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DETERMINANTS OF FINANCIAL PERFORMANCE OF SAVINGS AND LOANS COMPANIES IN GHANA.A CASE OF OPPORTUNITY INTERNATIONAL SAVINGS AND LOANS LIMITED

BY

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DECLARATION

I hereby declare that this submission is my own work towards the degree of Master of Science (Economics) and that, to the best of my knowledge; it contains no material previously published by another person, nor material which has been accepted for the award of any other degree of the University, except where acknowledgement has been made in the text.

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ABSTRACT

The main purpose of this study was to examine the determinants influencing financial performance of savings and loans companies in Ghana: A case of Opportunity International savings and Loans Company limited. The study specifically identified the factors influencing the performance of Opportunity International and further examined the financial products and services the institution offers. Lastly, the study assessed the challenges facing Opportunity International. The research revealed that capital adequacy ratio is non-stationary at the 5 percent significance level but became stationary after firstdifference. Thus, capital adequacy ratio is integrated of order one (I(1)). Also, credit risk is non-stationary even at the level. It attained the stationary status after first-difference, thus being an I (1) series. Inflation is non-stationary at the level and become stationary after first difference and Management inefficiency at 1 percent level of significance is stationary. Log of Net profit at the 5 percent level of significance is non-stationary but became stationary after first –difference and hence an I (1) series. Cointegration test was carried out to determine whether there is a level of relationship between profitability of Opportunity Savings and Loan Limited and its determinants. In the long run, management inefficiency was statistically significant. In the short run, capital adequacy was statistically significant and a meaningful addition to the model because changes in the predictor‟s value are related to changes in the variable. From the survey group and individual loan products are the most widely patronized products in Opportunity International representing 30% and 23% respectively. Mulltiple borrowing from same clients across several organizations but with no data on the credit reference bureau and

poor addressing systems were among the challenges identified.

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DEDICATION

This dissertation is dedicated to my lovely parents and to my siblings for their encouragement and support.

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CHAPTER ONE

INTRODUCTION

1.0 Background of the Study

Savings and Loans Companies in Ghana have experienced significant technological changes and the central bank continues to license, regulate, supervise and direct the nonbanking financial institutions to further enhance the financial sector. Financial institutions channel proceeds from depositors to investors for investments. Channelling of funds from surplus agents to deficit agents can be expediently done on the account of financial institutions generating enough income in meeting their operational expenses they expend. This is to say, financial institutions need to be profitable for continuous intermediation function. Hansen and Mowen (2005) assert that financial performance is an essential assessment on the effectiveness of management steering the affairs of an entity.

The financial sector in Ghana has seen reforms over the last twenty years. The financial sector in Ghana was predominantly dominated by state governed banks. With the adoption of the Financial Sector Structural Adjustment Program (FINSAP), Ghana‟s financial sector was gradually liberalized and that saw the licensing of many Non-Bank Financial Institutions. The Non-Bank Financial Institutions (NBFIs) have brought about diversification and an increase in the breath of Ghana‟s financial sector.

Savings and Loans Companies are technically part of Non-Bank Financial Institutions and serve the informally sector which constitutes about 80% of the economy in Ghana (B0G 2012). Savings and Loans Companies continue to emerge with the underperformed ones collapsing quite frequently. Currently there are thirty one (31) licensed savings and loans companies in Ghana (BOG 2016).

Financial institutions performances are measured on the account of how profitable they are and which also serve as a good signal for customer driven focus and survival of institutions (Bikker, 2010).Financial performance has remained mixed in terms of profitability, productivity and efficiency. A continuous decline in terms of financial ratios is blatantly affecting profits since 2007 (BOG, 2012).A thorough study of financial performance of savings and loans companies in Ghana is a focal facet to the country‟s banking industry as sterling performances achieved implies growth in the industry (Ayanda, Christopher & Mudashiru, 2013).

There is an increasing competition among savings and loans companies, rising costs a resultant repercussions licensing requirements, financial and technological innovation and penetration of large numbers of non-bank financial institutions coupled with the challenges of recent economic crises in Ghana. These alterations have consequences on the profitability of savings and loans companies in Ghana. The non-banking sector precisely savings and loans companies are unquestionably one of the sector that continues to be evidently affected by modern macroeconomic drifts and policy actions. The industry continually is beleaguered the depository market, with the greatest presage posed by commercial banks and micro finances. Seemingly, the savings and loans sector would have to weather a few more storms in the coming years.

The Bank of Ghana has also presented various first hand instructions on reserve requirements further constraining savings and loan companies‟ potentiality to lend or acquire interest-earning liquid assets. Notwithstanding the seemingly challenging time, the savings and loans sector remains to be a bull‟s eye of encouraging improvements too. The sector has witnessed the introduction of some lucrative and appealing products through financial innovations; which is geared on acquiring new clients and also realizing avenues for non-interest revenue from transaction banking services. Savings and Loans Companies

usually get accussed for high charges expended on their customers and on the account of realizing big profits when other businesses simply shrivel when the macroeconomic environments flesh out.

Needless to say, savings and loans companies think of themselves differently and maintain this past couple of years is among the most challenging periods they have lived with. The principal activities carried out by savings and loans companies include the provision of micro finance facilities in the form of loans to the general public, with the emphasis on lending to those in society with limited incomes who would not ordinarily qualify for a loan from a traditional bank. Savings and Loans Companies also accept deposits of various types including current accounts, savings accounts and enter into contracts for fixed deposits. Opportunity International Savings Limited is a non-bank financial institution licensed by the Central Bank of Ghana to operate in savings and loans. OISL serves micro and small entrepreneurs with small loans, deposits, and other financial services in the seven (7) out of the ten (10) regions.

At year-end 2005, OISL‟s stated capital stood at GH¢ 2.8 million (US$3.1 million) making it the highest capitalized savings and loans company in Ghana. Opportunity‟s shareholders are faithful in transforming the lives of less privileged and having a positive impact on their families, their communities and the society at large.

1.1 Statement of the problem

Regardless of the financial sector reforms in Ghana since the 1990s with the prerogative of improving profitability, efficiency and productivity, banks‟ performance has remained poor with quite substantial gaps in service delivery to agents (BoG 2015). There is a declining trend of average profits for financial institutions in Ghana (BoG 2015).

Bank of Ghana is the central bank and regulates the activities of all the banks. The number of deposit Money Banks (DMBs) and Non-Bank Financial Institutions (NBFIs) stood at 26 and 52 respectively as at the end of 2015. Profitability in the banking sector has been mixed. Net interest margin (NIM) dropped from 9.6% to 6.5% by end of 2015. By the close of 2015, the profitability ratios of the DMBs as measured by the return on assets (ROA), return on earning assets (ROEA) and return on equity (ROE) had seen some continuous decline since 2015.

There are a number of studies on the performance of banks in Ghana. Krakah and Ameyaw (2010) studied the profitability drivers of Merchant Bank Limited and Ghana Commercial Bank Limited. Mills and Amowine (2013) for the period of 2002 to 2011 studied the determinants of Rural and Community Banks but none focused on the determinants of financial performance of savings and loans in Ghana.

With the varied characteristics (loan portfolio, equity capital, size) between the formal banking institutions and non-banking financial institutions, generalization of result may be misleading and hence a need for a study in this regard.

The current study adds to existing knowledge by examining the trend in bank performance using both trend equations and graphs. Also, the study analyses determinants of banks performance using not just bank specific variables, but also an external variable being inflation. Given the fact that various financial institutions use different measures to assess their performance, the current study departs from previous studies by using profitability measure as log of net profit as the dependent variable

1.2 Objective of the study

The main objective is to examine the determinants of financial performance of Opportunity International Savings and Loans Limited. Specifically it is

i. To examine the trend factors influencing the financial performance of Opportunity International Savings and Loans Limited.

ii. To examine the type of financial products and services of Opportunity International Savings and Loans Limited.

iii. To assess the challenges of Opportunity International Savings and Loans Limited.

1.3 Research questions

i. What are the trend factors influencing financial performance of Opportunity International Savings and Loans Limited?

ii. What are the financial products and services offered by Opportunity International Savings and Loans Limited?

iii. What are the challenges Opportunity International Savings and Loans Limited facing?

1.4 Justification of the study

Undertaking this study, therefore, becomes relevant in the sense that results will be used by various participants to assess the Opportunity International Savings and Loans Limited‟s positioning and inherent challenges. Further, the study is expected to be beneficial to numerous participants including the Bank of Ghana, current and possible people who plan to invest, members and management of Opportunity International Savings and Loans Limited, and scholars interested in similar or related areas of study.

The Government policy makers will be previewed to OISLs‟ dynamics and furthermore gain direction in designing appropriate practices that will control the stakeholders for the purpose of financial stability. The research also anticipates that the findings of the study will help investors in discovering new and better techniques of improving and running their operations in order to improve their financial performance. The OISL management will benefit through application of the study‟s independent recommendations. Lastly, this

study will pinpoint the information breaks and make available propositions for advance investigation to benefit scholars interested in expanding the scope or undertaking related studies.

1.5 Organization of the study

The study is structured into five main chapters. The rest of the study is structured as follows. Chapter Two (2) deals with a critical review of both relevant and related theoretical and empirical literature on financial performance. Chapter Three deals with the methodology of the study. Chapter Four focuses mainly on the presentation, analysis and discussion of the results in relation to each of the specific objectives of the study. Chapter Five concludes with summary of main findings, some concluding remarks policy recommendations.

1.6 Scope

This study involved appraising the financial performance of Opportunity International Savings and Loans Limited (OISL) of over the last eight years that is, from 2007 to 2015, its compliance with Bank of Ghana‟s regulations and its performance over the period in line with operational performance, asset quality, leverage and efficiency.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Savings and Loans companies in Ghana are financial institutions that are mandated by the Central Bank (Bank of Ghana) to take deposits and advance loans to economically poor but active people. The enactment of NBFI Law in 1993 has seen a rise in establishments of more savings and loans companies in Ghana. A substantial number of Financial Non-

Governmental Organizations (FNGOs) have been transformed into savings and loans operating in the rural and urban areas in the country. They provide tailored made products and services to the unbanked population in the country through deposit mobilization, credit delivery and financial literacy modules to low income earners who shy from the traditional banks. In recent times, Savings and Loans Companies have benefited from foreign investors and that has brought about a significant technological progress in their operations. This has brought about a healthy competitiveness in the industry and has boosted operations.

2.1 The financial sector reform in Ghana

The financial sector reform was implemented in Ghana in the late 1980‟s as a package with the Economic recovery program. The rationale behind the introduction of this reform was to get the economy of Ghana back on track as the economy of Ghana was performing far below expectations. The Economic Recovery Program primarily focused on the stabilization process of the economy from 1983 to 1986.This period was characterized by credit guidelines for different sectors of the economy, ceilings fixed for interest rates, ceiling fixed for credits and direct monetary controls instruments. In

September 1987, the Recovery Program was abolished as the economy was backsliding.

This led to the transformation to the Financial Sector Structural Adjustment Program(FINSAP) which was adopted in the year 1988.This period of economic adjustment was largely very beneficial to the country that saw a considerable improvement of savings, investments as well as financial mediation. Owusu, 1993 asserts that the overall financial system, including the informal non-bank sector in Ghana was strengthened and that led to the emergence of a number of susu and finance companies whose mandate was to mobilize savings for on-lending to their clients. General credit advances made by these companies trilled many petty traders in making deposits with them. Against this

background, millions of cedis that had been mobilized was squandered as the owners and employees indulged in fraudulent activities.

The Bank of Ghana took steps in restoring sanity in the financial system by licensing the susu and finance companies under the classified name of Savings and loans companies. This approach was largely to bring back consumer confidence in the sector and to achieve a higher savings mobilization rate in supporting economic ventures in the country. PNDCL 328 was enacted to regulate the Non-Bank financial institutions.

2.2 Types of formal financial institutions in Ghana

A financial institution is a company that provides financial service and assistance to its clients.Firms and individuals are motivated in diverse ways to save. Individuals save for retirement, house purchase, future consumption, to meet future payments and insurance against loss of life or loss of property and so forth. Businesses save in meeting contingencies, to finance investment, takeovers or for expansion of the enterprise. Agents may have short-term or long term financial requirements; Governments borrow funds for investment decisions and expansion of infrastructure. A variety of financial institutions exist to meet these demands. Some institutions offer a wide variety of fairly standard services, while others provide more specialist products and services. The Central Bank is the apex of all financial institutions.

The formal institutions are depository institutions, merchant banks, commercial banks, savings and loans companies, credit unions, non -depository institutions, life insurance companies, pension funds, mutual funds, investment bankers, leasing and brokerage companies. Deposit taking institutions accept deposits from economic agents which become their liabilities, and then on-lend these funds to make direct loans or investments which become their assets.

Deposit-taking institutions make their profits from the difference between the cost of deposits they take and other sources of funding, and the return that they receive on their investment portfolio in the way of loans, equity stakes and other investments.

Examples of deposit institutions include commercial banks, savings and loans, universal banks, merchant banks, etc.

Non-depository institutions raise funds from other financial institutions or by selling securities in the financial markets.

2.3 The Concept of Savings and Loans Companies in Ghana

Women‟s World Banking Ghana (WWBG) is the maiden S&L Company to have been licensed in 1994 to commence business in Ghana. Currently there are thirty one (31) savings and loans companies in Ghana registered with the BoG namely: First African Savings, Abii National, Adehyeman, Advans Ghana Savings and Loans Limited, Asa, Beige Capital, Bond, CFC Savings and Loans Limited, Pan-African, Express, First Allied Savings and Loans Limited, First Ghana Savings and Loans Limited, First Trust, Global Access, Golden Pride Savings and Loans Limited, Ivory Savings and Loans Limited, Midland, Multi Credit, Opportunity International Savings and Loans Limited, Pacific, Seeds Funds Savings and Loans Limited, SIC Life Trust Savings and Loans Limited, Sinapi Aba, Unicredit, Union Savings and Loans Limited, Utrak , Women‟s World Banking Savings and Loans Limited, Progress Savings and Loans Limited and Assurance Savings and Loans Limited, BoG (2016).

2.4 Products and Practices of Opportunity International Savings and Loans Limited

Savings and Loans Companies are controlled by the central bank-Bank of Ghana to offer product and services to its clients. The most popular products and services are:

E-Banking

It is the electronic means of banking via electronic devices like mobile phones, Laptops, PCs, iPads and ATM Machines. There are several products such as SMS Alerts, internet banking, e-statement, e-alert, debit and credit cards, mobile banking and e-zwich.

Internet Banking

Internet banking hinges on the usage of technology and brings the bank closer to the customer. It refers that help bank customers to get access to their accounts and general information on banking products and services through the use of bank‟s website, without intervention or inconvenience

Sms Alert

It is where alerts are gotten on the account holder‟s mobile phone whenever a transaction hits the account of the account holder. This helps to identify fraudulent or unauthorized transactions that may be taking place on the account of the account holder. It also helps to know when an expected transaction has taken place by instantaneously alerting the client whenever a transaction is performed on his or her account.

Mobile Banking

It is a form of remote or virtual banking which is essentially the delivery of branch financial services via mobile devices such as mobile phones, iPads, etc. It helps check your account balance, obtain mini account statement, top-up phone credit, intra-account transfer.

Fixed Deposit

A fixed deposit is a financial instrument provided by the bank which provides investors with a higher interest rate than a normal or regular savings account, until a given maturity date.

A fixed deposit may be known by different names in various institutions including guaranteed investment fund, tenure deposits which describes the nature of fixed deposits.

Purpose

Customers use Fixed Deposit to ensure that funds for which they do not have immediate use are kept safely and invested prudently to yield good returns.

Features

Fixed deposit certificates are issued and on the basis on the amount of deposits, the rate charged is negotiable. Maturity periods are three (3) months, six (6) and twelve (12) months. Certificates of fixed deposits are issued to the clients are they can serve as securities loan facility from the bank.

Current Account

Current Account is an account that enables customers to transact business and effect payments by using bills of exchange, commonly known as cheques and ATM cards. By so doing clients are not burdened with travelling with large amounts of money in transacting business. It is a non-interest bearing bank account. Ordinarily, current account does not promote savings culture as compared to savings account.

2.5. The Profile of Opportunity International

Opportunity International Savings and Loans (Opportunity) is a focal savings and loans company in Ghana, West Africa. Opportunity is a constituent of Opportunity Network that is a worldwide conglomerate committed in the provision of business chances to people in the marginalized countries. The worldwide network comprises of forty seven (47) partners globally. Opportunity International Savings and Loans Limited began its banking operations in Ghana in September 2004 after it had received operating license from the Bank of Ghana in June 2004.Opportunity International commits to transforming the lives of the entrepreneurial poor in the society by tailoring high quality financial and developmental services.

2.6 Financial Performance Measure

Richardo and Wade (2001) in their study resulted that organizations are measured in terms of return on equity and high return on equity ratios suggests possibly an establishment of good employees performance system.

Garg (2007) resulted that firm performance are measured by the return on asset and ratio of sales to assets. Hossan and Habib (2010) suggested that profitability ratios show a firm‟s overall performance and efficiency. Analysis of financial performance helps to evaluate the performance of a firm which signals investors to invest in that company or not.

This study adopted log of net profit as a proxy in measuring profitability as it is most useful in a study like this.

2.7 Theoretical Review

2.7.1 Capital Adequacy

Capital is the quantum of funds available for firms and individuals for their usage in their business activities. Financial institutions that are not capital adequate stand a chance of their equity capital wiping out. Banks may try to raise additional equity but this might prove a daunting task due to their weak financial position. Liquidation is possible and this trigger possible runs on the financial institution. In 2003, Hassan and Bashir in their study on the Performance of an Islamic bank revealed capital adequacy as a major contributing factor influencing profitability. Financial strength could be well capitalized, adequately capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized (Ngugi (2007).

2.7.2 Asset Quality

Secondly, another specific variable affecting financial performance is asset quality. These assets embody current asset, loan portfolios, and medium and long term assets among other

investments. Many a time, the asset that generates most income for financial institutions is loan portfolio. The more loans booked, the more charges financial institutions derive from their loan clients through the processing of these contracts. The greatest threat posed to financial institutions under this jurisdiction is delinquency loans (Dang, 2011). This is so because non-performing loans eat up profits as huge sums of monies are written off from the books of these financial institutions (Hassan and Bashir 2003).

2.7.3 Management Efficiency

The element of management efficiency in the CAMEL model enshrines the effectiveness and efficiency of management of financial institutions. Management and directors are mandated to outline the institution‟s mission and strategies therein in accomplishing their targets. Appointment and removal of key officers and members of top management are responsibilities managements for see (Mwaura (2005). Monitoring of financial integrity with compliance of the law are essentials of efficient management (Van der Walt‟s 2005). Formulation of institutional policies governing overall service delivery is also a key constituent in the effectiveness of management.(Lyne and Collins, 2008; Zulu, 2007).

2.7.4 Liquidity

Liquidity is the ability of the financial institution to fulfill its mandate to depositors.

Liquidity is directly related to profitability (Dang 2011). The financial institutions must pursue liquidity management by keeping a good deal of cash at hand through acquiring of enough liquid assets in meeting obligations to depositors. Risk sensitivity analysis plays an important role in liquidity management.

Muriuki(2004) asserts that the evaluation of the performance of financial institutions help inform government policy from the Central Bank in assessing the effects of mergers and market structure by screening the overall liquidity and performance of such

institutions.

Lyne et al, (2008) evaluated the profitability and efficiency in South Africa with emphasis on ten regional banks. This result showed efficiency measure had a significant relationship with efficiency ratios and profitability. Dash (2009) in his study on the account of performance of four large and four small South African banks used the
Stochastic frontier model in analyzing the cost and profit efficiency. He resulted that South African banks are cost efficient and profit efficient also.

2.8 Empirical Literature

Five core assessment tools in appraising the financial performance the banking institutions was implemented in the United States by the Uniform Financial Institutions
Rating System abbreviated as UFIRS in 1979 under the tutelage of the U.S.A. Federal Reserve. This system holds the abbreviation CAMEL: enshrining five pivotal areas of assessment of financial institutions. These are “capital”, asset quality”, “management”, “earnings” and “liquidity”.

Al-Tamimi, (2010) with his findings from his research of performance of Islamic banks and conventional banks in the United Arab Emirates during 1996 to 2008 showed that liquidity, costs operational costs incurred as being major determinants in appraising the financial performances of those institutions. Gupta and Sumeet, (2007), in their study used CAMEL Model for evaluating banking sector in India. The study concluded that Indian banks are strong considered to have quality of assets and capital adequacy. Commercial banks performances were reviewed in Oman and the CAMEL model was deployed as a perfect tool in appraising performance in terms of bank size, management of asset and operational efficiency (Tarawneh2006).

Dash and Das (2010) in their study suggested public sector financial institutions improving their credit delivery procedures and policies thereof.

AL-Tamini,(2010) on his study of factors influencing performance of Islamic banks and conventional banks in United Arab Emirates resulted that liquidity and concentration were significant determinants of conventional banks performance whereas cost of number of branches significantly influenced the overall performance of Islamic banks.

Macroeconomic variables also play a crucial performance affect financial performance of banks. Variables like economic growth and inflation affect the overall financial performance of savings and loans companies. Ceteris paribus, there will be a higher demand for credit in economic booms than recessionary times and that impact significantly on profitability. Conversely, adverse macroeconomic fluctuations shrink banks operations by increasing non-performing loans.

A study on the impact of bank characteristics as well as financial structure variables on the Macao banking industry conducted by Vong and Chan (2009) resulted that asset quality as a measure of loan-loss provisions and the loan-to-total assets ratio significantly affected the performance of banks. Conversely, management efficiency as a measure of equity to total assets related positively on the performance of banks. The study concluded by saying that banks performance can be harnessed when it is well capitalized enough and borrows less from open market in financing its operations. Additionally, the study concluded that only rate of inflation exhibited a significant relationship with banks performance.

Hoffman(2011) on the determinants of the profitability of US banks during 1995 to 2007 asserted a negative link between the capital ratio and the profitability, that reiterates the thought of banks over-cautiously operating and shredding off potential profit making ventures. A negative significant operation existed between profitability and the size of a

bank. Implying a bank taking advantage of the economies of scale at a low asset size as the bank‟s size increases the economies of scale becomes exhaustive.

In 2012, Sarita, Zandi and Shahabi reviewed the determinants of banks performance for the period of 1994 to 1999 in Indonesia with the help of time series and panel data models. The study showed a negative and significant relationship between capital adequacy ratio, debt to total assets and bank performance.

Krakrah and Ameyaw (2010) in their study of the examination of the drivers of banks profitability of Ghana Commercial Bank Limited and Merchant Bank Limited found capital strength, annual inflation, total assets and growth of money supply as significant factors of banks profitability.

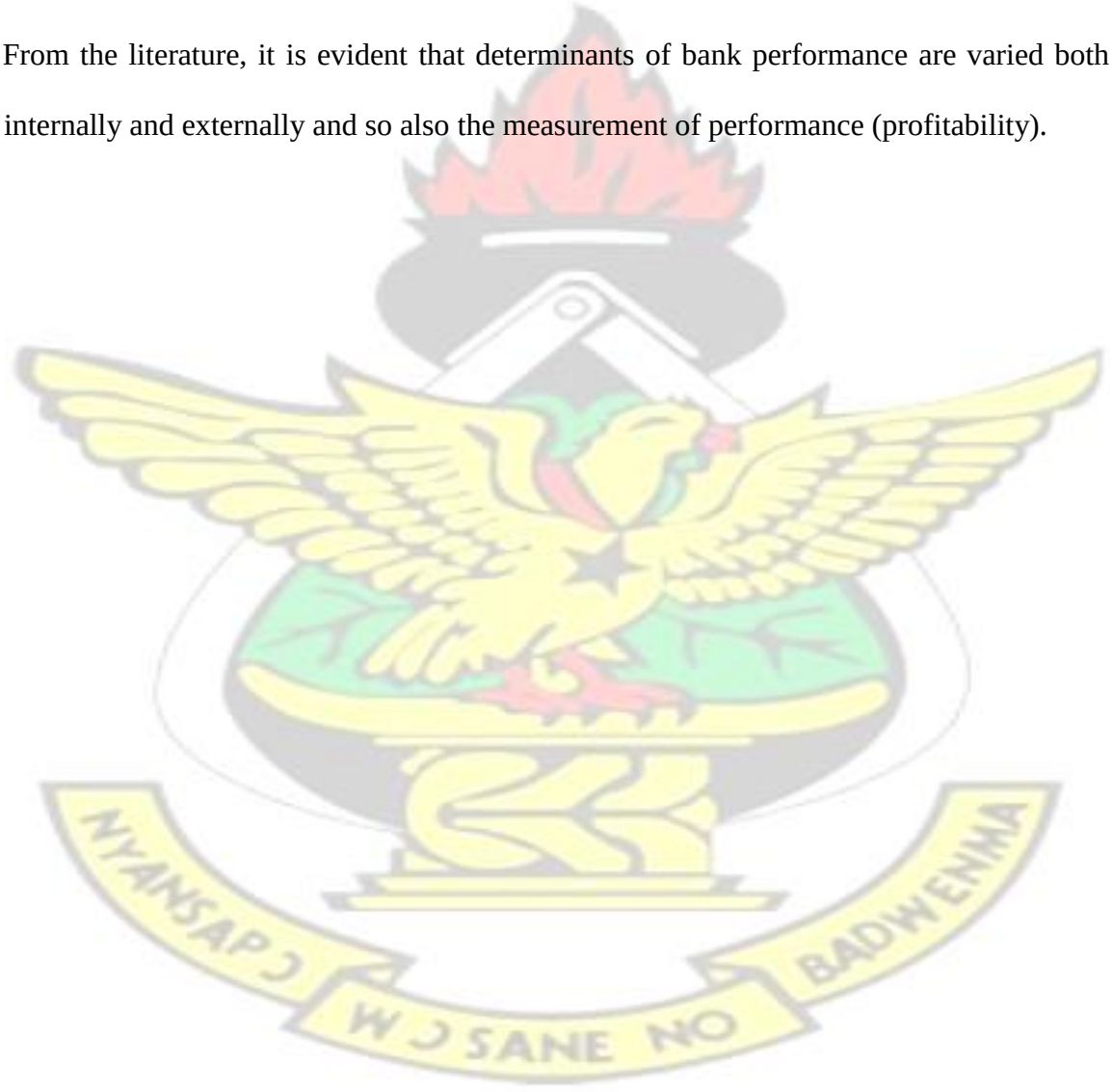
Govori (2013) observed that research studies on the determinants of banks profitability focus on returns on assets and equity and the net interest margin as measures of performance. Whether in-country or cross-country studies, Nassreddine, Fatma, and Anis (2013) argue that the determinants of banks performance can be split between those that are internal and those that are external. Internal determinants are also sometimes called microeconomic determinants or inherent performance, while external determinants are variables that reflect economic and legal environment in which the bank operates. The internal factors are bank specific variables, which influence the profitability of specific banks. These factors are within the scope of the bank to manipulate and that they differ from bank to bank. These include capital size, size of deposit liabilities, size and composition of credit portfolio, interest rate policy, labour productivity, and state of information technology, risk level, management quality, bank size, and ownership, among others (Ongore & Kusa, 2013).

Garza-Garcia (2011) analysed the determinants of bank performance in the Mexican banking sector for 2001-2009. The results of the study indicate that the lagged performance variable is positive and significant, which shows the tendency of bank profits to persist over time. Also, the Herfindahl-Hirschman index (HHI), which is a proxy for market concentration, shows no significance, thus rejecting the SCP hypothesis. The ratio of loan to total assets is negatively related to performance while capital is positive and significantly related to performance. Thus greater capital in banks reduces their funding costs and releases to them more resources to fund profitable investments. Sarita, Zandi and Shahabi (2012) examined the determinants of bank performance in Indonesia for the period 1994-1999 using pooled cross-sectional time series and dynamic panel data models. They established a negative and significant relationship between capital adequacy ratio, debt-to-total assets and bank performance. The findings, they argued, showed that bank performance was achieved not because of capital from the banks themselves, but from society‟s funds. Bank debt as debt-to-total assets also exhibited a negative relationship. The relationship between bank size and bank performance was positive implying that bank size increases bank performance.

Dang (2011) examined the determinants of bank performance across eighteen European countries and found that state-owned banks generate higher return on capital than their private sector competitors contrary to the findings in literature. They, however, attributed this to their sample which comprises a much larger proportion of state owned banks. Hassan and Bashir (2003) analysed how bank characteristics affect the performance of Islamic bank utilizing bank level data for 1994-2001, and found an inverse and statistically significant relationship between non-interest earning assets variable and performance measures. They also established significant positive relation of economic growth with performance measures.

Hassan & Bashir (2013) examined the determinants of bank interest margins in subSaharan African countries and found market concentration, bank inefficiency, equity and credit risk to be positively associated with interest margins. Liquidity ratio was negatively and significantly related to interest margins. Macroeconomic variables‟ relationship with bank performance in the study however appeared mixed. While inflation was positively related to interest margins, no evidence of significant relationship was found between economic growth and interest margins.

From the literature, it is evident that determinants of bank performance are varied both internally and externally and so also the measurement of performance (profitability).



CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The methodology employed to carry out the study is discussed in this chapter. The chapter is planned along these lines; Section 3.1 deals with research design and sample size of the study while Section 3.2 study population. 3.3 presents on sampling technique.

3.4 presents on data collection instrument and procedures.3.5 presents on data analysis. 3.6 presents on the model specification and estimation strategy and 3.7 presents on the description of variables.

3.1 Research Design

Research design can be defined as the overall strategy that is chosen to integrate the different components of a study in a coherent and logical way. A research design constitutes the blueprint for the collection, measurement, and analysis of data (De Vaus, 2001). Research design is seen as the approach or method employed in the design of a study or carried out in a research to ensure that a research problem is effectively addressed.

According to Bhattacherjee (2012), explanatory research is designed to seek descriptions of behaviours, observed phenomena and problems. It is suitable for seeking answers to „how and why" types of questions as well as pinpointing causal factors and consequences of the target occurrence (Bhattacherjee, 2012). In effect explanatory research design aids in enhancing the understanding of characters and mechanisms of relationship that exist between dependent and independent variables. In this case the explanatory research design was used for an effective analysis of the study since it aided the researcher to gain a deeper theoretical and empirical understanding on the determinants of financial performance of Opportunity International Savings and Loans Limited.

3.2 Study Population

The target population is 740 which are divided into clusters based on the 37 operating branches. The population of interest in line with this study consisted of all thirty seven (37) branches of Opportunity International Savings and Loans in Ghana. The main respondents to answering the challenges be dwindling Opportunity International was the top management members of Opportunity International and staff as well. The staff strength of Opportunity International is 740.

3.3 Sampling Technique

From the cluster of branches I purposively selected four (4) branches that are Kejetia branch, Asafo branch, Suame branch and Ashaiman branch on the basis of existence of those 4 branches from the period of emphasis and additionally their sterling performances to profitability of the institution. The researcher employed quota sampling to sample the limits within each cluster in determining the proportion of the limits in each cluster in the total sample frame. Twenty five respondents were interviewed from each of the four (4) clusters to get one hundred (100) respondents.

3.4 Data Collection Instrument and Procedures

The researcher used both primary and secondary data. Primary data was collected from employees of the sampled branches in Opportunity International using questionnaires to obtain perceptions of the respondents. This is because the type of data source is original and was collected specifically for the study. The researcher used self-administered questionnaires as the data collection instrument. The questionnaires comprised of open and closed ended questions in order to give the respondents room for airing well thought information adequate to base good judgment. Questionnaires are instruments for data collection that are defined to elicit written respondents from the subject in the study. The advantage of using the questionnaire is that the data obtained was easy to process and

analyze statistically (Saunders *et al.*, 2007). Conversely, the secondary sources were obtained from the audited financial statements of Opportunity International Savings and Loans Limited (OISL) from 2007 to 2015 as that marks the period from the institution‟s inception. Precisely data on interest income, interest expenses, operating expenses, profit before tax, total assets, equity capital, taxation and net profit were drawn from the audited financial statements.

3.5 Data Analysis and Presentation

Regression analysis was done to determine financial performance factors. Financial ratios were employed to assess the bank‟s performance in terms of profitability, liquidity, efficiency and management of credit risk. Additionally time series data analysis was done in the determination of trends levels in terms of performance. Unit root test was done with the help Augmented Dicker Fuller to test whether time series variables are non-stationary and possess a unit root by the help of Eviews software. Statistical Package for Social Sciences computer software was used in providing descriptive outputs of the challenges and products of Opportunity International Savings and Loans Limited. Descriptive statistics was employed in analyzing the available financial information. Means will be computed for key financial figures, as well as bar charts, line charts in the data presentation and analysis.

3.6 Model Specification

This section covers the multiple regression model used in this study. The multiple regression model used in determining the factors influencing financial performance of Opportunity International is explained as follows.

Generic model Y= F (Capital adequacy, Inflation, Management Inefficiency, Credit Risk)

$$Y = f(CEA, MIE, CR, INFL)$$

$$Y_1 = \beta_0 + \beta_1 CEA \quad + \beta_2 MIE \quad + \beta_3 CR \quad + \beta_4 INFL \quad + \varepsilon$$

The model developed is consistent with the studies of Samina and Ayub (2013) who studied on the financial performance of MFI"s in Ethiopia.

3.6.1 Model Measurement

Due to sample size constraint each of the bank specific determinants were modelled with the external factor being inflation to arrive at the models below

model 1 $$Y_1 = \beta_0 + \beta_1 CEA \quad + \beta_2 INFL \quad + \varepsilon$$

model 2 $$Y_1 = \beta_0 + \beta_1 CR \quad + \beta_2 INFL \quad + \varepsilon$$ model

3 $$Y_1 = \beta_0 + \beta_1 MIE \quad + \beta_2 INFL \quad + \varepsilon$$

Where Y log of net profit, CEA is capital adequacy, CR is credit risk (portfolio quality), INFL is inflation, MIE is management inefficiency

3.7. Variable Description

This section describes variables used in consistent with Ongore and Kusa (2013)

3.7.1 Dependent Variable

The dependent variable of this study is log of net profit which is represented by Y in the multiple regression model which is similar to studies of Ongore and Kusa (2013) and Sehrish et al.,(2011).The net profit of a firm or an institution is the profit realized after operating expenses and other charges including taxes, depreciation have been subtracted from total revenue. The difference between revenues generated by interest bearing-assets and the cost of servicing (interest-burdened) liabilities.

3.7.2 Independent Variables

The independent variables used in this study are clearly explained below:

Capital Adequacy

Percentage ratio of a financial institution‟s primary capital to its assets (loans and investments).A higher Capital adequacy gives a financial strength and soundness of a financial institution.

Credit Risk

Risk of default on a debt that may arise from a borrower failing to fulfill his or her indebtedness. The risk of that of a lender and includes lost principal and interest, disruption to cash flows, increased collection costs.

Management Inefficiency

Ratio of operating costs to total income

Inflation Rate

A measure of percentage change in price index over a period of time. Alternatively, the rate of inflation measures how fast a currency loses its value.

3.8 Estimation Strategy

Analysis of time series data involves three main stages, these are test for stationarity, testing for the possibility of cointegration relationship that exist between the variables and estimating the long as well as the short run coefficients. These steps are followed so as to obtain a consistent estimate of the parameters in the above specified econometric model using time series. These steps are described in sections 3.3.1 and 3.3.2

3.8.1 Unit Root Test

Most macroeconomic time series according to Asteriou and Hall (2007) are trended and as a result happen to be non-stationary on several occasions. Thus it is very imperative to conduct a test to check if the variables are stationary in order to circumvent the problem

of spurious regression. Any variable that is not stationary is expected to meander around over time, which suggests that the variables will either drift or downwards or upwards.

When two variables which are not related to each other happen to be non-stationary are considered, they both will either go up or down together, or one will go up while the other goes down. If these non-stationary series are regressed on each other, it will be revealed that they will either be moving in the same direction or alternate directions despite the fact that both are not related. To be able to discern formally the order of integration of the series, this study makes use of Augmented Dickey-Fuller (*ADF*) developed by Dickey and Fuller (1979).

3.8.2 Test for Cointegration

As discussed above, time series that are trended can possibly generate major problems in the course of conducting empirical econometrics due to what is known as spurious regressions. One of the ways to attain stationary in a non-stationary time series is to difference the variables up until they become stationary. However this approach is not without shortfalls. One of them is that the unique long run solution of the model is lost after differencing the variables.

Cointegration makes available applicable statistical procedures which will enable the researcher scrutinize the presence of an economically significant long-run association concerning the variables.

The models were designed to capture key financial determinants responsible for financial performance of Opportunity International Savings and Loans Limited.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter presents the results of the study and discusses them with a focus on the objectives, research problem and the research questions defined in Chapter one. It includes the presentation of results of trend analysis of net profit, capital adequacy ratio, management inefficiency, credit risk, inflation and the unit root followed by the outcomes of the test of the presence of cointegration and the products and services offered by Opportunity International coupled with its challenges.

4.1 Descriptive Statistics of Dependent and Independent Variables

4.1.1 Trend Analysis of Net Profit, Capital Adequacy Ratio, Management Inefficiency, Credit Risk and Inflation

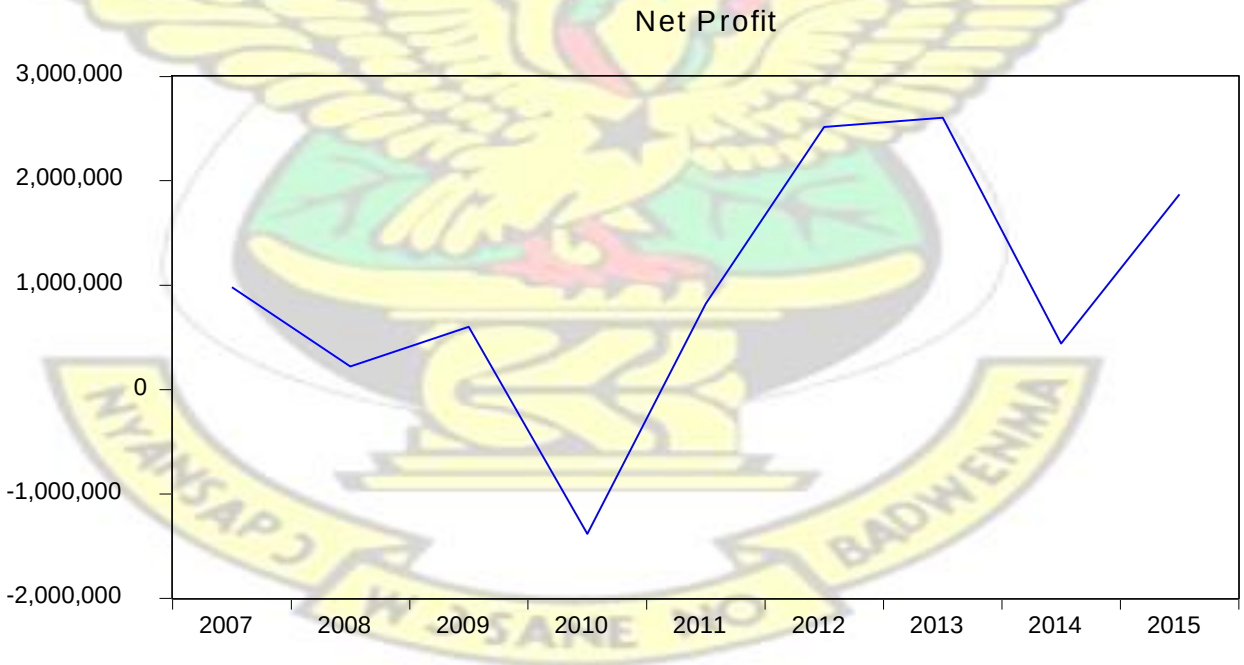


Figure 1: A graph of OISL's net profit from 2007 to 2015

The graph depicts that Opportunity International Savings and Loans Company Limited‟s net profit was 977,373 Ghana cedis in 2007 and declined sharply to 219,251 Ghana cedis in 2008. In 2009, the company‟s net profit rose from 219,251 Ghana cedis to 598,312 Ghana cedis.In 2010, the institution‟s experienced a massive downturn by recording a net loss of 1,385,366 Ghana cedis.Net profits rose sharply to 820,446 Ghana cedis, 2,514,028 Ghana cedis, 2602552 Ghana cedis and declined to 439,241 Ghana cedis in 2014.The institution in the last year of this study realized a net profit of 1,868,473 Ghana cedis

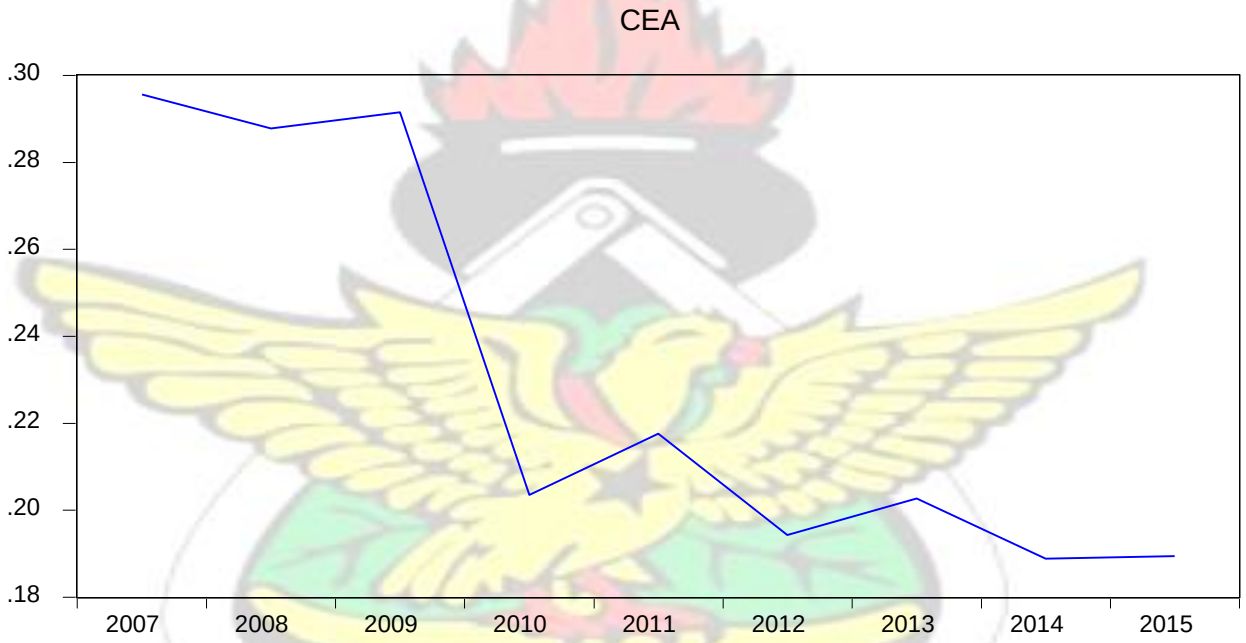


Figure 2: Graph 2: A graph showing Capital Adequacy

The graph depicts a fairly constant trend of OISL‟S capital adequacy as it‟s defined as the ratio of equity capital to total assets from 2007 to 2009.In 2010 the Capital Adequacy ratio was 0.2035.0.2176,0.1942, 0.2026,0.1888 and 0.1894 were the capital adequacy ratios for the periods of 2011, 2012, 2013,2014 and 2015 respectively.

equity capital

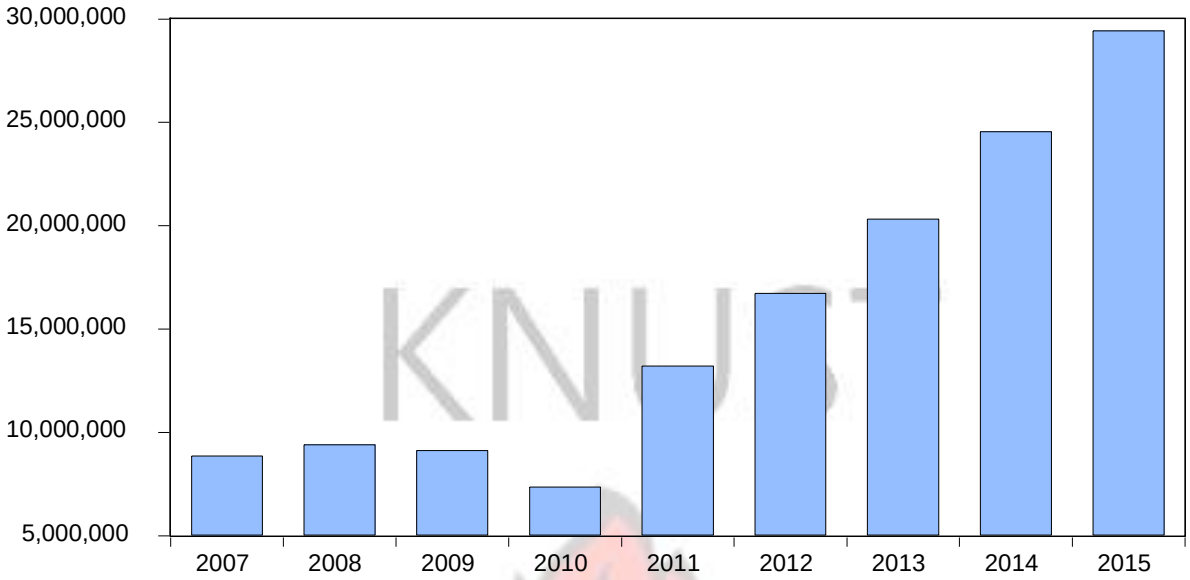


Figure 3: Bar Chart showing equity capital of OISL from 2007 to 2015

Opportunity International‟s equity capital was 8,845,540 Ghana cedis in 2007 and further increased to 9,406,807 Ghana cedisin 2008 .There was a marginal decrease to 9,126,174 Ghana cedis in 2009.In 2010, the institution experienced a major setback and had a stated equity capital of 7,351,506 which happens to the lowest stated equity capital in the history of OISL .Equity capital increased from 13,195,325 Ghana cedis, 16,720,246 Ghana cedis, 20,320,251 Ghana cedis, 24,544,330 Ghana cedis and 29,418,378 from the years 2011 to 2015 respectively.

total assets

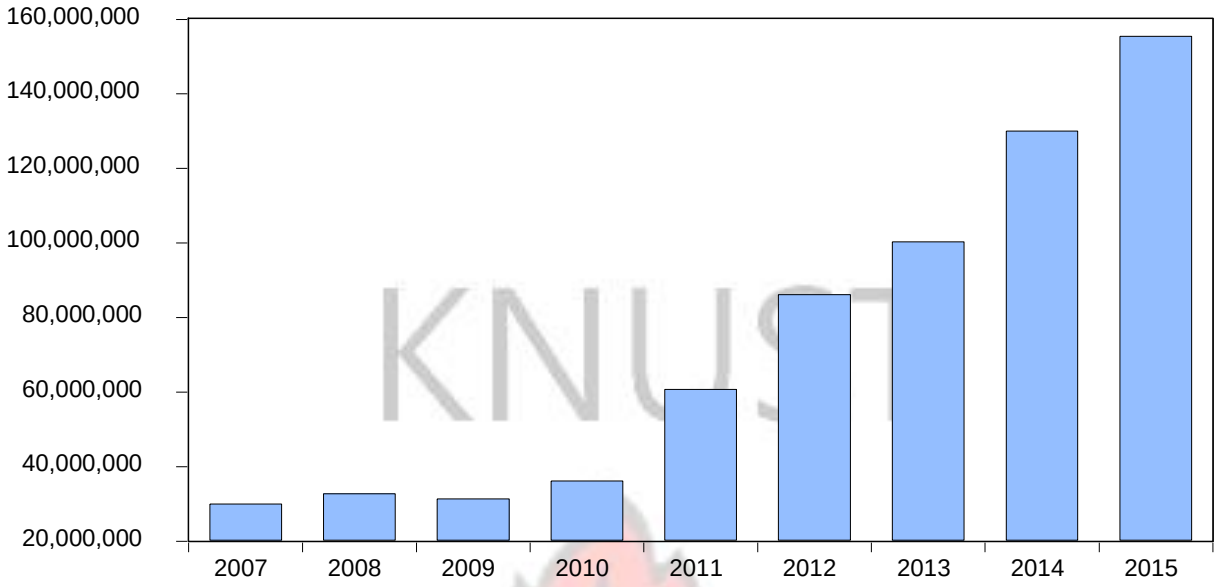


Figure 4: Bar chart showing log of total assets of OISL from 2007 to 2015

The bar chart depicts a further growth of OISL‟s assets base from 2007 to 2015.Although the institution experienced a major performance drift in all the other variables, it must be said the institution grew its assets composition. Assets composition comprises cash and cash equivalents, investment securities, due from related party, loans to customers, current tax asset, property and equipment, intangible assets and deferred tax payments.

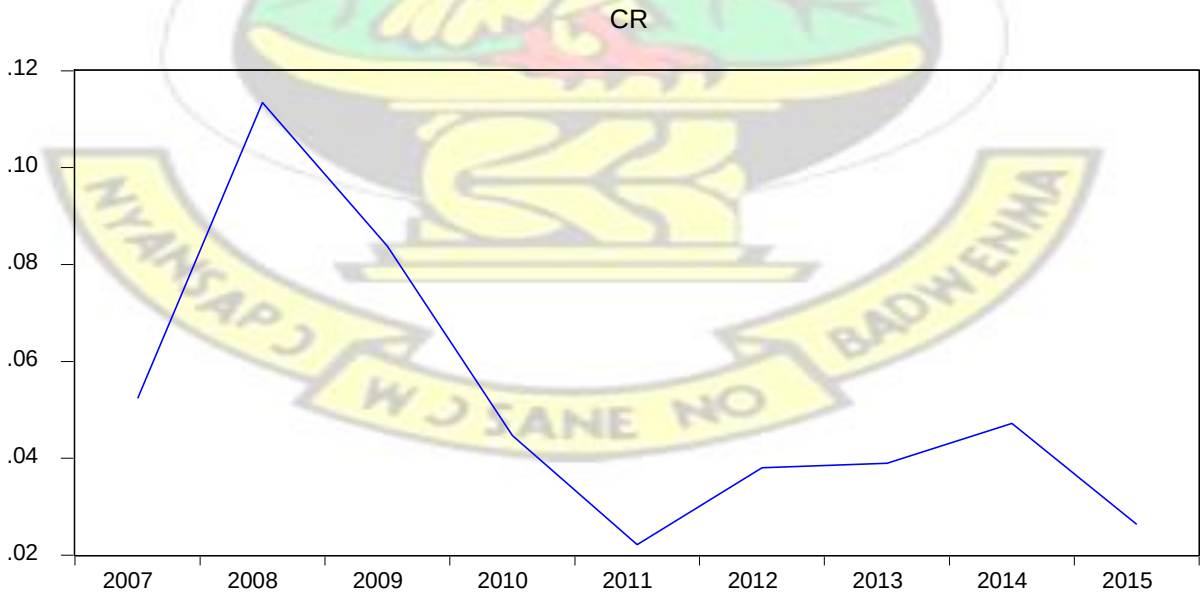


Figure 5: A graph showing OISL's Credit Risk (Loan Quality)

Credit Risk or Portfolio quality from the graph shows management should take a stern eye on portfolio quality as this erodes profits. Portfolio quality is measured as a ratio of loan loss provisions to total loans booked.

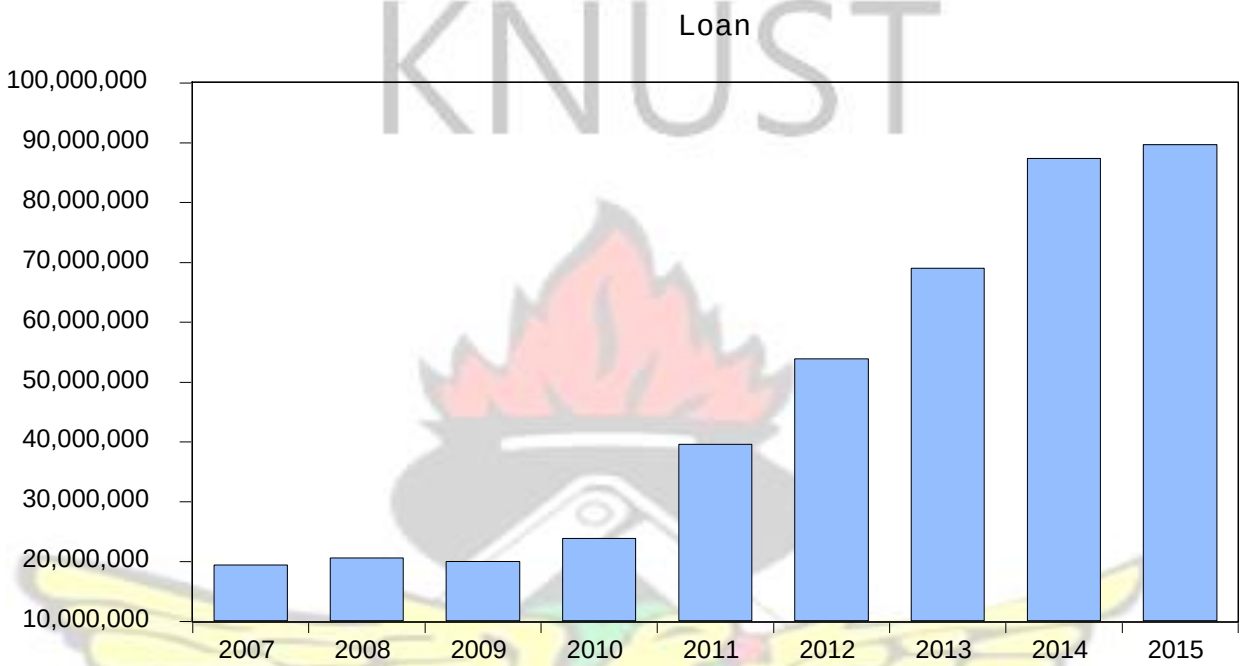


Figure 6: Bar Chart showing OISL's Loans Booked from 2007 to 2015

The bar chart depicts the institution continues to grow in terms of loans disbursements. This could be a reason why it is savings and Loans Company and a tremendous improvements in terms of loans booked enshrine its mandate as a savings and loans company.

credit loss

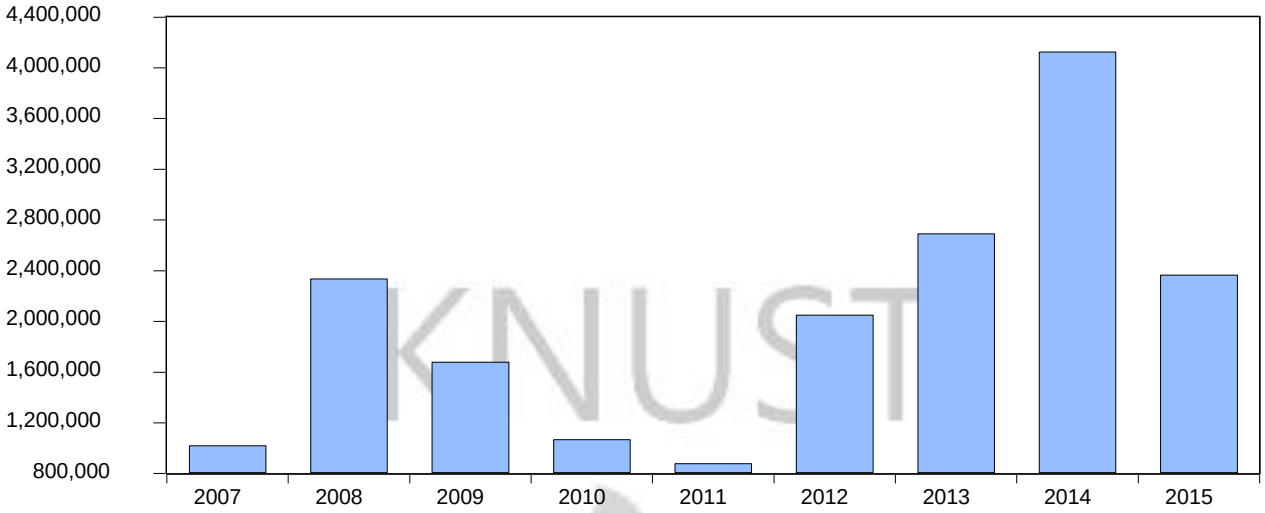


Figure 7: Graph depicting credit loss or written off loans

Credit loss as shown in the above graph is the most herculean task the institution is facing since its inception. From 2007 to 2015, a sum of 18,188,214 Ghana cedis has been written off and that is so not impressive.Measures to reduce high delinquency arising from loans default should be strictly put in place to arise such an alarming occurrence. In 2011, the institution recorded the lowest credit loss of 875,693 Ghana cedis with the highest being 4,123,449 Ghana cedis in 2014.

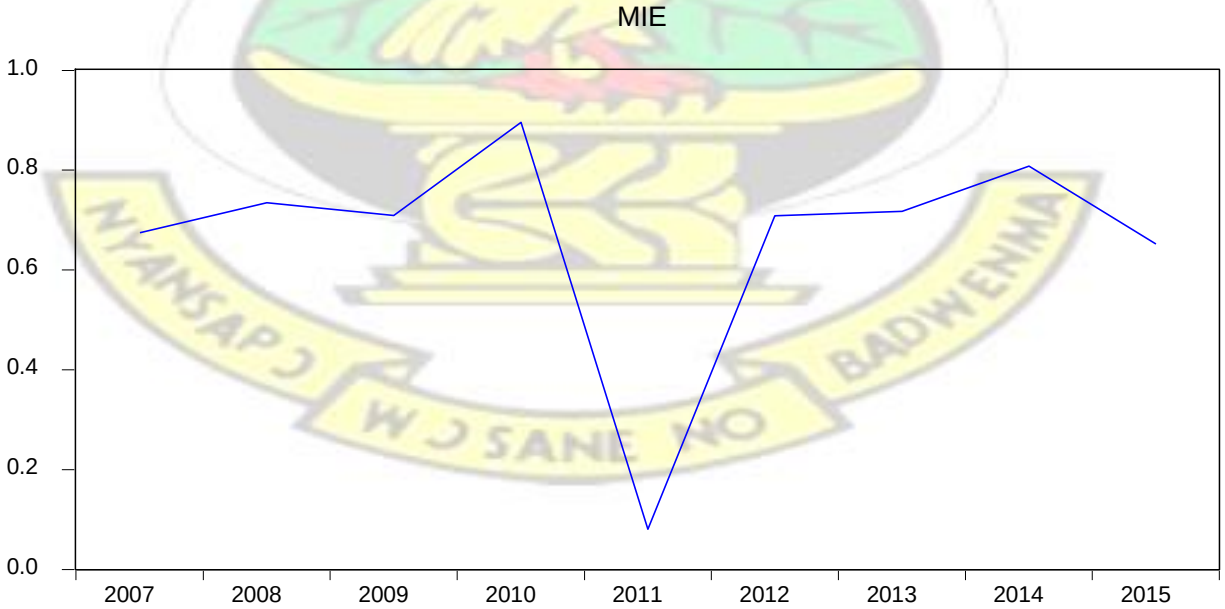


Figure 8: Graph showing management inefficiency of OISL from 2007 to 2015

Management inefficiency is the ratio of operating costs to total income. The lowest ratio was O.079909 in 2011 and the peak was 0.895882 in 2010 which shows clearly management in 2010 did lightly in managing costs.

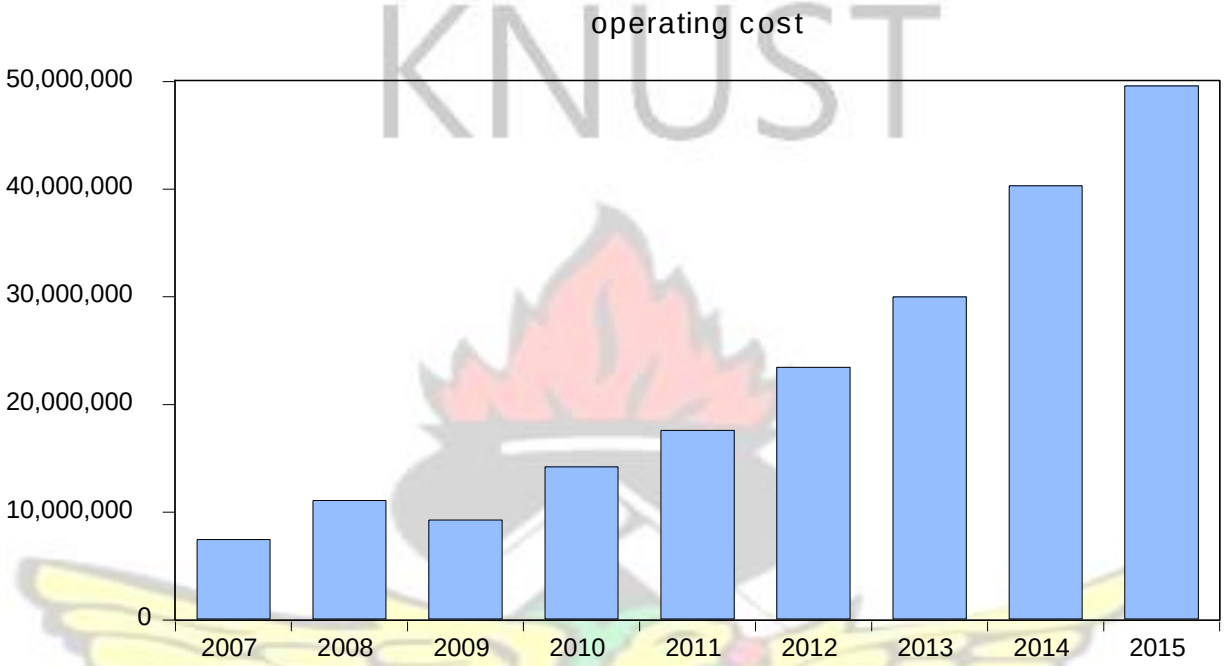


Figure 9: Graph showing OISL's operating costs from 2007 to 2015

From the graph, the peak operating cost was expended in 2015 which was 68,809,179 Ghana cedis the institution had opened more branches and had thirty seven (37). The operating costs of Opportunity International increases across the trend giving an indication of the growth and sustenance of the institution.

total operating income

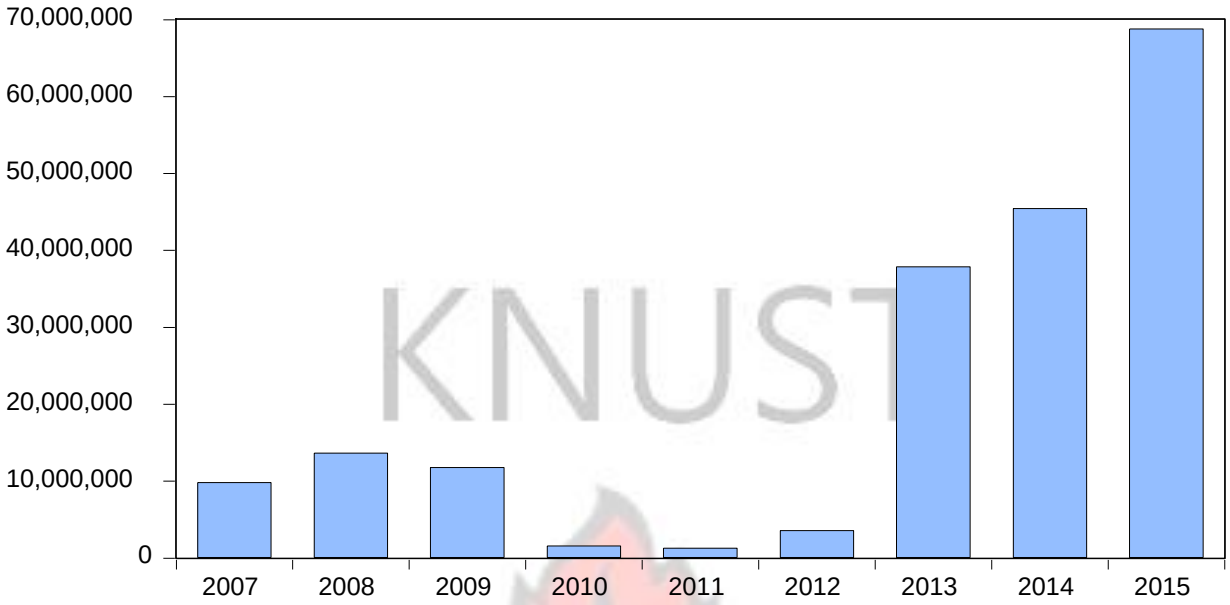


Figure 10: Graph showing OISL's total operating income from 2007 to 2015

From the graph, total operating income increased from 2007 to 2009 but reduced from 2010 through 2012.Total operating increased appreciably in 2013 through to 2015 with the peak being 76,049,006 Ghana cedis.

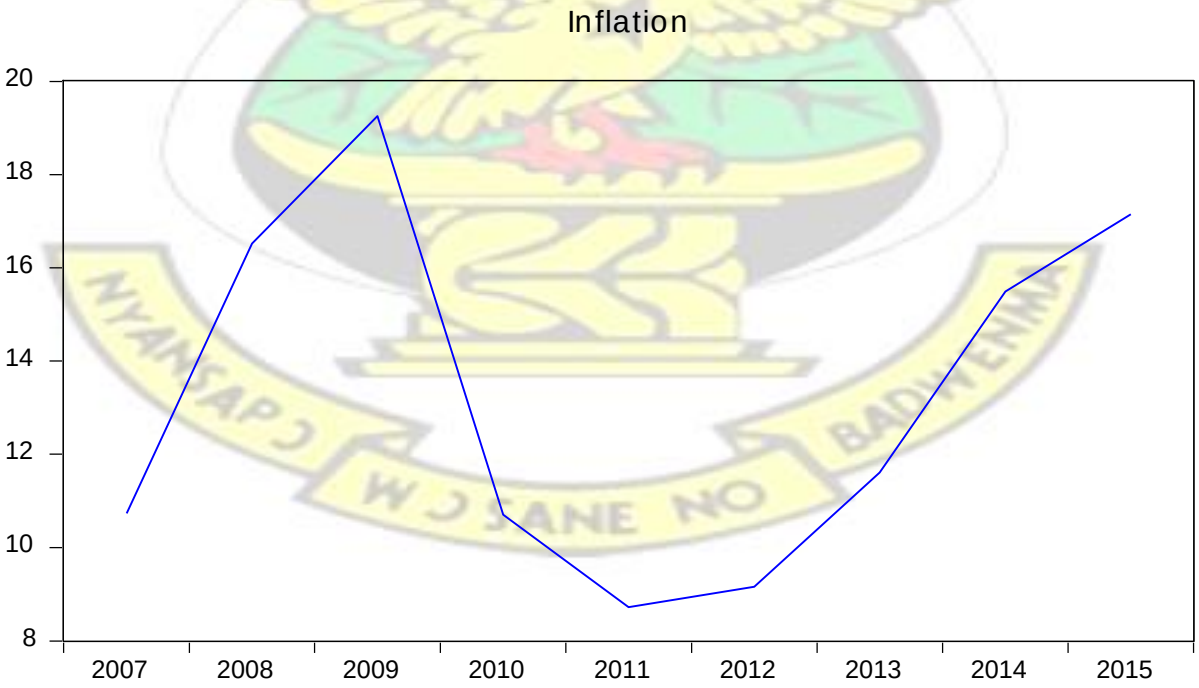


Figure 11: Graph showing Inflation of Ghana from 2007 to 2015

4.2. Unit Root Test Results

This section of the chapter reports on the unit root results on capital adequacy ratio, credit risk ratio, inflation, management inefficiency and log of net profit. The results are presented in Table 1

Table 1: Unit Root Tests of Inflation, Capital adequacy ratio, Credit Risk, Inflation and Log of Net Profit

Variable	ADF at the Level	ADF at the First Difference
CEA	-1.921669*	-3.189928***
CR	-0.879724	-2.156246**
INFLATION	0.109276	-4.217976***
MIE	-4.926674***	-
LN NET PROFIT	-0.686275	-4.217976***

*denotes 10 percent level of statistical significance, **denotes 5 percent level of statistical significance and *** 1 percent level of statistical significance

Source: Author‟s construction based on data obtained from World Bank‟s World Development Indicators and Financial Statements of Opportunity International Savings and Loans Limited

The results revealed that capital adequacy ratio is non-stationary at the 5 percent significance level but became stationary after first-difference. Thus, capital adequacy ratio is integrated of order one (I (1)). Also, credit risk is non-stationary even at the level. It attained the stationary status after first-difference, thus being an I(1) series. Inflation is non-stationary at the level and become stationary after first difference and Management inefficiency at 1 percent level of significance is stationary. Log of Net profit at the 5

percent level of significance is non-stationary but became stationary after first – difference and hence an I(1) series

4.3. Cointegration Test

Cointegration test is carried out to determine whether there is a level of relationship between profitability of Opportunity Savings and Loan Limited and its determinants. The results are presented in Table 2.

Table 2: Cointegration Test Based on ARDL Bounds Test

Model	F-value	K	Lower bound critical value	Upper bound critical value
1	9.132966	2	3.79	4.85
2	9.458721	2	3.79	4.85
3	18.17815	2	3.79	4.85

K denotes the number of explanatory variables in the model

Source: Author"s construction based on data obtained from World Bank"s World

Development Indicators and Financial Statements of Opportunity International Savings And Loans Limited Model 1 relates to the equation where inflation and capital adequacy are specified as the explanatory; model 2 relates to the equation where inflation and management inefficiency are specified as the explanatory variables; model 3 relates to the equation where inflation and credit risk are specified as the explanatory variables.

The results revealed that all the three models are cointegrated at the 5 percent level of significance. In other words there is a long-run relationship between the net profit and credit risk, management inefficiency, capital adequacy ratio and inflation. Thus, the study proceeded with the estimation of the long-run and short-run equations associated with each model.

4.4. Long Run Results of the Determinants of Financial Performance

This section presents and discusses the empirical results of the determinants of financial performance of Opportunity Savings and Loans Company. Both internal factors and external factors are included in the models to assess their significant effect on the financial performance of Opportunity Savings and Loans Companay. Table 3 shows these results.

Table 3: Long Run Results of the Determinants of Financial Performance

Variables	Model 1	Model 2	Model 3
Inflation	-0.314535	-0.345811	-0.461586
Cea	-14.540943	-	-
Mie	-	46.843186**	-
Cr	-	-	-29.448000

**denotes 5 percent statistical significance

Source: Author"s construction based on data obtained from World Bank"s World Development Indicators and Financial Statements of Opportunity International Savings and Loans Limited.

In model 1, both inflation and capital adequacy are statistical insignificant in the long run and maybe Opportunity International was operating over-cautiously to avoid eating into regulatory requirement. And thus ignoring potential profitable opportunities in the long run. Inflation is statistically insignificant in the long run because management is well able to plan for any unforeseen shocks.

In model 2, Management Inefficiency is statistically significant with profit and the management forecasting costs and Total Income affects profits in the long run. Inflation remained statistically insignificant in the long run because management is well able to plan

for any unforeseen shocks. Management inefficiency is statistically significant because an aspect of operating costs being staff renumeration was being adhered to and that perhaps motivate staffs to work efficient which intuitively pans from efficient wage model theory.

In model 3, both credit risk and inflation are statistically insignificant in the long run.

The result of Table 3 shows that the variable CR which is credit risk or loan loss provision which gives an idea of portfolio or asset quality is statistically insignificant and has a negative relationship with profitability in the long run. High non-performing loans leads to a poor financial performance as loans constitute the greatest share of OISL‟s assets that generate income from their mandate.CR which is credit risk or loan loss provision which gives an idea of portfolio or asset quality is statistically insignificant and has a negative relationship with profitability. High non-performing loans leads to a poor financial performance as loans constitute the greatest share of OISL‟s assets that generate income from their mandate. A value of -29.44 gives a net loss of a unit increase of credit risk (loan loss). Credit Risk and poor asset quality has serious repercussions on banks profitability which invariably can lead to insolvency (Bessis 2002). CR variable reported a coefficient of -29.44 which implies that a unit change of CR will further wipe off profitability by 0.29.

The variable CEA is statistically insignificant with profitability but shows a negative relationship with profitability As Adequacy is a percentage ratio of a financial institution‟s primary capital to its assets (loans and investments).A higher Capital adequacy gives a financial strength and soundness of a financial institution. The result of the trade-off (negative relation) implies that OISL‟s equity capital was not sufficient in funding its operation and therefore resorted to external funding which was expensive.

The expensive external funding in aiding its operations may have eroded profit margin. OISL must ensure efficient Capital and well capitalization if they must remain very profitable.

The macroeconomic variable inflation INFLis negatively related with profitability and OISL‟s management has to fairly strengthen their capacity of targeting inflation well and its inflation negates the impact of profitability.

4.5. Short Run Results of the Determinants of Financial Performance

This section presents and discusses the empirical results of the determinants of financial performance of Opportunity Savings and Loans Company in the short run. Both internal factors and external factors are included in the models to assess their significant effect on the financial performance of Opportunity Savings and Loans Company. Table 4 shows these results.

Table 4: Short Run Results of the Determinants of Financial Performance

Variables	Model 1	Model 2	Model 3
Inflation	0.450737	-0.215952	-1.101741
Cea		154.449136**	-
Mie	-55.576953	-	-
Cr	-	-	-95.546486
Error correction term			

**denotes 5 percent statistical significance

Source: Author‟s construction based on data obtained from World Bank‟s World Development Indicators and Financial Statements of Opportunity International Savings and Loans Limited.

In model 1, both inflation and management inefficiency are statistical insignificant in the short run and maybe capital is not efficiently being used. Inflation is statistically insignificant in the short run.

In model 2, Inflation is statistically insignificant with profit in the short run. Inflation is statistically insignificant in the short run because inflation has an insignificant p-value of 0.5308 which exceeds the common alpha level of 0.05 that suggests that changes in the predictor are not associated with changes in the response. Possibly in the short run, management is well able to plan for any unforeseen shocks. Management inefficiency is statistically significant because an aspect of operating costs being staff remuneration was being adhered to and that perhaps motivate staffs to work efficient which intuitively pans from efficient wage model theory.

Capital adequacy is statistically significant at 5% significance level in the short run and is likely to be a meaningful addition to the model because changes in the predictor‟s value are related to changes in the variable.

In model 3, in the short run model for inflation is statistically insignificant. Capital adequacy is statistical significant in the short run and is likely to be a meaningful addition to the model because changes in the predictor‟s value are related to changes in the variable. Inflation is also statistically insignificant in the short run because inflation has an insignificant p-value of 0.5308 which exceeds the common alpha level of 0.05 that suggests that changes in the predictor are not associated with changes in the response.

4.6. Products and Services Offered by OISL and level of Patronage by the Clients

From the field interview with the Chief Executive Officer OISL it was revealed that savings deposit, fixed deposit and susu deposits are the savings instruments offered by the institution whereas there are a wide range of loan products tailor-made for its clients. The

customers were also interviewed to real that product that they patronize. The results of the responses are presented in Table 5.

Table 5: Products and Services of Opportunity International

Product	Frequency	Percentage
Fixed Deposit	100	7%
Savings Deposit	100	9%
Susu Deposit	100	6%
Agric Loans	100	15%
Agric SME	100	2%
Ahoto Housing	100	0.05%
Church Loan	100	0.05%
Edufinance	100	1%
Eduloan	100	1%
Group Loan	100	30%
Individual Loans	100	23%
Institutional Lending	100	1%
Salary Loans	100	2%
Susu Loans	100	2%

Source: Field survey from OISL management and staff, 2015

From the field survey, group and individual loan products were the most widely patronized product in OISL representing 30% and 23% respectively.

Table 6: Innovative Ways to Improve Banking Services

Innovative Ways to Improve Service	Frequency	percentage

Taking financial service to door step of the customer	100	10%
High Deposit Interest Rate	100	30%
Access to Credit	100	25%
Access to Money Deposited	100	35%

Table 7: Challenges of Opportunity International Challenges OISL is facing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1=loan diversion	20	19.8	20.0	20.0
	2=long queue at banking halls	21	20.8	21.0	41.0
	3=high rate of default	19	18.8	19.0	60.0
	4=multiple borrowing	20	19.8	20.0	80.0
	5=poor addressing system	20	19.8	20.0	100.0
	Total	100	100.0	100.0	
Total		100	100.0		

Source: Field survey from OISL management and staff, 2015

The challenges identified as very striking affecting OISL performance are multiple borrowing from same clients across several organizations but with no data on the credit

reference bureau. Poor addressing system which affects effective monitoring and tracking of clients when there are defaults. Loan diversion by clients persist a challenge as well as long queues at various banking halls.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary on the findings from the work, its conclusions drawn and measures recommended to enhance better financial performance of Savings and Loans Limited in Ghana and also further areas for intuitive research.

5.1 Summary of Findings

The study examined factors influencing financial performance of Opportunity International Savings and Loans Limited and the products and services that Opportunity offers. Additionally, the challenges of Opportunity International were assessed through the administration of questionnaire to management and staff of the institution. A multiple regression model was used in determining the factors influencing financial performance of Opportunity International. Firstly, the stationarity status of the individual series in the regression model was examined to ensure that the estimated relationships are not spurious. Secondly, using the Autoregressive Distributed Lag Approach to cointegration technique, the researcher estimated for the long-run and short-run parameters of the model.

The results revealed that capital adequacy ratio is non-stationary at the 5 percent significance level but became stationary after first-difference. Thus, capital adequacy ratio is integrated of order one (I(1)). Also, credit risk is non-stationary even at the 5 percent level of significance. It attained the stationary status after first-difference, thus being an I (1) series.

Inflation and Management inefficiency is non-stationary. Log of Net profit at the 5 percent level of significance is non-stationary but became stationary after first – difference and hence an I (1) series.

CR which is credit risk or loan loss provision which gives an idea of portfolio or asset quality is statistically insignificant and has a negative relationship with profitability. High non-performing loans leads to a poor financial performance as loans constitute the greatest share of OISL"s assets that generate income from their mandate. A value of 29.44 gives a net loss of a unit increase of credit risk (loan loss). Credit Risk and poor asset quality has serious reprecussions on banks profitability which invariably can lead to insolvency. CR variable reported a coefficient of -29.44 which implies that a unit change of CR will further wipe off profitability by 0.29.

As Capital Adequacy is a percentage ratio of a financial institution"s primary capital to its assets (loans and investments).A higher Capital adequacy gives a financial strength and soundness of a financial institution. The result of the trade-off (negative relation) implies that OISL"s equity capital was not sufficient in funding its operation and therefore resorted to external funding which was expensive. The expensive external funding in aiding its operations may have eroded profit margin. OISL must ensure efficient and well capitalization if they must remain very profitable.

Inflation is statistically insignificant in the short run because inflation has an insignificant p-value of 0.5308 which exceeds the common alpha level of 0.05 that suggests that changes in the predictor are not associated with changes in the response. Possibly in the short run, management is well able to plan for any unforeseen shocks. Management inefficiency is statistically significant because an aspect of operating costs being staff remuneration was

being adhered to and that perhaps motivate staffs to work efficient which intuitively pans from efficient wage model theory**.**

5.2. Conclusions

5.2.1 Determinants of Financial Performance (Bank's Specific Variables)

5.2.1. Capital Adequacy

Capital Adequacy (CEA) was statistically significant with profitability but shows a negative relationship with profitability in the long run. As Capital Adequacy is a percentage ratio of a financial institution‟s primary capital to its assets (loans and investments).A higher Capital adequacy gives a financial strength and soundness of a financial institution. The result of the trade-off (negative relation) implies that OISL‟s equity capital was not sufficient in funding its operation and therefore resorted to external funding which was expensive. The expensive external funding in aiding its operations may have eroded profit margin. OISL must ensure efficient and well capitalization if they must remain very profitable.

5.2.2. Credit Risk (Loan loss provision)

The variable CR which is credit risk or loan loss provision which gives an idea of portfolio or asset quality is statistically significant and has a negative relationship with profitability. High non-performing loans leads to a poor financial performance as loans constitute the greatest share of OISL‟s assets that generate income from their mandate.

5.3 Determinants of Financial Performance (Macroeconomic Variable)

The result from the study indicates inflation as a macroeconomic variable was statistically significant with profitability implying OISL‟s management must be more proactive in anticipating for inflation to absorb shocks in its financial performance.

The challenges identified as very striking affecting OISL performance are multiple borrowing from same clients across several organizations but with no data on the credit reference bureau. Poor addressing system which affects effective monitoring and tracking of clients when there are defaults. Loan diversion by clients persist a challenge as well as long queues at various banking halls. OISL offers a wide range of products namely: savings account, current account, edufinance, agric loans, group loans, individual loans, ahoto housing loans with the most patronized ones being group and individual loans.

5.4. Recommendations

Taking into consideration, the challenges financial institutions are facing these days, and the reminiscences of the economic recession bedeviling them, it comes as no surprise that a growing number of banks are concentrating keenly on cutting costs, pruning payrolls and controlling their operational activities. The policy implication which emerged from this study includes the following;

A policy on efficient management should be put in place for OISL‟s operational expenses. This should be done by finding ways to obtain the optimal utilization of resources during production of banking products and services. In other word, policy instruments should be able to reduce operational expenses through cost decisions. Policy on credit risk management should be enhanced in order to improve on Asset quality, thus minimizing non-bank performing assets. Consequently, strong monitoring and control of assets should be exercised by both bank management and regulatory authority. The focus should not

only be geared towards cost cutting rather a more holistic balanced approach which gives room for capacity building that triggers the financial institution the plan for efficiency.

5.4.1 Strategies to Improve Financial Performance

Business realignment: Management must realign the business towards more cost effective lines by strategically planning, monitoring and evaluating the resources needed to compete in the market and differentiate them particularly in their line of business Channel optimization: The aim of this is to identify the ever-changing needs of clients and designing tailored-made products and services for them. It is said clients are the centre of every business and this can be enhanced through improving technical capabilities of staff to meet clients‟ changing expectations and increasing operating hours and fairly good customer service.

Cost Cutting: Personnel expenses from staff should be well managed as already impairment loss on financial assets, depreciation and amortization eat up profits. Improvement in this regard often arises through proper monitoring and bench-marking operational activities.

Staff productivity: Productivity of employees is of much concern to financial institutions in seeing growth and recouping profits. Productivity is an assessment of efficiency of a worker or group of workers. Redundancy should be brought to the barest minimum as OISL are saddled with a lot of staff with a few‟s contribution to profitability in question. The remedy is downsizing the staff strength. Management should improve motivation, reward systems, training and supervision.

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APPENDICES

Appendix 1

QUESTIONNAIRE (for Opportunity International)

Dear Respondent

This questionnaire forms part of a research on the Financial Performance of Savings and Loans Companies of in Ghana.A case study of Opportunity The questions below are being asked to enable me gather information to undertake this study. Thank you for your co-operation.

1. Name of Institution

……

2. Date of incorporation

……

3. What savings instruments do you provide to the public?

   Fixed deposit ( )

   Savings deposit ( )

   Deposits that can be withdrawn at any time

   (Demand Deposits) ( )

   Susu ( )

   Others (Please specify)

4. Who are your clientele?

   Public Servants ( )

   Small & Medium scale enterprises and Traders ( )

   Corporate Organisations ( )

   Others (specify)

5. What methods do you employ for deposit collection from your customers?

   Mobile banking teams to get to customers at their business locations ( )

   Waiting for customers to come into the banking halls ( )

   Others ( )

6. What are your hours and days of operation? (Please Specify)

……

7. What innovative schemes have you put in place to attract depositors?

   High Interest rates ( )

   Access to credit ( )

   Access to money deposited ( )

   Taking financial service to the customers at their doorstep ( )

8. At what frequency do your customers make deposits?

   Daily ( )

   Weekly ( )

   Others (specify)

9. Who are your largest categories of borrowers?

   Public servants ( )

   Medium & Large Enterprises ( )

   Petty Traders & Artisans ( )

   Corporate bodies ( )

   Others (please specify)

10. Factors considered in evaluating credit requests (please tick those applicable)

    Feasibility Studies ( )

    Collateral ( )

    Track record (repeat borrowing) ( )

Character based assessment (selection based on personal relations) ( )

Family connections or knowledge ( )

Business relations ( )

Financial Statements of clients ( )

11. Duration of loans; Short term ( )

Medium term ( )

Long term ( )

12. Processing time between loan application and disbursement :

One week- fortnight ( )

One Month ( )

13 Which of these lending approaches do you practice?

Individual based lending ( )

Group based lending ( )

14 What is your loan default experience?

High ( ) Moderate ( ) Low ( )

15 How do you protect yourself against possible loan default?

Lending against collateral ( )

Lending against cash security ( )

Through rigorous appraisal ( )

Others (Please specify)

16 Do you give loans to non savers?

Yes…… No……

17. What is the maturity profile of your loans?

Short term (within 1 year) ( )

Medium term (between 2years and five years) ( )

Long term (over 5 years) ( )

Other (please specify)

18. Which of the following measures do you adopt to reduce credit risk/default risk?

Credit rationing ( )

Collateral to strengthen repayment incentives ( )

Small loan amounts ( )

Shorter term loans ( )

Lending for certain sectoral economic activities only ( )

Lending for purposes that will provide ability to repay ( )

Others (specify)

19 How do you manage your interest rate risk?

Short term loans ( )

Transfer to customers ( )

20. How do you get information on potential borrowers before loan decisions are made?

Community and neighbourhood ties ( )

Transactions in other market ( )

The company‟s own records ( )

Others (Please specify

21. What problems do you encounter and would like to be addressed? (Please specify)

……

Thank You very much for your time

Appendix 2 Extracted from e-views software

ARDL Cointegrating And Long Run Form
Dependent Variable: LNNETPROFIT
Selected Model: ARDL(1, 0, 1)
Date: 08/06/02 Time: 20:43
Sample: 2007 2015
Included observations: 8

Cointegrating Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INFLATIO N)	-0.214328	0.302923	-0.707530	0.5302
D(CEA)	153.012828	38.764701	3.947221	0.0290
CointEq(-1)	-0.681411	0.219474	-3.104750	0.0531

Cointeq = LNNETPROFIT - (-0.3145 *INFLATION -14.5409*CEA + 22.7451)

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION	-0.314535	0.513521	-0.612506	0.5835
CEA	-14.540943	33.059510	-0.439841	0.6898
C	22.745066	8.171673	2.783404	0.0688

Cointeq = LNNETPROFIT - (-0.3458 *INFLATION + 46.8432*MIE - 14.4942)

ARDL Cointegrating And Long Run Form
Dependent Variable: LNNETPROFIT
Selected Model: ARDL(1, 0, 1)
Date: 08/06/02 Time: 20:45
Sample: 2007 2015
Included observations: 8

Cointegrating Form

Variable	Coefficient	Std. Error	t-Statistic	Pr ob.
D(INFLATION)	0.449103	0.222202	2.021151	0.1365
D(MIE)	-55.042509	8.667730	-6.350279	0.0079
CointEq(-1)	1.298695	0.488614	2.657918	0.0765

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION	-0.345811	0.256048	-1.350573	0.2697
MIE	46.843186	13.335540	3.512658	0.0391
C	-14.494241	6.101716	-2.375437	0.0980

ARDL Cointegrating And Long Run Form
Dependent Variable: LNNETPROFIT
Selected Model: ARDL(1, 1, 1)
Date: 08/06/02 Time: 20:48
Sample: 2007 2015
Included observations: 8

Cointegrating Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.

	1.091601			
D(INFLATION)	0.307917		3.545109	0.0712
D(CR)	-94.931032	45.635279	-2.080211	0.1730
CointEq(-1)	-1.142996	0.223031	-5.124839	0.0360

Cointeq = LNNETPROFIT - (-0.4616 *INFLATION -29.4480*CR + 18.5082)

Long Run Coefficients

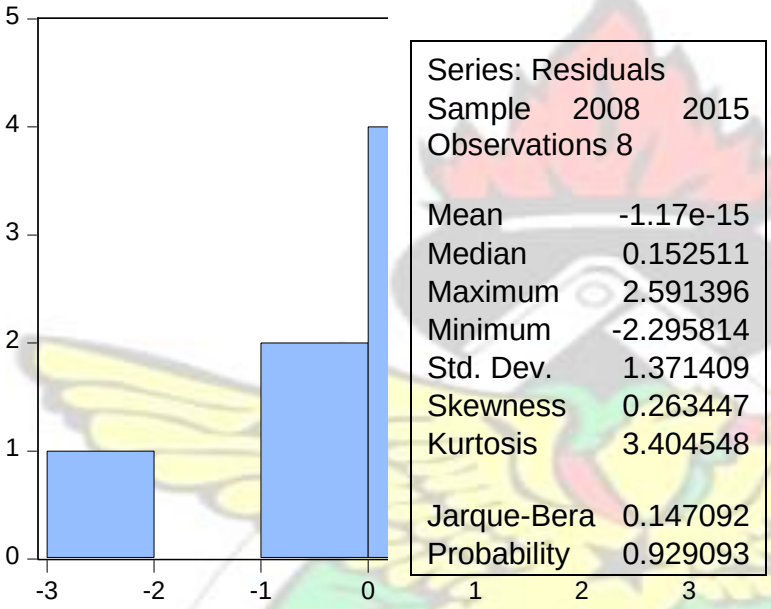
Variable	Coefficient	Std. Error	t-Statistic	Prob.
	-0.461586	0.524379	-0.880253	
INFLATION				0.4716
CR	-29.448000	46.747958	-0.629931	0.5931
C	18.508210	5.237523	3.533772	0.0716

Dependent Variable: LNNETPROFIT
Method: ARDL
Date: 08/06/02 Time: 23:15
Sample (adjusted): 2008 2015
Included observations: 8 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (1 lag, automatic): INFLATION CEA
Fixed regressors: C
Number of models evalulated: 4
Selected Model: ARDL(1, 0, 1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
		0.219474		
LNNETPROFIT(-1)	0.318589		1.451607	0.2425
INFLATION	-0.214328	0.302923	-0.707530	0.5302
CEA	153.0128	38.76470	3.947221	0.0290
CEA(-1)	-162.9212	29.11109	-5.596532	0.0113
C	15.49873	4.736034	3.272512	0.0467

R-squared	0.921431	Mean dependent var	12.03546
Adjusted R-squared	0.816672	S.D. dependent var	4.892612
S.E. of regression	2.094861	Akaike info criterion	4.586022
Sum squared resid	13.16533	Schwarz criterion	4.635673
Log likelihood	-13.34409	Hannan-Quinn criter.	4.251147
F-statistic	8.795729	Durbin-Watson stat	3.054325
Prob(F-statistic)	0.052462		

*Note: p-values and any subsequent tests do not account for model selection.



Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.327696	Prob. F(1,2)	0.3683
Obs*R-squared	3.191869	Prob. Chi-Square(1)	0.0740

Test Equation:
Dependent Variable: RESID
Method: ARDL
Date: 08/06/02 Time: 23:16
Sample: 2008 2015
Included observations: 8
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.

		0.243574		
LNNETPROFIT(-1)	0.145307		0.596563	0.6113
INFLATION	-0.174440	0.325031	-0.536688	0.6452
CEA	20.55206	40.90059	0.502488	0.6652
CEA(-1)	-11.54479	29.40048	-0.392674	0.7325
C	-1.239526	4.623681	-0.268082	0.8138
RESID(-1)	-0.752762	0.653293	-1.152257	0.3683

R-squared	0.398984	Mean dependent var	-1.17 E-15
Adjusted R-squared	-1.103557	S.D. dependent var	1.371409
S.E. of regression	1.989042	Akaike info criterion	4.326889
Sum squared resid	7.912578	Schwarz criterion	4.386470
Log likelihood	-11.30756	Hannan-Quinn criter.	3.925038
F-statistic	0.265539	Durbin-Watson stat	2.541429
Prob(F-statistic)	0.899449		

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	4.978876		
		Prob. F(4,3)	0.1091
Obs*R-squared	6.952674	Prob. Chi-Square(4)	0.1384
Scaled explained SS	1.175487	Prob. Chi-Square(4)	0.8821

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 08/06/02 Time: 23:17
Sample: 2008 2015
Included observations: 8

Variable	Coefficie nt	Std. Error	t-Statistic	Prob.
C	4.186721	3.408775	1.228219	0.3069
LNNETPROFIT(-1)	0.556859	0.157967	3.525168	0.0388
INFLATION	-0.830119	0.218030	-3.807362	0.0318
CEA	59.67671	27.90101	2.138872	0.1220
CEA(-1)	-47.49900	20.95280	-2.266952	0.1082

R-squared	0.869084	Mean dependent var	1.645666
Adjusted R-squared	0.694530	S.D. dependent var	2.728063

S.E. of regression	1.507783	Akaike info criterion	3.928328
Sum squared resid	6.820226	Schwarz criterion	3.977979
Log likelihood	-10.71331	Hannan-Quinn criter.	3.593452
F-statistic	4.978876	Durbin-Watson stat	2.535993
Prob(F-statistic)	0.109119		

ARDL Bounds Test
Date: 08/06/02 Time: 23:17
Sample: 2008 2015
Included observations: 8
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	9.132966	2

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	3.17	4.14
5%	3.79	4.85
2.5%	4.41	5.52
1%	5.15	6.36

Test Equation:
Dependent Variable: D(LNNETPROFIT)
Method: Least Squares
Date: 08/06/02 Time: 23:17
Sample: 2008 2015
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
		29.10738		
D(CEA)	120.8422		4.151600	0.0254
C	17.67095	4.645714	3.803711	0.0319
INFLATION(-1)	-0.264861	0.241464	-1.096892	0.3528
CEA(-1)	-13.06287	18.33711	-0.712374	0.5276
LNNETPROFIT(-1)	-0.797138	0.158209	-5.038496	0.0151

R-squared	0.969998	Mean dependent var	0.081001
Adjusted R-squared	0.929996	S.D. dependent var	7.225666
S.E. of regression	1.911780	Akaike info criterion	4.403117
Sum squared resid	10.96470	Schwarz criterion	4.452768
Log likelihood	-12.61247	Hannan-Quinn criter.	4.068241
F-statistic	24.24874	Durbin-Watson stat	2.942068

Prob(F-statistic)	0.012758

Dependent Variable: LNNETPROFIT
Method: ARDL
Date: 08/06/02 Time: 23:19
Sample (adjusted): 2008 2015
Included observations: 8 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (1 lag, automatic): INFLATION MIE
Fixed regressors: C
Number of models evalulated: 4

Selected Model: ARDL(1, 0, 1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
		0.488614		
LNNETPROFIT(-1)	2.298695		4.704525	0.0182
INFLATION	0.449103	0.222202	2.021151	0.1365
MIE	-55.04251	8.667730	-6.350279	0.0079
MIE(-1)	-5.792510	3.542485	-1.635154	0.2005
C	18.82360	3.068743	6.133978	0.0087

R-squared	0.948635	Mean dependent var	12.03546
Adjusted R-squared	0.880149	S.D. dependent var	4.892612
S.E. of regression	1.693798	Akaike info criterion	4.160994
Sum squared resid	8.606854	Schwarz criterion	4.210645
Log likelihood	-11.64398	Hannan-Quinn criter.	3.826119
F-statistic	13.85146	Durbin-Watson stat	2.411853
Prob(F-statistic)	0.028206		

*Note: p-values and any subsequent tests do not account for model selection.

ARDL Bounds Test
Date: 08/06/02 Time: 23:19
Sample: 2008 2015
Included observations: 8
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	9.458721	2

Critical Value Bounds

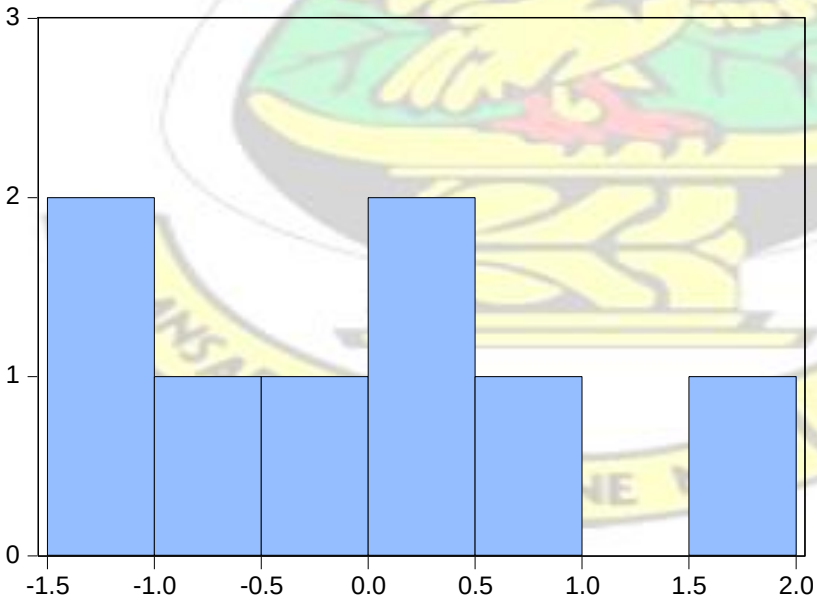
Significance	I0 Bound	I1 Bound
10%	3.17	4.14
5%	3.79	4.85
2.5%	4.41	5.52

1%	5.15	6.36

Test Equation:
Dependent Variable: D(LNNETPROFIT)
Method: Least Squares
Date: 08/06/02 Time: 23:19
Sample: 2008 2015
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
	-61.96150	20.44089	-3.031253	
D(MIE)				0.0563
C	19.22526	4.891991	3.929945	0.0293
INFLATION(-1)	0.086989	0.460128	0.189053	0.8621
MIE(-1)	-63.97637	22.86417	-2.798106	0.0680
LNNETPROFIT(-1)	1.855585	0.952095	1.948949	0.1464

R-squared	0.945037	Mean depende nt var	0.081001
Adjusted R-squared	0.871753	S.D. dependent var	7.225666
S.E. of regression	2.587621	Akaike info criterion	5.008526
Sum squared resid	20.08735	Schwarz criterion	5.058177
Log likelihood	-15.03410	Hannan-Quinn criter.	4.673650
F-statistic	12.89559	Durbin-Watson stat	3.080041
Prob(F-statistic)	0.031152		



Series: Residuals
Sample 2008 2015
Observations 8

Mean	-2.66e-15
Median	0.072822
Maximum	1.891258
Minimum	-1.384800
Std. Dev.	1.108851
Skewness	0.262479
Kurtosis	2.172153
Jarque-Bera	0.320304
Probability	0.852014

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.890675	Prob. F(1,2)	0.4449
Obs*R-squared	2.464961	Prob. Chi-Square(1)	0.1164

Test Equation:
Dependent Variable: RESID
Method: ARDL
Date: 08/06/02 Time: 23:20
Sample: 2008 2015 Included observations: 8
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNNETPROFIT(-1)	0.147740	0.521803	0.283134	0.8037
INFLATION	-0.076253	0.240352	-0.317254	0.7811
MIE	-0.915125	8.883196	-0.103018	0.9273
MIE(-1)	1.177269	3.818362	0.308318	0.7870
C	-0.779736	3.233566	-0.241138	0.8319
RESID(-1)	-0.741371	0.785553	-0.943756	0.4449

R-squared	0.308120	Mean dependent var	-2.66 E-15
Adjusted R-squared	-1.421579	S.D. dependent var	1.108851
S.E. of regression	1.725530	Akaike info criterion	4.042651
Sum squared resid	5.954908	Schwarz criterion	4.102233
Log likelihood	-10.17061	Hannan-Quinn criter.	3.640800
F-statistic	0.178135	Durbin-Watson stat	2.018217
Prob(F-statistic)	0.947301		

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.545466	Prob. F(4,3)	0.7187
Obs*R-squared	3.368463	Prob. Chi-Square(4)	0.4982
Scaled explained SS	0.277619	Prob. Chi-Square(4)	0.9912

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 08/06/02 Time: 23:21
Sample: 2008 2015
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.319534	2.622089	-0.884613	0.4415
LNNETPROFIT(-1)	0.129095	0.417496	0.309213	0.7774
INFLATION	0.114254	0.189860	0.601779	0.5898

MIE	-0.908041	7.406146	-0.122606	0.9102
MIE(-1)	1.355994	3.026878	0.447984	0.6845

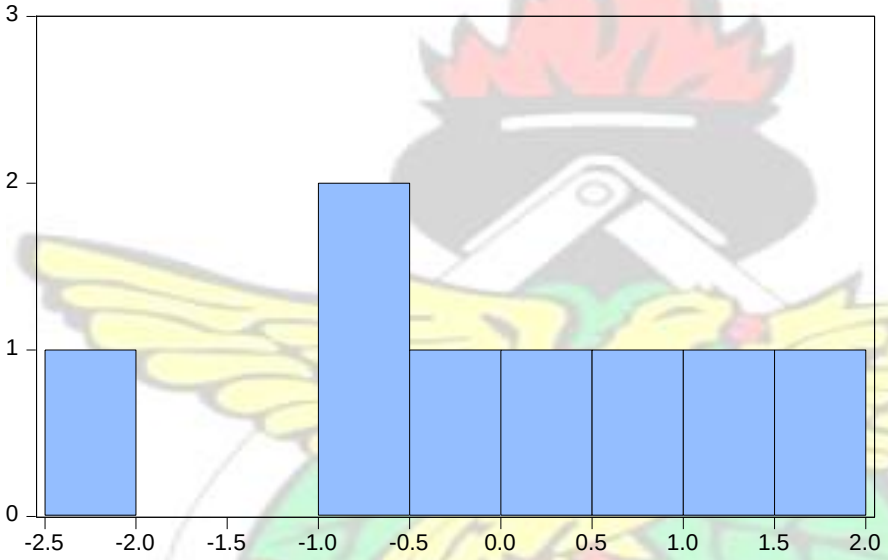
R-squared	0.421058	Mean dependent var	1.075857
Adjusted R-squared	-0.350865	S.D. dependent var	1.245210
S.E. of regression	1.447266	Akaike info criterion	3.846401
Sum squared resid	6.283740	Schwarz criterion	3.896052
Log likelihood	-10.38560	Hannan-Quinn criter.	3.511525
F-statistic	0.545466	Durbin-Watson stat	2.525543
Prob(F-statistic)	0.718725		

Dependent Variable: LNNETPROFIT
Method: ARDL
Date: 08/06/02 Time: 23:21
Sample (adjusted): 2008 2015
Included observations: 8 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (1 lag, automatic): INFLATION CR
Fixed regressors: C
Number of models evalulated: 4
Selected Model: ARDL(1, 1, 1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
	-0.142996	0.223031	-0.641151	
LNNETPROFIT(-1)				0.5871
INFLATION	1.091601	0.307917	3.545109	0.0712
INFLATION(-1)	-1.619192	0.482958	-3.352654	0.0786
CR	-94.93103	45.63528	-2.080211	0.1730
CR(-1)	61.27208	70.04846	0.874710	0.4740
C	21.15482	4.371010	4.839800	0.0401

R-squared	0.936736	Mean dependent var	12.03546
Adjusted R-squared	0.778576	S.D. dependent var	4.892612
S.E. of regression	2.302253	Akaike info criterion	4.619359
Sum squared resid	10.60074	Schwarz criterion	4.678940
Log likelihood	-12.47744	Hannan-Quinn criter.	4.217508
F-statistic	5.922714	Durbin-Watson stat	2.450060
Prob(F-statistic)	0.150735		

*Note: p-values and any subsequent tests do not account for model selection.



Series: Residuals
Sample 2008 2015
Observations 8

Mean	3.55e-15
Median	-0.161672
Maximum	1.912554
Minimum	-2.072479
Std. Dev.	1.230606
Skewness	-0.068010
Kurtosis	2.420757
Jarque-Bera	0.118008
Probability	0.942703

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.611903	Prob. F(1,1)	0.5774
Obs*R-squared	3.036921	Prob. Chi-Square(1)	0.0814

Test Equation:
Dependent Variable: RESID
Method: ARDL
Date: 08/06/02 Time: 23:22
Sample: 2008 2015 Included observations: 8
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
		0.364729		
LNNETPROFIT(-1)	0.208886		0.572717	0.6689
INFLATION	-0.341643	0.555329	-0.615208	0.6489
INFLATION(-1)	-0.391577	0.734841	-0.532873	0.6883
CR	-1.977343	50.89588	-0.038851	0.9753
CR(-1)	70.96757	119.6616	0.593069	0.6592
C	3.150487	6.318753	0.498593	0.7055
RESID(-1)	-1.334094	1.705474	-0.782242	0.5774

R-squared	0.379615	Mean dependent var	3.55E-15
Adjusted R-squared	-3.342694	S.D. dependent var	1.230606
S.E. of regression	2.564476	Akaike info criterion	4.391944
Sum squared resid	6.576536	Schwarz criterion	4.461455
Log likelihood	-10.56777	Hannan-Quinn criter.	3.923118
F-statistic	0.101984	Durbin-Watson stat	2.782393
Prob(F-statistic)	0.979711		

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.349880		
		Prob. F(5,2)	0.8513
Obs*R-squared	3.732651	Prob. Chi-Square(5)	0.5885
Scaled explained SS	0.165725	Prob. Chi-Square(5)	0.9994

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 08/06/02 Time: 23:22
Sample: 2008 2015
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C		4.380249		
	1.609067		0.367346	0.7486
LNNETPROFIT(-1)	0.154718	0.223502	0.692244	0.5604
INFLATION	0.084045	0.308568	0.272371	0.8109
INFLATION(-1)	-0.098572	0.483979	-0.203671	0.8575
CR	-23.01242	45.73174	-0.503205	0.6648
CR(-1)	-14.94046	70.19653	-0.212838	0.8512

R-squared	0.466581	Mean dependent var	1.325092
Adjusted R-squared	-0.866965	S.D. dependent var	1.688503
S.E. of regression	2.307119	Akaike info criterion	4.623582

Sum squared resid	10.64560	Schwarz criterion	4.683163
Log likelihood	-12.49433	Hannan-Quinn criter.	4.221731
F-statistic	0.349880	Durbin-Watson stat	3.445609
Prob(F-statistic)	0.851297		

ARDL Bounds Test
Date: 08/06/02 Time: 23:23
Sample: 2008 2015
Included observations: 8
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	18.17815	2

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	3.17	4.14
5%	3.79	4.85
2.5%	4.41	5.52
1%	5.15	6.36

Test Equation:
Dependent Variable: D(LNNETPROFIT)
Method: Least Squares
Date: 08/06/02 Time: 23:23
Sample: 2008 2015
Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INFLATION)	0.307917	1.091601	3.545 109	0.0712
D(CR)	-94.93103	45.63528	-2.080211	0.1730
C	21.15482	4.371010	4.839800	0.0401
INFLATION(-1)	-0.527591	0.541920	-0.973558	0.4330
CR(-1)	-33.65896	54.79307	-0.614292	0.6016
LNNETPROFIT(-1)	-1.142996	0.223031	-5.124839	0.0360

R-squared	0.970994	Mean dependent var	0.081001
Adjusted R-squared	0.898480	S.D. dependent var	7.225666

S.E. of regression	2.302253	Akaike info criterion	4.619359
Sum squared resid	10.60074	Schwarz criterion	4.678940
Log likelihood	-12.47744	Hannan-Quinn criter.	4.217508
Durbin-Watson stat	2.450060		
Prob(F-statistic)	0.070944