ................................................................................................. 28
    3.4.2 Independent Variables ............................................................................................... 29
  3.5 Model Specification .......................................................................................................... 29
    3.5.1 Financial Performance of RCB (ROA/ROE) ......................................................... 30
    3.5.2 Bank Capital (CAP) ................................................................................................. 30
    3.5.3 Bank Size (BS) ......................................................................................................... 31
    3.5.4 Liquidity (LQ) .......................................................................................................... 31
    3.5.5 Donor Aid (DA) ........................................................................................................ 31
    3.5.6 Inflation (INF) .......................................................................................................... 31
    3.5.7 Exchange Rate (EXC) ............................................................................................ 32
    3.5.8 Error Term for bank i at time t (Ɛit) ..................................................................... 32
  3.6 Estimation Technique ......................................................................................................... 32
  3.7 Ethical Considerations ....................................................................................................... 32

CHAPTER FOUR ....................................................................................................................... 33
  4.1 Introduction ......................................................................................................................... 33
  4.2 Descriptive Statistics ......................................................................................................... 33
  4.3 Correlation Analysis .......................................................................................................... 36
  4.4 Panel Regression Results ................................................................................................. 38
    4.4.1 Hausman Test .......................................................................................................... 40
  4.5 Chapter Summary .............................................................................................................. 43

CHAPTER FIVE ........................................................................................................................ 44
5.1 Introduction .................................................................................................................... 44
5.2 Summary of Findings ..................................................................................................... 44
5.3 Conclusion ...................................................................................................................... 46
5.4 Recommendations .......................................................................................................... 46
REFERENCES ............................................................................................................................ 48
LIST OF TABLES

Table 2. 1 The Trend of Financial Performance of RCBs in Ghana (2013-2018) ....................... 13

Table 4. 1 Summary of Descriptive Statistics ........................................................................ 34

Table 4. 2 Correlation between ROA & ROE and Dependents Variables ............................. 37

Table 4. 3 Choosing the Appropriate Regression .................................................................... 39

Table 4. 4 Random Effect GLS Regression .......................................................................... 40

Table 4. 5 Summary Table .................................................................................................... 42
LIST OF FIGURES

Figure 2. 1 The Relationship between Dependant and Independent Variables ............................ 25
Figure 4. 1 Trend of Donor Aid to RCBs ..................................................................................... 35
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Agricultural Developmental Bank</td>
</tr>
<tr>
<td>BHC</td>
<td>Bank for Housing and Construction</td>
</tr>
<tr>
<td>CBRDP</td>
<td>Community Based Rural Development Project</td>
</tr>
<tr>
<td>DANIDA</td>
<td>Danish International Development Agency</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>FINSAP</td>
<td>Financial Sector Adjustment Programme</td>
</tr>
<tr>
<td>GAB</td>
<td>Ghana Association of Bankers</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHS</td>
<td>Ghana Cedi</td>
</tr>
<tr>
<td>GSS</td>
<td>Ghana Statistical Service</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>MASLOC</td>
<td>Microfinance and Small Loans Centre</td>
</tr>
<tr>
<td>MiDA</td>
<td>Millennium Development Authority</td>
</tr>
<tr>
<td>NIB</td>
<td>National Investment Bank</td>
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<tr>
<td>RCBs</td>
<td>Rural and Community Banks</td>
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<tr>
<td>ROA</td>
<td>Return on Assets</td>
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<td>ROE</td>
<td>Return on Equity</td>
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<tr>
<td>USD</td>
<td>United States Dollar</td>
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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The goal of all developing countries, with focus on Sub-Saharan African countries, is to enjoy consistent economic and political growth as an end to poverty in the sub-region. In the case of Ghana, over the last three decades, there have been various approaches to achieving this developmental goal. They include the Economic Recovery Programme, the Structural Adjustment Programme, Vision 2020, the Highly Indebted Poor Country Initiative and currently the Poverty Reduction Strategy. These strategies, either technical or financial, are deemed to have had a positive effect on Ghana and have emerged as a way to strengthen poor communities which is key to accelerating the poverty reduction motion.

There is an ongoing discussion on the concept of ‘financial inclusion’. It is believed that the expansion of financial services will ultimately result in financial inclusion of the populace; a key indicator of economic growth. As per the definition by Diniz, Birochi and Pozzebon (2012), financial inclusion is “the making of formal financial services accessible and affordable to all individuals, especially those with low incomes”. The offering of such financial and notably non-financial services to the deprived has been conceptualized as microfinance. In Ghana, the government, as well as other stakeholders including development partners, has deepened efforts to support this concept through the institutionalization of projects and the provision of an enabling framework. These include the setup of the ARB Apex Bank, the Microfinance and Small Loans Centre (MASLOC) and the Microfinance Unit of the Ministry of Finance.
Up until the year 2010, the rural populace were the majority residents in Ghana owing to the 2010 population and housing census which indicates that Ghana’s statistics on geographical location and population has 50.9% dwelling in urban areas (Ghana Statistical Service, 2014). Yet the fact that rural dwellers equally make up a large portion of the population cannot be overlooked. The idea of rural banks has therefore been established to serve the rural segment of the population that has been excluded from gaining access to formal financial services.

Rural banking came into existence with the objective of mobilizing savings and reducing the financial distress of small and medium scale entrepreneurs and farmers. It was envisaged that rural banks would manage credit, provide auxiliary financial services and provide agricultural credit (Shekhar and Shekhar, 2007). Essentially, rural banks have been the principal avenue for encouraging the concept of financial inclusion in Ghana. By achieving the objective of their establishment, Rural and Community Banks (RCBs) have been greatly recognized for local financial intermediation.

The thriving of the rural banking system in Ghana has been made possible by some institutions; they include the Bank of Ghana (BOG), the ARB Apex Bank, the World Bank, the International Fund for Agricultural Development (IFAD) and the Danish International Development Agency (DANIDA). Apart from the ARB Apex Bank and the BOG, which are regulatory bodies with oversight responsibilities over RCBs in Ghana, the rest are classified as donor agencies for development.
1.2 Problem Statement

Ghana’s financial sector has a number of multilateral and bilateral players. Their support has been in the form of grants to the government. The aim of such grants is to make funds available to the poor by building the human resource and technical capacities of microfinance institutions in Ghana. Donors have directly and indirectly supported the efficiency of rural banks as per assessments made by Boadi (2015) and Anyieni (2014) in their articles on the effects of foreign aid on the performance of rural banks in Ghana and Kenya respectively.

There has been some criticism for the assertion that the financial performance of RCBs are positively impacted by donor aid due to the assumed adverse effects of donor aid on the operations of the rural banks. In a paper by Yaron (1994) on ‘Successful Rural Finance Institutions’, he attributes the failures of rural finance institutions mainly to the heavy reliance on donor aid and governments for funding. He further explained that due to the high dependence of RCBs on funding from donor agencies, there has been a high occurrence of a low innovation drive for self-mobilization of deposits, thus resulting in poor collections required to offset their loan portfolios in recent times. Yaron (1994) also noted that rural finance institutions lack commercial motives, as their funding sources are largely donor provided. In view of this, their processes suffer from inadequate credit evaluation, management and monitoring and an unavoidable poor loan collection. Donor support could weaken financial discipline of banks, as the dependence on donor funds rather than deposit mobilization limits competition and innovation in their operations which could eventually constrain growth and sustainability.
These diverse opinions on the subject have inspired the research into donor support and the financial performance of RCBs in Ghana to further ascertain whether there is actually any relationship between the two, either directly or indirectly.

1.3 Research Objectives

The specific objective of the study is to:

1. Determine the trend of donor aid to Rural and Community Banks in Ghana

1.4 Research Questions

The study seeks to provide answers to the following questions:

1. What has been the nature of donor support to Rural and Community Banks in Ghana over the last decade?
2. Has the effect of the above been positive to the banks’ financial performance or otherwise?

1.5 Significance of the Study

There have been a lot of policies and interventions to ensure that the objective to alleviate or rather reduce poverty is achieved, such as the establishment of rural banks, agents of rural development, which have been operational in Ghana for over forty (40) years.
The relevance of this study lies in its contribution to theory and practice. To theory, the study will add up to the many empirical references for future research to follow and apply. Its findings will also stimulate further studies to fill any existing gaps related to the study area.

Various development partners have contributed significantly to different sectors of the economy. Considering that poverty alleviation and the reduction of the inequality gap has been an agenda for most donor agencies, it is important to ascertain their impact on the financial performance of RCBs which form the bedrock of financial inclusion of the most vulnerable and poor communities in Ghana. It is therefore necessary to undertake this research, as it has been suggested that donors can play an important role in the growth of a strong rural financial sector in Ghana. The findings would support the Government of Ghana’s development agenda for accelerated growth, improvement of the agricultural sector and reduction in poverty levels under the broad development framework of the country.

1.6 Scope and Limitation of the Study

The research covers a twelve-year period spanning from 2007 to 2018, where the overall financial performance of the RCBs is based mainly on donor aid and other microeconomic and macroeconomic variables. Within the said period, there has been receipt of substantive donor aid into the rural banking sector and a consequent boom in the financial sector. The choice of the study period is also dependent on data availability for most of the variables used in the study.

This data is limited to the information supplied by the ARB Apex Bank Limited which is the supervisory body for all RCBs in Ghana. The data will therefore be susceptible to any limitation in the ARB Apex Bank database.
1.7 **Organisation of the Study**

This study is outlined in five main chapters, with each chapter comprising appropriate subsections; it is organized as follows.

Chapter One is the introductory chapter of this research work. It will consist of the background, problem statement, objectives and significance of the study.

Chapter Two considers available theoretical and empirical literature on donor aid, rural banking and their funding in Ghana. This will lead to the formulation for an appropriate model for analysis.

Chapter Three outlines the methodology used in collecting and analysing data for the study, including the research approach and design, research population and sample, data collection instruments and procedures, methods for ensuring reliability and validity, data analysis techniques and ethical considerations.

Chapter Four focuses on the analysis and interpretation of the collected data, as well as the discussions of the findings of the research.

Chapter Five provides a summary, as well as conclusions and recommendations, based on the findings of the study.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews related works on foreign aid to RCBs and their subsequent financial performance, with particular emphasis on the Ghanaian economy. In order to achieve the objectives of the study by addressing the questions raised, this chapter is discussed under four sub-topics; definition of terms and concepts, theoretical framework, empirical review and conceptual framework.

2.2 Definition of Terms and Concepts

Performance can also be defined as the effectiveness and efficiency of an organisation in achieving its targeted goals and the extent to which it is able to meet the requirements of customers (Durden, 2019). It involves cost reduction and revenue enhancement through non-conventional means such as innovations. To Cho and Dansereau (2010), performance is the output of an organisation in relation to its intended objectives or goals. Tomal and Jones (2015) also define performance as the output achieved due to the tools or mechanisms put in place to enhance the productivity of employees.

The current study, however, focuses on financial performance, which measures an organisation’s output in monetary terms. Tomal and Jones (2015) further explain that financial performance translates into an organization’s return on assets or return on equity. Other indicators in the case of banks are cost of funds, net interest margin, efficiency ratio, loans-to-deposit ratio, and the like.
According to Yaron (1994), there are two key indicators used in measuring the performance of rural banks, namely; self-sustainability and the extent of reach of their operations. In his write-up, he stated that profit figures are quite a limiting measure of performance for rural finance institutions. He defined self-sustainability as the absence of dependence on subsidy or aid, where the progress of rural finance institutions is made by their ability to greatly reduce their dependence on aid and subsidy and to consequently support their operations by themselves. The author’s second measure of rural performance is by outreach; in terms of services offered, intended outcomes and clientele served (quality and quantity).

Kuma (2018), in his article titled ‘the Meaning of Foreign Aid’, defined donor aid as the reallocation of resources by means of transfer from one country to another to improve the recipient country’s economic situation. He explained that the transfer could include the flow of capital, usually via a loan or a grant, to developing countries to assist in mitigating their economic challenges. Donor aid refers to the external assistance or support an international donor or country offers to other countries to improve their standards of living. Development assistance is expanded to include analysis, advice, technical support and capacity-building. Donor aid may come in various forms and dynamics which have been identified by Agarwal (2019) to include bilateral aid, multilateral aid, tied aid, project aid, military aid and voluntary aid.

2.3 Overview of the Banking Sector in Ghana

The banking system in Ghana is said to have been in existence since the late nineteenth century. Commercial banks such as the British Bank of West Africa and Barclays Bank DCO (known presently as Standard Chartered Bank and Barclays Bank Ghana Ltd, respectively), in 1917, existed mainly to provide funding to support trade between the United Kingdom and the Gold

University of Ghana http://ugspace.ug.edu.gh
Coast (now Ghana). Therefore, they did not have the financial needs of the indigenous Ghanaians at heart (Aning, 2000). Upon recommendations, the colonial government established the Bank of Gold Coast, which began operations in 1953. With the passage of time, expert banks were created such as the National Investment Bank (NIB), Agricultural Credit and Bank for Housing and Construction (BHC). The objectives of these banks were industry specific. They were established to meet the financial needs of the specialized sectors within the economy and to promote their developmental needs.

The banking sector has witnessed a number of reforms which were motivated by extensive governmental intervention. These reforms include the liberalization of allocation controls of banks, the shake-up of the sector through the restructuring of distressed banks and the reform in prudential regulation and supervision. As a result, Ghana initiated the Financial Sector Adjustment Programme (FINSAP) to save the banks from the supervision and regulation of government and become a free market-based system. As the banking industry exists, so does challenges in the forms of risks that affect their operations. Based on these perceived challenges, the BOG put in place measures to ensure that information security policies are firm and best practices are adopted to protect the integrity of the operations of the banking sector (Bank of Ghana, 2019).

The total number of commercial banks in Ghana as at February 2019 is twenty-three (23); comprising of thirteen (13) foreign banks and ten (10) indigenous banks. The objectives of these banks are to provide universal banking services to the people of Ghana.
2.4 Contribution of the RCBs in Ghana

The rural banking system has been pivotal in the banking sector of Ghana. The sector controls a significant portion of total domestic deposits.

Their financial intermediation role ensures that they mobilise funds and lend to the rural dwellers for their various economic activities. The returns earned from their activities are sometimes used in building the community within which they operate. By so doing, they contribute significantly to the socio-economic development of their catchment areas.

It is in view of this that there has been a laudable increase in the establishment of more rural banks all over the country as their contributions impact positively on society. The state of the rural sector is crucial to the overall development of Ghana, which is why it is crucial to empower them for an eventual reduction in poverty. The author emphasizes that, rural banks serve as a bridge to the once existing disparity between the formal banks and the informal financial system.

2.5 Overview of Rural Banking in Ghana

Rural banking started operating in Ghana in 1976 to assist rural populations with loans to improve their small-scale businesses and support developmental projects. In establishing rural banks, the government implemented some policies to enable financially strained rural folks such as fishermen and farmers get access to financial support in the rural area. These policies included a prerequisite that commercial banks should lend a minimum of 20% of their portfolio for agricultural uses. These policies led to the establishment of the Agricultural Developmental Bank (ADB) in 1965 and mandated to lend to agriculture and allied industries in the rural areas (Bank of Ghana, 2019). Prior to the ADB’s establishment, commercial banks did not find it attractive to extend financial
services to the rural dwellers who were mostly farmers or fishermen; thus, the rural folks were ultimately sidelined by location.

Various attempts made to encourage these commercial banks to extend their coverage to the rural areas especially through the provision of credit facilities to the farmers in the food and cash crop cultivation business failed to result in the desired impact. These banks rather had other profit-making interests comprising large ticket transactions relating to the financing of international trade, commerce and industry. This presented a gap in the provision of a well-structured means of finance to the rural areas, especially in the field of the agriculture. As a result of the failure of commercial banks to lend on a substantial scale to the rural sector, that sector was left out in the developmental agenda. The neglect of the rural sector was due to their inability to provide any collateral for commercial banks to rely on. Upon the realization that the existing structure did not support rural development, there was a need to come up with an institutionalized credit framework to bridge the aforementioned gaps created by the existing banking institutions. The set-out framework was structured to possess some advantages of the non-institutional credit organizations, hence the emergence of Rural Banking in Ghana (ARB Apex Bank, 2011).

Rural banks exist with the objective of mobilizing savings and alleviating the financial distresses of small and medium scale entrepreneurs and farmers. They are envisaged to manage credit, provide auxiliary financial services, and provide input and agricultural credit (Shekhar and Shekhar, 2007). Rural banks were established mainly to stimulate the banking habit among rural inhabitants, mobilize resources in the rural areas to improve the standard of living among the dwellers and invest in competent industries to facilitate development. Essentially, Rural Banks have been the principal avenue for promoting financial inclusion in Ghana. By achieving the
objectives of their establishment, RCBs have been very pivotal in local financial intermediation (ARB Apex Bank, 2010).

As at the end of 2018, the ARB Apex Bank had a network of one hundred and forty-four (144) Independent RCBs with about seven hundred (700) branches spread throughout the country to provide financial services to rural inhabitants. (www.arbapexbank.com).

2.6 Sources of Income for RCBs in Ghana

A cursory glance at the financial reports of RCBs in Ghana shows that the banks’ source of income is primarily from interest income on loans and investments in government securities such as treasury bills.

Other sources included commissions and fees earned on local and foreign remittances, charges on services, rural finance and aid from donor support projects.

2.7 Financial Performance of RCBs in Ghana

RCBs are expanding rapidly in recent years. In an article by Nair and Fissha (2010), they stated that in Ghana, the rural banking segment of the large banking sector has in its embrace an estimated number of two million and eight hundred thousand (2.8 m) depositors and over six hundred and eighty thousand (680,000) borrowers, making these rural banks the largest group of licensed financial service providers in rural areas since the year 2008. RCBs had a substantial market share of 67% of depositors and 48% of borrowers in rural areas.
Over the last decade the depositors have grown in number at an annual average rate of 21%, along with an annual average growth of 33% for borrowers; and this trend is expected to continue in the coming years. (ARB Apex Bank, 2018).

Rural banks’ performance has been mixed in recent years. Nair and Fissha (2010) report that the profit margins and net worth of the rural banking sector have steadily increased from the year 2000 to 2008. They stated that capital required across the sector is well above the minimum 10% required by the BOG. Most recent financial reports from the Efficient Monetary Unit (EMU) of ARB Apex Bank Limited as at December 2018 reveal that 72.22% of the total number of one hundred and forty-four (144) RCBs had met the capital adequacy ratio by an average of 17%.

Table 2.1 The Trend of Financial Performance of RCBs in Ghana (2013-2018)

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<tr>
<td>Total Assets</td>
<td>15.7%</td>
<td>20.3%</td>
<td>19.4%</td>
<td>18.5%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Total Advances</td>
<td>12.5%</td>
<td>11.5%</td>
<td>13.8%</td>
<td>17.1%</td>
<td>13.4%</td>
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<tr>
<td>Total Investment</td>
<td>51.1%</td>
<td>38.2%</td>
<td>27.2%</td>
<td>14.1%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Total Deposits</td>
<td>37.1%</td>
<td>22.1%</td>
<td>19.7%</td>
<td>19.6%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Profit Before Tax</td>
<td>-8.1%</td>
<td>10.2%</td>
<td>36.0%</td>
<td>3.9%</td>
<td>-18.9%</td>
</tr>
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</table>

Source: EMU of ARB Apex Bank Limited as at December 2018

The above shows a steady and satisfactory performance of the rural banks over the last five (5) years. However, a decrease in performance in the last year has been attributed to the recent banking crisis in the sector, per reports from the EMU, and has therefore been described as peculiar.
This does not, however, depict a wholly vibrant rural banking system, as further details from the financial report of the EMU of ARB Apex Bank Limited suggests that the performance of some of these rural banks has being very poor over the past years. For instance, four (4) RCBs were classified as being distressed as at December 2018; this performance analysis was based on the quality of asset, capital adequacy, annual earnings and liquidity status of the RCBs. These banks require ‘a more than normal supervision as they have immoderate weakness and a high risk of failure in the near future’ as provided by the EMU, ARB Apex Bank Limited; they include Denkyiraman Rural Bank Limited, North Birim Rural Bank Limited, Fanteakwa Rural Bank Limited and Lower Amenfi Rural Bank Limited (ARB Apex Bank, 2018). This depicts a missing gap in the performance of RCBs in the country requiring further probing.

2.8 The Trend of Donor Aid to RCBs

In an article by Bayer (2004) entitled “The World Bank’s Contribution to Financial Stability”, the author places great interest on the contributions of the World Bank towards the economic development of its member states. The World Bank’s mission is to provide economic and social development to many developing nations for an eventual reduction in poverty by providing an enabling environment for investments, employments and sustainable growth.

The World Bank Group has so far provided funds summing up to over USD 24 billion for annual insurance, loans and grants and more than USD 130 billion in an outstanding portfolio in monetary development assistance and improvement of the banking sector, capital markets, insurance as well as rural and SME finance.
Statistics show that as at 2017, foreign aid issued out to rural banks stood at $146.6 billion as compared to 2016 where the figure declined by 0.6% (Organisation for Economic Co-operation and Development, 2018). Apart from other countries benefiting from foreign aid, Ghana seems to be one of the less developed countries that had received about 3% of foreign aid from donors. In 2016, Ghana received $2.9 billion foreign aid which was used to strengthen the economy. According to Abubakar (2018), most of the funds approved by the donors are meant to help the government come up with reforms to promote financial inclusion and to have an enhanced system for the supervision and regulation of banks and other financial institutions.

According to the Organisation for Economic Co-operation and Development (2018), there has been an increase in the demand for foreign aid based on the activities of RCBs and as a result the sector has received substantial funds and other forms of aid. The areas of concentration as well as the volume and type of aid are explained by the current economic and political agenda of these donor nations and agencies.

Nair and Fissha (2010) analyze the performance of RCBs and identify key issues of concern in their article entitled “Rural Banking: the case of RCBs in Ghana”. They state that by recognizing the continued relevance of rural banks as rural finance service providers, the Government of Ghana in partnership with several donors has consistently provided support to the RCBs by financing capacity building restructuring programs, and undertaking regulatory reforms.

2.9 Nature of Donor Support to RCBs

Capital formation has been recognized as one of the problems hindering the growth of the economy. Evidence has shown that developing countries face challenges in investing in large assets to foster their development (Kabete, 2008). Based on this challenge, economists believe that
Development assistance is essential for restructuring capital since the less developed countries lack private and public savings to finance large investments (Boadi, 2015).

Foreign aid is therefore needed to increase the investment base and contribute to the total growth of the economy. The main objective of foreign aid is to help eradicate poverty, improve the economy, investments and public expenditure in services. In Ghana, technical assistance and emergency aid are also aid opportunities that are made available for rural banks to thrive. Technical assistance is one of the crucial types of foreign aid often made available for rural banks, which consists of an exchange of skills, knowledge and advice to enhance the operation of the rural banks (Nair and Fissha, 2010). In this situation, skilled personnel from developed countries are given the opportunity to train and develop the skills of employees within the rural banks in order to meet their objectives.

Emergency aid is also one of the essential forms of aid released to rural banks to foster development in rural areas. Since RCBs provide financial assistance to farmers and other local traders in rural areas, challenges such as natural diseases and man-made crises might affect their standards of living (Nair and Fissha, 2010). Therefore, rural banks depend on emergency aid to assist farmers and local traders improve their businesses as well as their welfare.

In their article entitled “The Role and Effectiveness of Development Assistance: Lessons from World Bank Experience”, Goldin, Rogers, and Stern, (2002) examine the Role and Effectiveness of Development Assistance. They describe development assistance to encompass both financial and non-financial instruments that are operationalised to support the beneficiary country’s efforts and actions to accelerate growth and reduce poverty. From their perspective, finance is one of the options or instruments used to support the developmental agenda and, in some situations, it is not
even the most useful one. Thus, development assistance is expanded to include analysis, advice, and capacity-building.

This work is significant to the current research as it shares views on what constitutes external support or development assistance including donor support, which is the thrust of this research.

By tracing the significance and development of microfinance in Southern Africa, Reinke (1999) states in his article – “Cooperation or Competition? Institutional Development of Microfinance in Southern Africa” – that RCBs account for almost all microfinance supplies in Ghana and thus symbolize a special feature in the country’s financial landscape. He describes RCBs as privately owned and for-profit, and licensed and supervised under the Banking Act, with developmental objectives. The author again observed that the Commercial Bank of Zimbabwe operates its microfinance through its Community Banking Unit which partners with the Department for International Development (DFID) and Care International. While DFID provides financial assistance on one hand, Care International provides for technical assistance on the other hand. And because DFID substantially subsidizes the unit’s operational costs, the bank is able to meet most of the costs of credit extension. The Community Banking also enjoys a donor-financed 80% cash guarantee cover for new clients under the community banking scheme, covering about 40% of their Community Banking portfolio thereby giving them an advantageous position over other banks.
2.10 Theoretical Framework

Several theories have been conducted to explain the effect of donor aid on the performance of rural and community banks. However, this study draws its basis on two developmental theories of nations; the dependency theory and the two-gap model.

Developmental theories are said to influence the way society approaches and handles growth economically. Development, as defined by Matunhu (2011), is ‘a gradual transition of society to a strong economic status’.

2.10.1 Dependency Theory

Dependency theory is a concept developed by Hans Singer and Raul Prebisch in 1970. The theory focuses on the extent to which resources flow from developing countries to developed countries (Sánchez, 2003). It explains how developed countries depend on the poor to make wealth and vice versa. Nienhuser (2008), in his article on Resource Dependence theory, explains that due to the power distribution in the international system poor states suffer and dwell in poverty while the rich ones maximise their wealth. Dependency implies a situation in which one nation counts entirely or partly on another for aid, support, “survival” and growth.

Matunhu (2011) explains this existing relationship, as per the dependence theory, as being less beneficial to developing nations. He further explains that the theory connotes that the developed nations act as a state of dependence in terms of media, sports, politics, entertainment, health, finance, education, culture and other human resource development initiatives, whereas poor nations are mandated to provide resources such as cheap labour, technology and market to the developed nations to the extent that they are robbed of the opportunity to improve their standard of living.
Dependency, as created from the developmental theory, is ‘the notion that resources flow from periphery of poor and underdeveloped states to a core of wealthy states, enriching the latter at the expense of the former’. Developed nations fight their way through the market of the less developed nations to use their resources to become stable in the competitive market. In other words, resources are extracted from poorer nations to enrich the wealthy ones. However, the indispensable need for aid by developing nations has made them submit to the dictates of the wealthy ones (Kabonga, 2017).

The theory also delves into the motive which supports the acts and deeds of donor agencies to developing nations. The motive of donor aid can be explained as selflessness by the donor or the expectation of something in return or even a mix of both. A review done by Bandyopadhyay and Vermann (2013), which focuses on donor motivation explores the various motives of donor nations as not only a development initiative but also a strategic tool for the existence of these donor nations. Donors, although in their acts lead to eventual growth of poorer nations, buy allegiance from these nations benefiting from their donations. The conclusion of their study suggest that humanitarianism as well as strategic interest are paramount in the extension of aid, which has existed since World War I

This theory is significant to the study as the concept and relationship between donor aid and rural banks supports the dependency theory and as such is perceived as one of the tools of the theory.

2.10.2 Two gap model

Two gap model is a concept developed by Chernery and Strout in 1966 to explain the importance of the foreign exchange gap to the savings gap of the Harrod-Domar model. The model establishes that less developed nations face a gap between their savings and investments within the economy.
The savings of such economies are low, even though they have insatiable investment need to be met. Suggestions to fill this gap include depending on foreign aid. Another discussion on the aforementioned gap was for developing nations to increase exports in order to have some trade surpluses. This established the gap between imports and exports. This implies that addressing the issues with foreign development aid was essential to boosting economic growth within a country. According to the model, the main objective of saving gap model and foreign exchange gap is to improve the living conditions of people (Garcia-Molina and Ruiz-Tavera, 2014).

Furthermore, even though every country earns foreign exchange through the exchange of raw material, commodities, industrial products and services, the model states that less developed countries face challenges in earning foreign exchange currencies because they depend on one or two primary commodities (Garcia-Molina and Ruiz-Tavera, 2014). The theory connotes that depending on one or two primary commodities exposes the country to earning lower income and subject to unpredictable global markets (Aremu, Abubakar and Bashorun, 2014). These countries, however, are known for the importation of fuel, oil, pharmaceuticals, food and consumer goods which earn a large amount of foreign exchange currency. Comparing the nature of imports and exports in less developed countries, the cost of importing commodities is higher than export earnings; thus, contributing to a net deficit. This implies that when a country fails to earn enough through its exports, the currency earned thereoff is used to pay for the deficit in imports (Kabete, 2008). This theory is significant to the study as it gives gravitas to the fact that a gap exists within developing economies and can only improve through trade surpluses or dependence on donor aid.
2.11 Empirical Review

This section reviews related works conducted by other researchers on the effect of donor aid on performance of rural banks.

2.11.1 The Determinants of Donor Aid to RCBs

As earlier established, the main objective of the rural bank is to mobilize resources and make credit available to the rural people who are unstable economically. In spite of the role rural banks play in the economy, issues such as weak institutional capacity, lack of suitable collateral, high cost of operations, and lack of funds to issue out loans influences these banks to depend on donor aid. Evidence shows that the factors that influence the provision of financial support from donors to rural banks include macroeconomic variables of the country, the capital structure of the rural bank, as well as their liquidity. In centring on this claim, Boadi (2015) examined the determinants of donor aid to RCBs in Ghana. The study used a quantitative research design and secondary data was collected from the Ghana Association of Bankers (GAB), Ghana Statistical Service (GSS) and BOG within the period 1997 to 2014. The study results revealed deposit, liquidity and capital as the determinant of donor aid to rural and community banks.

In a related study undertaken by Dong, Hou and Guariglia (2013) on the determinants of technical aid to rural banks, Gross Domestic Product (GDP) and inflation rate were revealed to be the key determinants of foreign aid to rural banks in China. Additionally, in a developing country’s context, Anyieni (2014) did an evaluation on foreign aid on growth, by assessing the determinants of foreign aid of rural banks in Kenya. Using a quantitative research design, a total of 51 RCBs in Kenya were randomly selected. Data was collected using a secondary source from the World Bank and International Monetary Fund (IMF). The findings of the study indicate that foreign aid was
released based on good governance, political stability, strong macroeconomic variables, and well-developed financial markets for a conducive environment.

Martens, Mummert, Murrell and Seabright (2001) also conducted a study on the determinants of donor aid to RCBs. The study gathered its data from several pieces of literature in relation to foreign aid and the banking system. The study’s results indicate that donors focus on the macroeconomic variables to issue out foreign aid to the rural banking sector of beneficiary countries.

Biepke and Kiweu (2009) investigated the determinants of foreign aid to rural banks. Using quantitative research design, a total of forty-four (44) managerial staffs were selected using simple random sampling technique. Data was collected using a questionnaire and secondary source data. The results of the study showed factors such as good governance, financial market reforms and enabling environment, formalization and transparency in financial reporting, bank size and capital asset.

2.11.2 The Relationship between Donor Aid and the Performance of RCBs

The existence of foreign aid plays a crucial role in the growth and development of an economy. Foreign aid has helped most developing countries resolve their issues pertaining to health, education, and economic instability. The outcome of foreign aid has also created a conducive environment for businesses to gain an advantage in the competitive market, especially in the banking sector. Studies by Dong et al (2013) and Boadi (2015) indicate that donor aid increased the net interest income, return on assets, efficiency and profitability of businesses.

Dong et al (2013) further explore the effect of technical aid on the performance of rural banks in China. Using a quantitative research design, a total of fifty-one (51) commercial banks were
sampled using a simple random sampling technique. In general, the findings of the study show that technical aid improved their managerial skills and use of technology, which contributed to an increase in efficiency and profitability of the banks.

In a different study by Goldin et al. (2002), they examine the role and effectiveness of development assistance to the development progress of recent decades. As described by the authors, development assistance comprises of both financial and non-financial tools that are aimed at supporting the recipient country’s efforts to accelerate growth and reduce poverty. In light of this, they established that finance is only one of the instruments, with many other non-financial tools available for use, to support development; which results in a very propelling effect on performance.

Boadi (2015) also assesses the effect of foreign aid on organisation performance of rural banks in Ghana using a quantitative research design for data collection. Results of the study reveal that donor aid increased the net interest income and return on assets of the banks.

Furthermore, Anyieni (2014) conducted a study on the effect of foreign aid on rural banks’ performance in Kenya. The study adopted a quantitative research design and employed the use of questionnaires. A total of fifty-one (51) RCBs in Kenya were selected using the simple random sampling method. Secondary source data was collected from the World Bank and the IMF. The study’s results reveal that foreign aid released to RCBs boost the confidence of customers and enhance efficiency in service delivery.

Reinke (1999) states in his article – “Cooperation or Competition? Institutional Development of Microfinance in Southern Africa” – that the Commercial Bank of Zimbabwe’s financial and technical aid from DFID and Care International is able to meet most of the costs of credit extension and thereby enjoys the benefits thereof.
From the literature review above, it can be established that there is a relationship between foreign aid and positive performance of rural banks and thereby a level of economic growth. However, Nyoni & Bonga (2017) contradict the above position as they establish in their research reviews of thirty-three (33) studies from one hundred (100) developing countries. They concluded that the relationship between donor aid and economic growth was unclear. Aid ineffectiveness may be the canker to economic development due to bad governance and rampant corruption in recipient countries. It is therefore advised by stakeholders for recipient governments to use aid for its intended purposes.

According to Agarwal (2019), the objectives of donor aid are to improve the country’s international image, build a strong relationship between other countries, and promote the condition of peace and stability. In spite of the benefits, however, donor aid does not necessarily foster economic growth. Even though it may fundamentally support RCBs’ performance, it increases the gap in the standard of living between the poor and the rich, and allows international countries to interfere in the affairs of other countries.

Anti (2012), in a thesis on rural banking and development in Ghana, sought to examine the impact of rural banks on rural community development. Her study attempted to assess how and how much rural banks facilitated the growth and buoyancy of the rural communities through deposit mobilization and the provision of credit facilities to these rural communities. The study also examined the views of the rural dwellers on the role that rural banks play in the facilitation of rural development, using the Ashanti Region as a case study. With the active support of the government, products and services for target groups on behalf of government and through donor financed programs were offered. These include but are not limited to the Millennium Development Authority (MiDA), Social Investment Fund (SIF), MASLOC and Community Based Rural
Development Project (CBRDP). Her article therefore emphasizes that, to achieve better growth and improvement in the activities of rural banks, all stakeholders including external donors must come on board with funds, technical expertise, advice and other forms of support necessary to raise and improve the standard of services provided by RCBs.

2.12 Conceptual framework

The conceptual framework for the study is being used to explain the relationship between the dependent and independent variables identified in the research. In this context, the dependent variable is financial performance and the independent variables are donor aid to the RCBs, inflation, exchange rate, banks’ capital, bank size and the liquidity of the bank. The diagram below illustrates the relationship between these two variables.

*Figure 2.1 The Relationship between Dependant and Independent Variables*

<table>
<thead>
<tr>
<th><strong>Independent Variables</strong></th>
<th><strong>Dependent Variable</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Donor Aid</td>
<td>Financial Performance</td>
</tr>
<tr>
<td>Inflation</td>
<td></td>
</tr>
<tr>
<td>Exchange Rate</td>
<td></td>
</tr>
<tr>
<td>Banks’ Capital</td>
<td></td>
</tr>
<tr>
<td>Bank Size</td>
<td></td>
</tr>
<tr>
<td>Liquidity of the bank</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Researcher’s Construct 2019*

The diagram above seeks to establish the link between foreign aid and the financial performance of rural banks. Boadi (2015) states that before assistance is provided by these foreign donors, there
are certain determinants that foreign donors examine within the banking sector. These determinants include macroeconomic variables, capital, liquidity and the number of deposits in the banks. Other determinants that Biepke and Kiweu (2009) identified include transparency in financial reporting, good governance, political stability, bank size and capital assets. In addition, according to Dong et al (2013), foreign aid to RCBs improves the banks’ managerial skills, increases efficiency, boosts the confidence level of rural inhabitants and increases customer base and return on assets. In view of this, the study examines the effect of donor aid to rural banks, inflation, GDP, banks’ capital, bank size and liquidity of the bank on the performance of rural banks.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter presents the methodological framework for the study. The methodology consists of the research design, population of the study, sampling size and technique, model specification, data source and collection, variable definition and estimation technique for the purpose of adequately addressing the research objectives.

3.2 Research Design

The panel data analysis approach is used to assess the relationship between the independent variables and dependent variables with focus on internal and macroeconomic factors.

Panel data is considered as more appropriate as it allows for a more extensive analysis on the subject, with the provision of both the cross-sectional information which captures individual variability, and the time series information which captures dynamic adjustment. Panel modelling helps to identify a common group of characteristics while, at the same time, taking into account the heterogeneity that is present among individual units.

The first objective of the study on ‘the Trend of Donor Aid to the RCBs’ will be addressed by undertaking a trend analysis from 2007 to 2018 to determine the trend of aid flows in terms of the volume received.
Based on an analysis of various research approaches, the study employs a quantitative research paradigm as the overall methodological approach to guide the study in addressing the second objective of ‘the Impact of Donor Aid on the financial performance of RCBs’. Within the design, a panel data regression analysis of secondary is used to assess the impact of donor support on the performance of RCBs in Ghana to adequately address the objective of the study.

3.3 Data Source, Study Population and Sample

The study’s population comprises of all the one hundred and forty-four (144) RCBs in Ghana as at December 2018. A total number of one hundred and twenty-two (122) RCBs forms the base of the sample. The data for this research is collected over a period of twelve (12) years from annual reports compiled by the EMU of ARB Apex Bank, the supervisory body for all RCBs in Ghana. Data on macroeconomic indicators will be obtained from the website of the World Bank. Other augmenting sources include published articles and journals, working papers, textbooks and relevant internet resources.

3.4 Description of the Variables

3.4.1 Dependent Variables

Profitability, as the dependent variable, is used as a proxy to measure the financial performance of RCBs. The financial performance of the RCBs, for the purposes of this study, employs principally two (2) financial indicators of profitability which have been extensively used as measures of profitability; Return on Asset (ROA) and Return on Equity (ROE).
3.4.2 Independent Variables

Ćurak, Poposki & Pepur (2012) explain that the determinants of the profitability of banks exists from two angles: internal or micro or bank-specific variables and external or macro variables.

The former variables reflect the characteristics of the bank that are as a result of management decisions. These include but are not limited to management/operational efficiency, asset quality (credit risk management), capital adequacy, liquidity and bank size. They are implicitly reflected in the operating performance of banks with financial ratios as proxies. These latter variables reflect the specifics of the industry and macroeconomic environment within which the bank operates. They include inflation, GDP, bank concentration and exchange rate.

3.5 Model Specification

To determine the relationship between donor aid and the financial performance of RCBs, an econometric panel model/linear multivariate regression is used and formed with profitability as a function of donor aid, bank size, liquidity, capital adequacy, exchange rate and inflation.

Appiah (2015) developed the equation below which provides the baseline for the research model:

\[
ROTA_{it} = \alpha + \beta \ CAP_{it} + \beta_2 \ B S_{it} + \beta_3 \ L Q_{it} + \beta_4 \ DEP_{it} + \beta_5 \ AQ_{it} + \beta_6 \ INF_{it} + \\
+ \beta_7 \ COA_{it} + \beta_8 \ OIL_{it} + \varepsilon_{it}
\]

The model above, which refers to the traditional determinants of profitability for RCBs, has the basis for its formulation that the variables are the basic determinants.
It is however identifiable that the focus of RCBs performance must consider the effect and importance of other variables such as donor funding, which is the crust of the study. Therefore, considering these variables and based on the researcher’s conceptual framework drawn from other studies, the augmented model which is a modification of Appiah et al (2015)’s equation was estimated as:

\[
\frac{ROA_{it}}{ROE_{it}} = \alpha + \beta_{1} CAP_{it} + \beta_{2} BS_{it} + \beta_{3} LQ_{it} + \beta_{4} DA_{it} + \beta_{5} INF_{it} + \beta_{6} EXC_{it} + \epsilon_{it}
\]

The variables of the model are explained below:

**3.5.1 Financial Performance of RCB (ROA/ROE)**

ROA is defined as the ratio of net profits to total assets expressed as a percentage, which reflects the ability of the management of a bank to generate profits from their assets. It demonstrates the profits generated per Ghana Cedi (GHS) of assets and indicates how effectively the bank’s assets are managed to generate revenues.

- Return on Assets = Net Profit after Taxes / Total Assets

ROE is the second measure of bank profitability which measures the returns achieved by the bank through the use of owners’ equity. It is expressed as the net profit before interest and tax divided by total equity.

- Return on Owners’ equity = Net Profit after Taxes / Total Owners’ Equity

**3.5.2 Bank Capital (CAP)**

The capital strength determines the need for external funding of firms. It is expected that the larger the capital base, the lower the need for external funding and vice versa. The capital strength gives an indication of the bank’s ability to absorb losses and handle risk and face better financial distress,
hence a determinant of profitability. From the risk-return hypothesis, it is estimated that RCBs with a large capital base are less risky relatively.

3.5.3 Bank Size (BS)
The size of a bank size has a positive effect on its profitability as a result of the economies of scale that comes to play (Kosmidou, 2008). Gibson (2005), however, argues that due to the presence of bureaucracy in the management of banks with large asset holdings, bank size may rather have an inverse impact on the profitability of RCBs.

3.5.4 Liquidity (LQ)
Liquidity measures the ability of banks to meet short-term obligations by the due dates. Liquidity of a firm is measured by the ratio of liquid assets to total assets. If the ratio is high then the bank is more liquid. It is established by Goldstein and Turner (1996) that insufficient liquidity is responsible for banks’ failure in the current global economy.

3.5.5 Donor Aid (DA)
Donor Aid serves as a reliable and less costly source of deposit to RCBs which is further used for lending purposes in their operations. RCBs pay little or no interest on such funds. This translates to interest margins and profitability (Anbar and Alper, 2011).

3.5.6 Inflation (INF)
Inflation is the measure of price stability in the country using the consumer price index as a proxy. This reflects the annual percentage change in the cost to the average consumer who acquires a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. A high rate of inflation may indicate internal economic instability. In a high inflationary period,
RCBs may face uncertainty in terms of product and input pricing, limiting the flow of aid in such economies.

3.5.7 **Exchange Rate (EXC)**

Exchange rate movement between the foreign and local currencies have a significant impact on the volume recorded in the country. These fluctuations therefore have an effect on the budgets of specific projects and an eventual impact on RCBs performance.

3.5.8 **Error Term for bank i at time t (\(\epsilon_{it}\))**

The error term encompasses all other conditions that influence profitability of RCBs which were not catered for by the independent variables in the model in equation 2.

3.6 **Estimation Technique**

Multiple regression analysis is used to assess the relationship between the financial performance of rural banks and donor aid from 2007 to 2018. The data gathered is analysed using the STATA software. A diagnostic analysis was run to test the normality and heteroscedasticity of the model. The estimations were tested using Fixed and Random effects with Hausman specification in order to choose the more appropriate of the two.

3.7 **Ethical Considerations**

Data gathered from the corporate websites were used solely for academic purposes, and not for any other purpose like intelligence gathering for competitive analysis.
CHAPTER FOUR

ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents the results that were obtained from the study based on data obtained from the annual reports of ARB Apex Bank. The summary of descriptive statistics is first presented, followed by the results obtained through the panel data analysis, and finally a thorough discussion of the findings.

To achieve the main objective of assessing the impact of donor aid and the financial performance of RCBs, specific examinations were done between profitability and each of the independent variables (inflation, exchange rate, bank capital, donor aid, bank size and liquidity).

For uniformity in the data, two (2) of the variables, donor aid and bank capital in GHS, were transformed by taking the log of each variable (donor aid and bank capital).

4.2 Descriptive Statistics

Performance variables were mainly computed based on the financials of each RCB as published in the annual report obtained from ARB Apex Bank.
Table 4.1 Below is a summary of the descriptive statistics of the various variables used

<table>
<thead>
<tr>
<th>Variables</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA (%)</td>
<td>1,387</td>
<td>0.019</td>
<td>0.069</td>
<td>-1.504</td>
<td>0.124</td>
</tr>
<tr>
<td>ROE (%)</td>
<td>1,385</td>
<td>0.152</td>
<td>3.499</td>
<td>-123.301</td>
<td>19.597</td>
</tr>
<tr>
<td>Donor Aid (GHS million)</td>
<td>285</td>
<td>14.422</td>
<td>66.492</td>
<td>0.000</td>
<td>850.000</td>
</tr>
<tr>
<td>Bank Capital (GHS million)</td>
<td>1,287</td>
<td>1.945</td>
<td>3.29</td>
<td>-9.535</td>
<td>35.263</td>
</tr>
<tr>
<td>Bank Size (%)</td>
<td>1,388</td>
<td>0.098</td>
<td>0.245</td>
<td>-6.117</td>
<td>1.890</td>
</tr>
<tr>
<td>Liquidity (%)</td>
<td>1,407</td>
<td>0.356</td>
<td>0.286</td>
<td>-0.251</td>
<td>1.411</td>
</tr>
<tr>
<td>Inflation (%)</td>
<td>1,413</td>
<td>13.077</td>
<td>3.770</td>
<td>7.126</td>
<td>19.251</td>
</tr>
<tr>
<td>Exchange Rate (USD/GHS)</td>
<td>1,413</td>
<td>2.472</td>
<td>1.286</td>
<td>0.935</td>
<td>4.585</td>
</tr>
</tbody>
</table>

Source: Author’s compilation based on data from ARB Apex Bank

The financial performance indicators as represented by return on assets (ROA) and return on equity (ROE), showed varied outcomes. The findings from the summary of the descriptive statistics show that, averagely, most RCBs over the period under review have not performed satisfactorily well as ROA hovered at an average of 2%. This suggests that for each cedi of assets employed, the RCBs recorded only two (2) pesewas in profit. The summary also indicates that the least performing RCB has a record of -150% in ROA while the percentage for the highest performing RCB is 12.4%. The results for ROE was, however, comparatively better with the average ROE being 15% among the 122 RCBs. Within the period 2007 to 2018, ROE turned out to be over 1000% for both the worst and highest performing RCBs recorded. This points out quite a wide gap in financial performance.

Again, over the period under review, the average value of donor aid was GHS 14 million, with some RCBs receiving nothing with respect to the receipt of donor funding as well as GHS 850 million being the highest injection of funds to RCBS. In terms of bank capital, most RCBs had
average capital of GHS 1.9 million with a few non-performing RCBs failing to meet their capital requirements. However, they were allowed to overdraw their capital accounts by GHS 9.5 million.

The summary of data revealed that the liquidity variables show significant variations perhaps due to the managerial decisions by the RCBs. The average position stood at 35.6% with the least being 25.1% thus suggesting periods of cash trap happenings.

With regard to the macroeconomic variables, the inflation records over the period under review was averaged at 13% and with a range from 9.4% to 19.3%. Exchange rate recorded an average of 7.8 percent within the study period, peaking at 15.00% and tumbling to a minimum reading of 4.00%. The average inflation is 12.75%. Within the period, inflation ranges from 8.73% and 19.25%.

The figure below shows the donor funding received within the period, and the trend over the period.

Figure 4.1 Trend of donor aid to RCBs

![Donor Funds Graph]
Figure 4.1 depicts the line graph of donor funds received by the Rural banks from 2007-2018. From the chart, it can be seen that on the average RCBs received the highest in 2011 as compared to the rest of the years. There seem to be stability in the amount received from 2008 and 2010 and also from 2012 and 2014. The lowest amount, as shown on the chart, was received among the RCBs in 2017. A careful study of the trend line shows there is no pattern in the amount as received by the RCBs from the donors.

There are various reasons that could account for these dynamics in the trend of funding. The rise and fall in trend as indicated by reports from EMU of the ARB Apex Bank mainly include the social objective of the donor agency and the political conditions within the receiver country.

4.3 Correlation Analysis

The correlation coefficients show the direction of the linear relationship between the profitability variables and the independent variables employed. Table 4.4 shows the correlation coefficient between the variables ROA, ROE, Bank Capital, Donor Aid, Bank Size, Liquidity, Inflation and Exchange Rates.
The table below reports the pairwise correlation and the significance at 0.05 for each variable under study.

**Table 4.2 Correlation among the study variables**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ROA</th>
<th>ROE</th>
<th>BANK CAPITAL</th>
<th>DONOR FUNDS</th>
<th>BANK SIZE</th>
<th>LIQUIDITY</th>
<th>INFLATION</th>
<th>EXCH. RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>-0.019</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.474)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BANK CAPITAL</td>
<td>(0.000)</td>
<td>(0.880)</td>
<td>0.386*</td>
<td>0.004</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DONOR FUNDS</td>
<td>(0.270)</td>
<td>(0.082)</td>
<td></td>
<td>-0.199</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BANK SIZE</td>
<td>(0.000)</td>
<td>(0.848)</td>
<td>(0.000)</td>
<td>(0.866)</td>
<td>0.145*</td>
<td>0.015</td>
<td>-0.469*</td>
<td>0.236*</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>(0.000)</td>
<td>(0.581)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>0.153*</td>
<td>0.015</td>
<td>-0.469*</td>
<td>0.236*</td>
</tr>
<tr>
<td>INFLATION</td>
<td>(0.188)</td>
<td>(0.285)</td>
<td>(0.700)</td>
<td>(0.000)</td>
<td>(0.857)</td>
<td>(0.000)</td>
<td>0.005</td>
<td>-0.141*</td>
</tr>
<tr>
<td>EXCH RATE</td>
<td>(0.000)</td>
<td>(0.326)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
</tbody>
</table>

*, ** and *** are 1%, 5% and 10% significance levels.

Even though the relationship between ROA and donor aid is a positive one, the results suggest that donor aid is not significant in determining the performance of ROA. Similarly, ROE and donor aid are positively correlated with the study results suggesting again that donor funding is not significant in determining ROE.

Again, there is a weak positive correlation between ROA and bank capital, however, the study suggests that bank capital is significant in determining financial performance (ROA) of the RCBs. Similarly, the correlation between bank capital and ROE is negligible with an insignificant impact of bank capital on ROE.
Furthermore, the size of RCBs and ROA have a strong association. The relationship is very significant in explaining performance (ROA). With regard to ROE, bank size is not a significant determinant.

Again, from Table 4.4, liquidity is significant in explaining ROA. Even though the correlation is positive, the relationship between ROA and liquidity is weak. In contrast, the significance value as depicted in the table also suggests that liquidity is not significant in determining performance using ROE as the indicator.

The study suggests that inflation has no influence on the ROA and no statistical significance on ROE.

Finally, exchange rate was found to be statistically significant in impacting on ROA. The exchange rate has a negative and weak relationship with ROA. In addition, the relationship between exchange rate and ROE is negative and very weak with no statistical significance on ROE.

**4.4 Panel Regression Results**

Table 4.3 shows the regression results between the dependent variables (ROA and ROE) and the independent variables (bank capital, donor funds, bank size and liquidity).
Table 4.3 Choosing the Appropriate Regression

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA Fixed Effect</th>
<th>ROA Random Effect</th>
<th>ROE Fixed Effect</th>
<th>ROE Random Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Capital</td>
<td>0.0096*</td>
<td>0.0085*</td>
<td>0.0516</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.000)</td>
<td>(0.189)</td>
<td>(0.017)**</td>
</tr>
<tr>
<td></td>
<td>0.0002</td>
<td>0.0003</td>
<td>0.0015</td>
<td>0.0028</td>
</tr>
<tr>
<td>Donor Aid</td>
<td>(0.47)</td>
<td>(0.334)</td>
<td>(0.656)</td>
<td>(0.392)</td>
</tr>
<tr>
<td></td>
<td>0.2619*</td>
<td>0.2146*</td>
<td>1.2384**</td>
<td>1.1268**</td>
</tr>
<tr>
<td>Bank Size</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.027)</td>
<td>(0.029)</td>
</tr>
<tr>
<td></td>
<td>-0.0044</td>
<td>-0.0032</td>
<td>-0.0516</td>
<td>-0.0256</td>
</tr>
<tr>
<td>Liquidity</td>
<td>(0.61)</td>
<td>(0.621)</td>
<td>(0.602)</td>
<td>(0.783)</td>
</tr>
<tr>
<td></td>
<td>-0.0005</td>
<td>-0.0004</td>
<td>-0.0109**</td>
<td>-0.0083***</td>
</tr>
<tr>
<td>Inflation</td>
<td>(0.183)</td>
<td>(0.281)</td>
<td>(0.018)</td>
<td>(0.062)</td>
</tr>
<tr>
<td></td>
<td>-0.0087*</td>
<td>-0.0081*</td>
<td>-0.0547</td>
<td>-0.0749**</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>(0.006)</td>
<td>(0.000)</td>
<td>(0.122)</td>
<td>(0.015)</td>
</tr>
<tr>
<td></td>
<td>-0.1129*</td>
<td>-0.0964*</td>
<td>-0.408</td>
<td>-0.812***</td>
</tr>
<tr>
<td>Constant</td>
<td>(0.011)</td>
<td>(0.000)</td>
<td>(0.417)</td>
<td>(0.055)</td>
</tr>
</tbody>
</table>

*, ** and *** are 1%, 5% and 10% significance levels.

Table 4.5 shows the regression of ROE and ROA on bank capital, donor aid, bank size and liquidity. A cursory glance at the results, as shown in the table, seem to suggest there is no real difference between the Fixed effect model and the Random effect model among the variables measuring performance (ROA, ROE). To be able to determine the appropriate model that carefully checks the relationship between ROA/ROE and the independent variables, Hausman Test of specification would to be used in the model estimation.
4.4.1 Hausman Test

The Hausman test is used in panel data analysis to enable a choice to be made between fixed effect and a random effect model. Essentially, the tests determines if there is a correlation between the unique errors and the regressors in the model.

The Hausman test run on ROA had the Prob.>chi2 = 0.1206 which was greater than the significance level (P=0.05). Therefore, the random effect model for ROA is the most appropriate model in determining the performance of RCBs.

**Table 4.4 Random Effect GLS Regression**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Random Effect</th>
<th>R2</th>
<th>Prob &gt; chi2</th>
<th>Wald chi2(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Capital</td>
<td>0.0085</td>
<td>0.3639</td>
<td>0.0000</td>
<td>133.88</td>
</tr>
<tr>
<td>Donor Funds</td>
<td>0.0003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Size</td>
<td>0.2146</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquidity</td>
<td>-0.0032</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>-0.0004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>-0.0081</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.0964</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 4.4, the Random Effect GLS Regression for the performance indicator ROA has the
significance level of \( P=0.0000 \). This buttresses the point as illustrated in the Hausman specification test that Random Effect model is very good in measuring the impact of the independent variables on performance of RCBs.

The R-squared value indicates that 36.4% of the variability in the dependent variables is explained by the independent variables.

From Table 4.4, the GLS regression coefficient of 0.0085 for bank capital means that if RCBs’ equity increases by 1%, there would be the corresponding marginal upward adjustment of 0.85%. The P-value of 0.000 implies that bank capital is very important in measuring the performance of RCBs.

The results obtained also suggest that donor aid, though insignificant, is positively related with ROA. As shown in the table, with a 1% increase in the amount of funds received by the RCBs from donors, there would be a 0.03% change in RCBs’ profitability (ROA).

Again, the size of these banks was found to be significant in measuring the performance of the RCBs. This is supported by the P-Value of 0.000, which is statistically significant. This means that, if all the other variables are held constant, a 1% increase in the size of RCBs will cause the banks to grow by 21.46%.

Similarly, from Table 4.4, liquidity with a regression coefficient of -0.0032 in the Random GLS model indicates there is negative relationship between liquidity and performance. The result means that, if all others are held constant, when liquidity increases by 1%, financial performance will decline by 0.04%. The significance of liquidity (\( P=0.281 \)) being greater than 0.05 implies that liquidity is not statistically significant in measuring the performance of the RCBs.
Exchange rate seems to have a toll on the performance of RCBs. The coefficient of -0.0081 between ROA and exchange rate is negative. This means that if the exchange rate rises, profitability of RCBs will decline, and vice-versa. The P-Value of 0.000 however suggests that exchange rate as an exogenous variable is very important in determining the performance of the RCBs.

The constant term (-0.0964) has a negative relationship with performance (ROA). The term implies that, if all the variables are held constant, ROA will decrease by a margin of 9.64%. The value is, however, statistically significant in measuring the impact of bank capital, donor funds, bank size and liquidity on the performance of the RCBs.

Table 4.5 Summary Table

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Relationship with Performance (ROA)</th>
<th>Impact on Performance (ROA)</th>
<th>P-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Capital</td>
<td>Positive</td>
<td>Yes</td>
<td>Supported</td>
</tr>
<tr>
<td>Donor Funds</td>
<td>Positive</td>
<td>No</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Bank Size</td>
<td>Positive</td>
<td>Yes</td>
<td>Supported</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Negative</td>
<td>No</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Inflation</td>
<td>Negative</td>
<td>No</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>Negative</td>
<td>Yes</td>
<td>Supported</td>
</tr>
</tbody>
</table>
4.5 Chapter Summary

This chapter of the study did an assessment of the impact of donor aid on the financial performance of RCBs as captured in the regression model specified earlier with descriptive statistics, correlation analysis and the regression results presented in tables.

The results established that the independent variables affect the financial performance of RCBs in varying measures and impacts.

Most importantly and for the purpose of the study, it was discovered that donor aid has a positive yet insignificant effect on the overall performance of the RCBs.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary and conclusion of the main findings of the study. It further discusses recommendations of the study.

5.2 Summary of Findings

The study aimed at examining the trend of donor aid to RCBs over the years and its impact on the financial performance of RCBs in Ghana.

The population of the study comprised all the one hundred and forty-four (144) RCBs in Ghana, out of which one hundred and twenty-two (122) were selected as the sample size from 2007 to 2018, based on data available from the EMU annual report of the ARB Apex Bank. The annual report provided data on donor aid, bank size, bank capital, and liquidity. The data on inflation and exchange rate were obtained from the World Bank website.

The equation of the study was subsequently estimated using the Fixed Effects/Random Effects estimations due to the cross-sectional nature of the data available. The Hausman test was used to select the estimation approach that was most appropriate for the study.
The results of the findings are stated below:

Donor aid was found to be positively related to the financial performance of RCBs, although insignificant to their overall impact. ROA increased by 0.03% only, with a 1% increase of donor funds. Hence, would not be regarded as a substantive positive impact.

The results of the study revealed that bank capital has a positive relationship with financial performance. An increase in bank capital by 1% will directly increase financial performance by 0.85%. This change was found to be statistically significant.

Moreover, bank size was found to be statistically significant in measuring the financial performance of RCBs. There was a positive relationship between bank size and ROA. A 1% increase in bank size resulted in a 21.46% increase in financial performance.

From the analysis, it was discovered that liquidity has a negative relationship with the financial performance of RCBs. The regression coefficient of liquidity means that an increase in liquidity by 1% will result in a decline in the financial performance of RCBs by 0.032%. The P-value of 0.621 means that it is statistically insignificant for liquidity to influence financial performance.

Finally, inflation and exchange rate were found to have a negative relationship with the financial performance of RCBs. A unit increase in both inflation and exchange rate would result in a 0.04% and 0.81% decrease in performance, respectively. Nonetheless, exchange rate is significant in measuring the financial performance of the RCBs, whilst the P-value of inflation suggests that inflation is not significant in measuring the performance of the RCBs.
5.3 Conclusion

The study tested the hypothesis that donor aid does not have a significant impact on the financial performance of RCBs. From the study, it was discovered that there is a positive relationship between donor aid and financial performance. It was also found that with an increase in the receipt in donor aid by 1%, the financial performance of RCBs would improve by 0.03%. This change, however, is not statistically good enough to have an impact on the overall financial performance of the RCBs.

The study concludes that there is no significant positive impact of donor aid on the financial performance of RCBs. The study also concludes that the size of the RCBs, capital and exchange rates significantly affect their performance. Again, the study concludes that inflation and liquidity do not significantly influence the financial performance of RCBs.

5.4 Recommendations

The following recommendations have been suggested, based on the findings and conclusions from the study:

This study finds that, although donor aid has a positive relationship on the financial performance of RCBs, its impact is, however, not significant. Donor aid has the tendency of improving the overall financial performance of RCBs. An increased volume in the funds received from the donor agencies could therefore have a significant impact. In view of this, the RCBs, with the assistance of the ARB Apex Bank, should proactively find more sustainable sources of donor funds to solicit for the RCBs.
Following the positive, yet less significant, impact of donor aid on financial performance, the research recommends that ARB Apex Bank should strengthen its disbursement policies of donor funds as well as intensify the adherence to credit policies to improve the quality of donor funds disbursed as loans so as to meet the intended objective of funding.

The study further revealed a negative relationship between liquidity and performance. RCBs were seen to have excess funds available to them. The study suggests that ARB Apex Bank should support RCBs to invest their excess funds to maximize returns for improved financial performance.

Based on the finding that inflation and exchange rate were negatively related to financial performance of RCBs, there is therefore the need to ensure that the macroeconomic variables of the country are stable to influence a positive impact on the financial performance of RCBs. The study recommends that the government must endeavour to institute policies that ban the dollarization of the Ghanaian economy and reduce the over reliance on imports. The manufacturing sector of the economy must be strengthened to produce competitive goods, since the poor performance of the local currency against the United States Dollar (USD) has been attributed to be a structural problem of the Ghanaian economy.
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50


