# ASSESSING THE IMPACT OF FISCAL AND MONETARY POLICIES ON THE FINANCIAL PERFORMANCE OF UNIVERSAL BANKS IN GHANA AND ITS EFFECT ON THE ECONOMY. USING ECOBANK GHANA LTD AS A CASE STUDY

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By Anthony Madana

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This Thesis by Anthony Madana has been approved by the committee members below, who recommend it be accepted by the faculty of Unicaf University in partial fulfillment of requirements for the degree of

Doctor of Philosophy (Ph.D.) in Accounting and Finance

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# Abstract

## ASSESSING THE IMPACT OF FISCAL AND MONETARY POLICIES ON THE FINANCIAL PERFORMANCE OF UNIVERSAL BANKS IN GHANA AND ITS EFFECT ON THE ECONOMY. USING ECOBANK GHANA LTD AS A CASE STUDY

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The triangulation of the mixed-method survey study assessed the impact of fiscal and monetary policies on the financial performance of universal banks in Ghana and their effect on the economy, using Ecobank Ghana as a case study. The effective and efficient implementation of fiscal and monetary policy tools has become a critical challenge facing the nation's economy in influencing the macroeconomic variables and the inefficient operation of the banking industry. The study adopted a concurrent, deductive, explanatory, and case study strategy based on a cross-sectional study using primary sources of questionnaire and secondary sources of document analysis. The response rate was 75% for 61 questionnaires and 5 interviews. Using the SPSS software, the data was statistically analysed using thematic, descriptive, and inferential statistical analyses. The analysis of inferential statistics results by the use of the correlation matrix indicates that government spending, taxation, inflation rate, and earnings quality positively and statistically significantly correlated to ROA and ROE. At a 95% confidence level, management operational efficiency negatively and statistically significantly correlated to ROA and ROE. However, GDP growth and liquidity measurement were negatively correlated to ROA and ROE but statistically nonsignificant. The adjusted R square of fiscal policy tools and the internal control factors of 42.1%, 38.3%, and 87.0%, 68.1% correlated positively and significantly to ROA and ROE,

respectively. Further study may be required to compare different banks' results through another methodology to capture the impact of the independent variables on the bank's profitability.

## Declaration

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own.

## Copyright Page

## Dedication

This PhD dissertation work is dedicated to my wife Joyce Asirifi Madana, my children Samuella Pokuaa Madana and Samuel Asamoah Madana, Dr. Samuel Badu-Nyarko of blessed memory (University of Ghana), and finally to all my Lifehouse Baptist Chapel members, especially Helena Poku.

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## Abbreviations/Acronyms

ADB-Agriculture Development Bank

AECT-Association for Educational Communications and Technology

ANOVA-Analysis of Variance

ATM-Automated Teller Machine

AQ-Asset Quality

BBGL-Ecobank Ghana Ltd

BOB- Bank of Baroda

BOG-Bank of Ghana

CA-Capital Adequacy

CAR-Capital Adequacy Ratio

CBB-Central Bank of Belize

CBGL-Consolidated Bank Ghana Limited

CFI-Corporate Finance Institute

CRR-cash reserve ratio

DMBs-Deposits Money Banks

DR-Discount Rate

E-Earnings

ECB-European Central Bank

FBN-First Bank of Nigeria

FINSAP-Financial Sector Adjustment Programs

FNB-First National Bank

GDP-Gross Domestic Product

GCB-Ghana Commercial Bank

GDPG-Gross Domestic Product Growth

GTB-Guaranty Trust Bank

GS-Government Spending

IEA- Institute of Economic Affairs

IMF-International Monetary Fund

INFR-Inflation Rates

IR-Interest Rates

L-Liquidity

ME-Management Efficiency

MPR-Monetary Policy Rate

MTN-Mobile Telephone Network

NAS-National Academy of Sciences

NDPC National Development Planning Commission

NEW-New World Encyclopedia

NIH-National Institutes of Health

NPL-Non-Performing Loans

OMO-Open Market Operations

ORI-Office of Research Integrity

PwC-Price waterhouse Coopers

ROA-Return on Asset

ROE-Return on Equity

RR-Reserve Requirements

SG-Societe General

SMEs.-Small Medium Enterprise

SMR-Sensitivity to Market Risk

TX-Taxation

UBA-United Bank for Africa

UNEP- UN Environment Programme

UREC-Unicaf Research Ethics Committee

WBG-World Bank Group

WHO-World Health Organization

UNEP-United Nations Environment Programme

## Definition of Concepts

**Asset Quality:** It is the rating of an organization's stability to risk and soundness of assets in assessing the fairness of the diversity and the quality of investments, such as current and fixed assets, credit portfolio, investments and operations and loan quality in terms of earnings and the appropriateness of risk factors.

**CAMELS' Rating System:** Refers to a standardised system of operation in rating financial institutions based on specific factor ratios using financial statements. Measured with an assigned score on a scale from a rating of one as the best quality institution with a strong performance and sound operations to a rating of five as the worst institution with unsatisfactory performance.

**Capital Adequacy:** It is the rating of an organization's level, quality of a bank's capital to credit, market risk and trend and the bank's financial capability and conditions. Analysing the capital performance in terms of quality and strength of earnings and the reasonableness of dividends and interest in protecting the bank's creditors.

**Discount Rate:** Refers to the rate of borrowing from the central bank discount window by depository financial institutions when in need of excess liquidity to meet reserve requirements and by extension of giving more loans to the general public and institutions.

**Earnings:** Refers to the assessment of institution stability and ability to generate appropriately quality and good sources of income and returns and in analysing, evaluating and demonstrating to shareholders the firm's earnings potential and quality, sustainability and the ability in generating profits compared to operating costs, earnings volatility and shareholders' equity.

**Fiscal Policy:** Refers to the strategic application and introduction of new laws in changing and adjusting government spending levels, borrowings and taxation to stabilize the nation's macroeconomic factors in controlling the economy to achieve economic growth.

**Government Spending:** It is the purchase of goods and services, payment and investments in public projects and of salaries, infrastructure and subsidies to boost economic growth and the stabilization of macroeconomic activities.

**Liquidity:** This is the determination of the institution's readiness in maintaining liquid cash and the easiness of converting the bank's marketable assets into cash. It is the bank's ability in achieving its short-term commitment to satisfying its financial obligations, withstanding unanticipated depositors' withdrawals and potential fluctuations leading to liquidity shocks, without having any effect on the institution's daily operations and loan obligations.

**Management Efficiency:** Relates to the management of risk portfolio at each level of operations by diagnosing and administering an oversight responsibility of management performance and capability to plan, come out with and able to quantify, manage and reduce risk of the company per day's operations and the general performance of the company.

**Monetary Policy:** Refers to the application of strategic measures and the operationalization of the central bank's toolkits such as discount and interest rate, open market operation, cash reserve requirement and foreign exchange rates in influencing the nation's money creation and managing the liquidity supply for economic growth and development.

**Open Market Operation:** Refers to the injection or extraction of liquidity to manage the supply of money in the economy by the central banks in undertaking the buying and selling of financial instruments from financial and non-banking institutions and the public.

**Reserve Requirement**: Refers to a repository reserve of customers' deposits that are not part of loanable funds, which financial institutions must hold as a minimum quantity of money reserved in cash, as liquid assets in their vaults or deposited at the central bank.

**Return on Assets:** Measures the capability of an institution's management of assets in generating revenue in terms of the firm's profit earned relative to the firm's level of investment in total assets, in determining the efficiency of the company's resources to generate revenue.

**Return on Equity:** Refers to the rate of return on the amounts of money invested by equity holders of a company. It is the proportion of a company's profit made on net income after taxes concerning the quantum of equity share capital invested.

**Sensitivity to Market Risk:** To assess the structure of bank assets and liabilities, board of directors' regulations and policies for limiting, tolerating and managing risk from unexpected changes in foreign exchange rates, derivatives, interest rates and its associated risk on loans and deposits and the bank's operations and protective cover from the bank's earnings and capital.

**Taxation:** It is a compulsory levy by the government in generating a quantum of revenue from corporate entities and individuals as a direct or indirect liability in financing its expenditures for the economic growth and development of the nation.

# CHAPTER 1: INTRODUCTION

## 1.1 Background to the Study

### *General Introduction*

The operationalization of the banking sector works within the framework of fiscal and monetary policy changes, economic growth, and development. This prompted the need to assess the impact of fiscal and monetary policies on the financial performance of the universal banks in Ghana and their effect on the economy using Ecobank Ghana Ltd as a case study from 2006 to 2021. The type of monetary and fiscal policy adopted is a significant determinant in triggering or inhibiting investment activities relating to the stabilization of interest and lending rates, as well as inflationary and monetary policy rates. Promoting economic stability and growth, and ensuring financial performance in terms of universal bank insolvency and liquidation (Bank of Ghana, 2018).

Most developing nations like Ghana currently have challenges in implementing effective and efficient fiscal and monetary policies in their various economies in regulating macroeconomic variables. The imperfection of some of the policy tools has greatly contributed to the abysmal and inefficient operation of the banking sector, with particular reference to service delivery provision and cost management (ECB 2005). There are problems in accessing credit and other portfolios from financial institutions, coupled with the high cost of borrowing hovering around 30%. Savings deposit rates are lingering below 8% per annum, serving as a source of revenue to individuals and corporations, militating against saving deposits and investments in the economy, hence the banks' profitability (Bank of Ghana, 2018).

According to Sarpong et al. (2014), the banking industry's role as intermediation between borrowing and lending through savings and investments in the nation's economy plays a crucial role in accelerating business expansion and economic growth. The banking industry has passed through a diverse series of transformations in Ghana as part of the restructuring activity to enhance

the performance of the financial sector to fit well into the globalised financial system. This has resulted in a paradigm shift from the control of the central bank to the application of market-based policy instruments and market-based regimes. Encouraging foreign investors and banks to enter the financial market for efficient and effective technological banking practices, innovative products, and risk management systems (Quarteya & Afful-Mensah, 2014). The weaknesses in the fundamental structure of the economy, such as high budget deficits leading to increasing interest rates, have affected the outcome of the financial sector's performance and profitability (Antwi-Asare & Addison, 2000). However, the country's currency, the cedi, is stable with a corresponding reduction in interest rates and a continuous reduction in the inflation process (Zaney, 2018).

There is a diverse performance of key financial sector indicators, where the capital adequacy ratio of the banking industry slightly increased to 17.8%, with key profitability variables of return-on-equity and return-on-assets falling to 18.0% and 3.8%, respectively, and non-performing loans improving marginally to 17.3%, with liquidity eased in 2016. Banks' loans and advances to companies and individuals are relatively moderate. The banking sector's performance remained relatively strong through asset growth from banks' investment portfolios and foreign assets and liquidity growth, as banks' solvency by capital adequacy ratio showed no significant changes. As asset quality degenerated and experienced growth through reclassification, restructuring and payment of debts by state-owned enterprises (Bank of Ghana, 2018).

To Segal (2021), the fiscal policies of government spending and taxation are strategies to influence and manipulate the nature of the economy. Monetary policy also deals with the operation of the central bank to influence the nation's money supply to manage liquidity for economic growth through open market operations, reserve requirements, interest and discount rates, and the discount window. As the government that controls money supply to influence interest rates in attaining policy objectives (Terra & Arestis, 2017). It delegates control of the nation's money supply,

availability, and cost in terms of interest rates to the government and the central bank, with the goal of stabilizing and growing the economy. They are effective tools for regulating prices, interest rates, and inflation, as well as increasing potential output levels in the economy through aggregate demand policy.

The growth of an economy depends on the performance of different sectors, particularly the banking sector, through its monetary policy innovations. Therefore, the need to assess the bank's operations and their impact on the soundness of the economy is paramount, as the financial health of banks serves as a guarantee to depositors, shareholders, and the nation's economy as a whole. Hence, the evaluation of the financial performance of the banking industry through efficiency indicators such as the fiscal and monetary policies, macroeconomic variables, and the banks' internal variables of the CAMELS rating system. Proven as an effective and useful tool to deal with government financial crises, as seen in the US (Nguyen et. al., 2020). In Ghana, universal banks play an important role in the economic development of the nation.

As a result, the paper examines the impact of fiscal and monetary policy tools, as well as macroeconomic variables, on the financial performance of universal banks in Ghana using the CAMELS model, as well as the impact on the economy. The purpose is to reveal how the independent variables simultaneously influence the bank’s profitability, whether the monetary and fiscal policy tools, macroeconomic variables, and the bank's internal control factors (CAMELS) employed have significant effects or not on the financial performance, the bank’s profitability, and the economy. Thereafter, the necessary measures and recommendations to ensure the sustainability of the banks' profits. The fiscal and monetary policies were necessary to ensure macroeconomic stability for the banking sector to remain afloat and profitable.

The overview of the study system involves understating the theoretical framework and the empirical review of literature, based on the fiscal and monetary policy tools, macroeconomic

variables, and the bank's internal control variables. It also involves the CAMELS rating and performance analysis; the financial and banking institutions in Ghana; the overview of Ghana's economic outlook since 2006; and the universal banks' outlook in Ghana through the CAMELS rating system. The study research methods and data collection were also considered in terms of the research approach and design; the research study population and sample; and the instrumentation of research tools, such as the questionnaire, an interview guide, and document analysis checklist. Others include operational definition of variables; study procedures and ethical assurances; and data collection and analysis.

The research results of the study are in line with the trustworthiness of data; the reliability and validity of data; the findings of descriptive analysis of demographics, the analysis of fiscal and monetary policy tools, the analysis of macroeconomic variables and the internal control variables; evaluation of results; and a summary of. Finally, the study looked at the implications of the results; recommendations for application and future research; and conclusions.

### *Background to the Study*

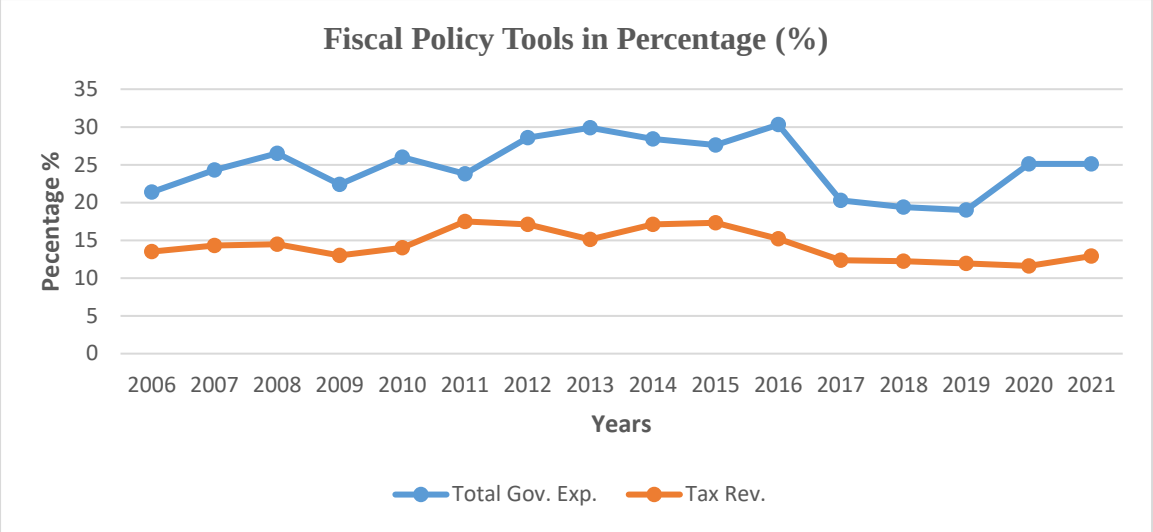
The study outcome was analysed through statistical data, demonstrating the importance and significance of the study problem. Government expenditure has been in ascendency from 2006 to 2021 through the application of expansionary fiscal policy to build the economy through the provision of economic infrastructure. These infrastructures include transportation networks, educational and health facilities, and utility supplies, inter alia, to meet the shortfalls in the nation's developmental needs (Asiama et al., 2014). Coupled with unrestrained high spending on elections and weak administrative expenditure management processes and control, high demand for salaries through the single spine salary structure pay policy, the free educational policy, and worst of all, the COVID-19 pandemic (Bank of Ghana 2021).

The impact of this is shown by the fact that the national debt has risen from 26.1% in 2006 to 78.4% in 2021 (GH344.5b), far beyond the IMF's 60% of GDP critical debt threshold. The greater part of the spending went in favour of recurrent expenditure. With a broad fiscal deficit of 9.7% of GDP (GH8.9b) in 2021 (above the targeted value of 9.4% of GDP (GH8.7b) (Bank of Ghana 2021). The fiscal stimulus of the government results from an increase in government spending or a decrease in tax revenue, which has a pronounced effect on total income. Despite the government's issuance of Eurobonds in Ghana to access the global financial market, the global economic shocks in 2008 resulted in the unsustainability of Ghana's fiscal stance, exerting severe pressures on the fiscal account. Resulted from an increase in commodity prices, which ended up affecting the new public financial management issues.

Over the years, consolidation efforts by the various governments to reduce expenditure have been to no avail, as there has been a consistent percentage increase in total government expenditure and tax revenue to GDP from 2006 to 2021. Showing the implementation of both expansionary and contractionary fiscal policies. The reason is that government spending in the economy is pre-financed largely by borrowing and taxation. However, the government's borrowing, spending, and tax burden reduce the private sector's consumption and investment activities (Bank of Ghana, 2021). The trend of the yearly percentage increase in fiscal policy tools of government expenditure and taxation from 2006 to 2021 is shown in Figure 1.1.

**Figure 1.1:**

*Government expenditure and Tax Revenue Trend in Ghana*



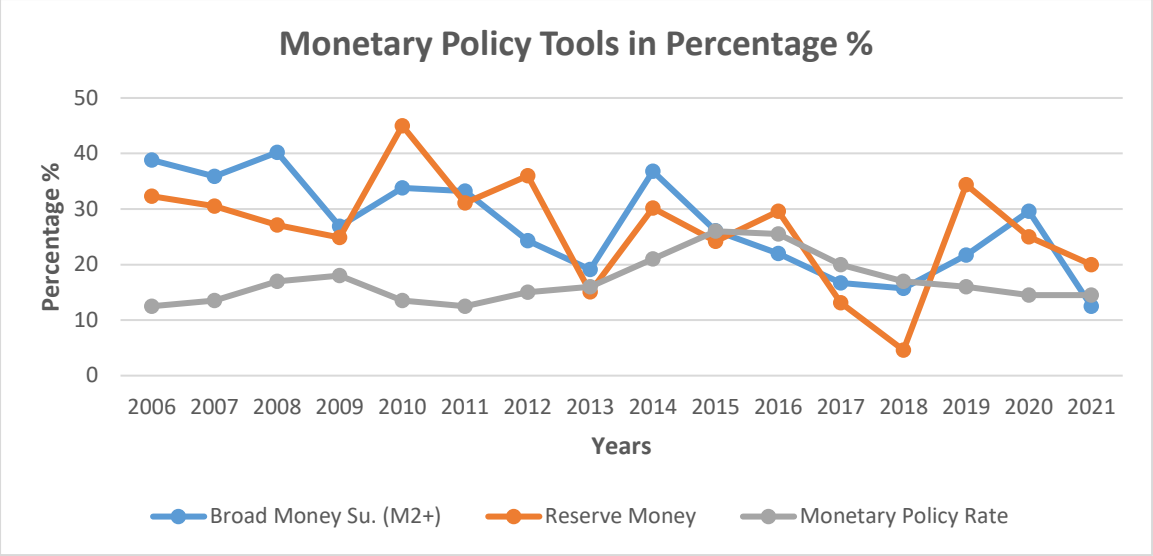

Source: Author's computation

The government expenditure fluctuated between 19.0% the lowest growth rate recorded in 2019, and 30.3% the highest growth rate recorded in 2016, with 2006 recording 21.4% and 2021 recording 25.1% growth rate of GDP (GH110.4b). The tax revenue also fluctuated between 11.61% the lowest growth rate in 2020 and 17.5% in 2011 the highest growth rate. The tax revenue recorded a growth rate of 13.5% in 2006 and 12.90% recorded in 2021 (Bank of Ghana, 2010 & 2021). Thus depicted in Figure 1.1.

The Bank of Ghana's monetary policy tools of reserve requirement and monetary policy rate, with broad money supply (M2+), is used as a proxy to determine the monetary policy direction.

**Figure 1.2:**

*Monetary policy Tools Trend in Ghana*

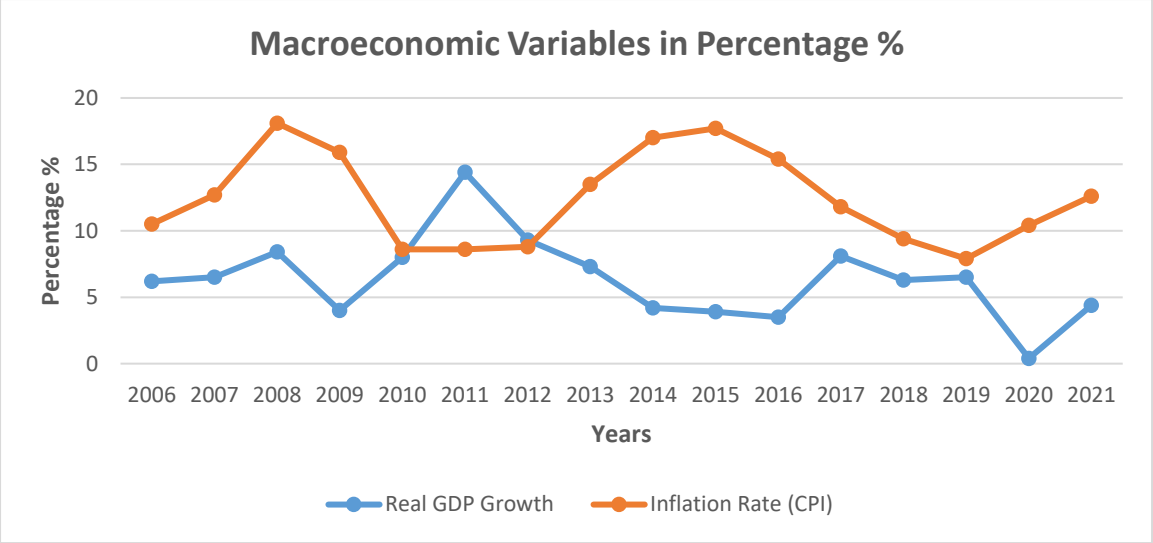



Source: Author's computation

Reserve requirements have the power to manage prudential and liquidity risks by sterilising commercial bank reserves and ensuring financial stability. It fluctuated between 4.6% in 2018 as the lowest recorded growth rate and 45.0% in 2010 as the highest recorded growth rate, with 32.3% recorded in 2006 and 20.0% recorded in 2021. While the monetary policy rate also fluctuated between 12.5% the lowest recorded value in 2006 and 26.0% the highest recorded value in 2015, with 2021 recording a growth rate of 14.5%. Broad money supply (M2+) as a proxy also recorded a growth rate of 38.8% in 2006 and 12.5% in 2021, fluctuating within the years under review between 15.7% in 2018 as the lowest recorded growth rate and 40.2% in 2008 as the highest recorded growth rate. The operation goes with the intermittent application of both expansionary and contractionary monetary policy. Thus illustrated in Figure 1.2.

**Figure 1.3:**

*Macroeconomic Variables Trend in Ghana*

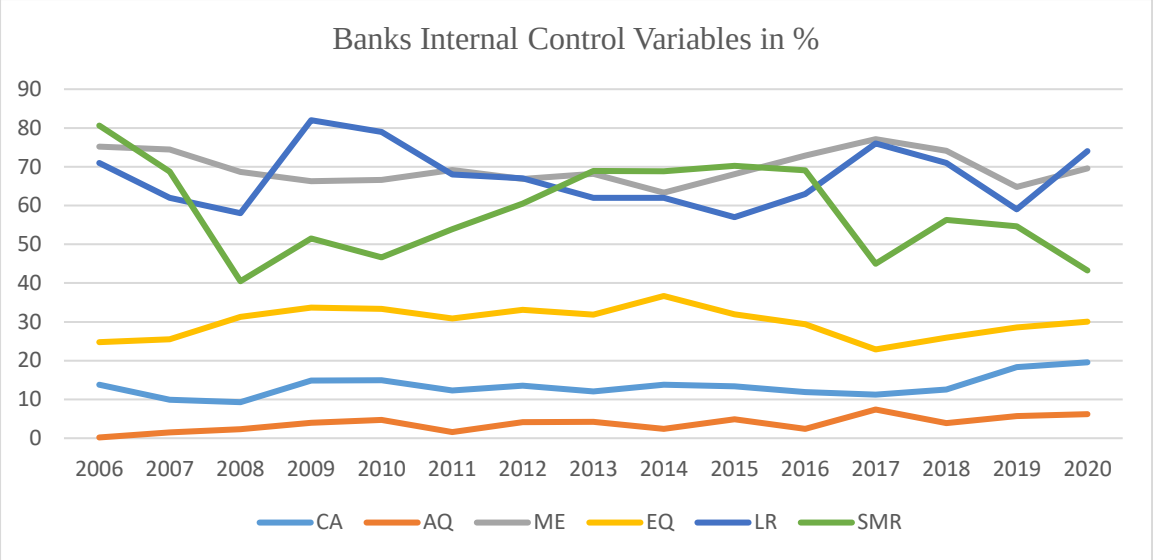



Source: Author's computation

The macroeconomic variables trend in terms of GDP growth and inflation has also shown a proportionate variation year after year. Real GDP growth recorded 6.2% in 2006 and 4.4% in 2021 recovering from the COVID-pandemic economic disruption and economic downturn. It fluctuated between 0.4% growth rates in 2020 the lowest growth rate due to the COVID-19 pandemic, as the decline in growth rate was very serious during the period and 14.4% in 2011 as the highest growth rate (Bank of Ghana, 2021). The inflation rate also recorded a growth rate of 10.50% in 2006 and 10.40% in 2020, with the lowest recorded growth rate being 7.90% in 2019 and the highest recorded percentage increment being 18.1% in 2008. However, 10.5% was recorded in 2006 and 12.6% in 2021, rising above the targeted rate due to rising demand and energy pressures and continuous and persistent supply chain disturbances. As illustrated in Figure 1.3.

**Figure 1.4:**

*The Bank Specific Internal Control Variables Trend in Percentage values*

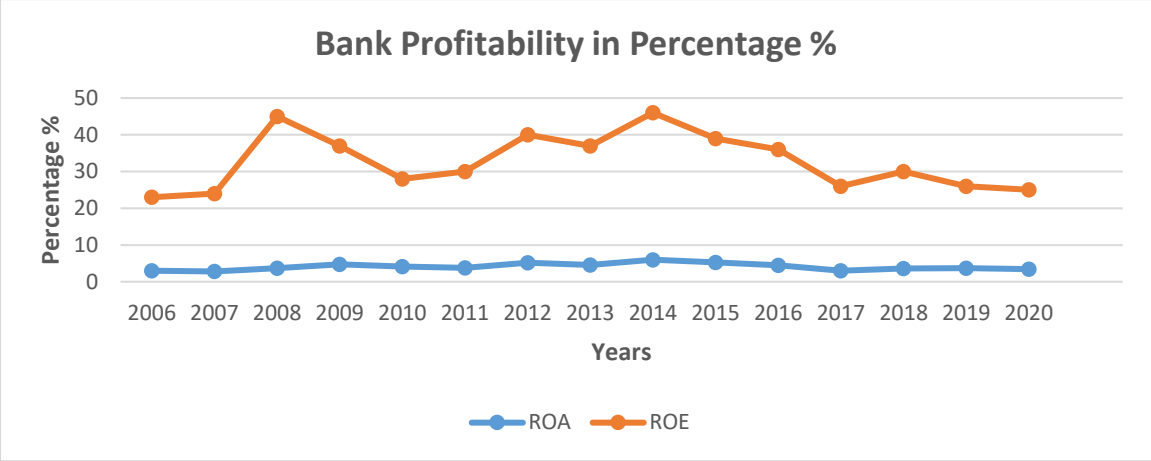



Source: Author's computation, 2022

The bank's specific internal control variables of the bank is as indicated in Figures 1.4 and Table 4. The percentage values of the bank's internal control variables fluctuated within the period under review. The bank's internal control variables have shown a proportionate increase and decrease year after year. They fluctuated either by increasing or decreasing and either proportionately or disproportional with the bank's profitability of ROA and ROE.

**Figure 1.5:**

*Ecobank Profitability Trend in Ghana*




Source: Author's computation, 2022

The bank's profitability in terms of ROA and ROE has also shown a proportionate increase year after year. ROA recorded a growth rate of 3.00% in 2006 and a growth rate of 3.40% in 2020. It fluctuated between 2.80% in 2008, the lowest recorded growth rate, and 6.00% in 2014, the highest recorded growth rate. ROE also recorded a growth rate of 23.00% in 2006 and 25.00% in 2020, with the lowest recorded growth rate being 23.00% in 2006 and the highest recorded percentage increment being 46.00% in 2014. See Figure 1.5.

From the data, the fiscal policy tools applied in the economy to stabilize macroeconomic factors affected the universal banks' profitability. Showing that there was a positive relationship between the bank's profitability and government spending and taxation (Kipkemoi et al., 2016). Again, the monetary policy tools such as central bank rates, required reserves, and open market operations have varying degrees of relationship with commercial banks' financial performance and significantly influence their lending behaviour and profitability (Meshack and Nyamute, 2016).

Furthermore, GDP growth, real interest rate, capital adequacy, and banks' total assets have a positive and significant correlation with return on assets and return on equity, except for the bank's liquidity, which has a negative correlation with the banks' profitability (Tuffour et al., 2018). The bank's credit risk, liquidity, operational efficiency, GDP growth, inflation rate, and profitability have an inverse correlation (Shamim et al., 2018). However, the various empirical research analyses were limited to either fiscal policy or monetary policy, or macroeconomic or internal variables, or some combinations.

It is against and based on this background that the researcher sees the need to undertake this research study. The study seeks convergence and corroboration of results by measuring and deducing relationships to portray meaning and insight into the data (Greene et al., 1989). The study employs quantitative and qualitative views of data as the bank's performance negatively or positively and significantly affects the nation's economy (Johnson et al., 2007). It involves the application of a deductive scientific research approach to analyse data using thematic, descriptive and inferential methods to obtain the breadth and depth of the study (Saunders et al., 2009).

## 1.2 Statement of the Problem

The problem of the research study is to assess the impact of fiscal and monetary policies on the financial performance of the universal banks in Ghana and their effects on the economy, using Ecobank Ghana Ltd. as a case study. The fundamentally structurally tangled challenges in the economy emanating from high budget deficits and rising interest rates have negatively affected the credibility of the financial industry's performance (Antwi-Asare & Addison, 2000). The profitability of universal banks has a strong positive correlation with government spending and taxation as fiscal policy tools for the stabilization of macroeconomic factors (Kipkemoi et al., 2016). The central bank's monetary policy tools of the bank policy rate, reserve requirement, and open market operations have a variable positive and negative correlation with the banks' profitability (Meshack & Nyamute, 2016). GDP growth, interest rates, bank capital adequacy, and bank total assets also significantly affect profits (Tuffour et al., 2018). Banks' credit risk and size, GDP growth, bank liquidity, operational efficiency, inflation rate and profits are differently correlated (Shamim et al., 2018). It is very important to examine the effects of fiscal and monetary policy tools and other determinants on the financial performance of universal banks simultaneously since fiscal and monetary policies are not the only factors influencing the profitability of banks in Ghana. Again, Ghana is different from other countries that have their own fiscal and monetary policy implementation depending on the country's economic situation and hence their empirical studies. Therefore, the significance of this empirical study. The study involves the use of primary and secondary methods to ascertain and assess the simultaneous effects of the independent variables of fiscal and monetary policy tools; the macroeconomic variables; and the bank internal control variables on universal banks' profitability in Ghana in terms of return on assets and return on equity from the period 2006 to 2021.

## 1.3 Purpose of the Study

The purpose of this triangulation of mixed-method survey study assesses the impact of fiscal and monetary policies on the financial performance of universal banks in Ghana and their effect on the economy, using Ecobank Gh. Ltd. as a case study. The study adopted a deductive, descriptive and explanatory approach to obtaining an in-depth understanding of the research problem in advocating for the implementation of stable fiscal and monetary policies in the economy to revamp the financial performance and the banks' profitability (Johnson et al., 2007). To evaluate the data collected the study applies descriptive and inferential statistics of correlation, regression and other statistical tools and thematic analysis. (Saunders et al., 2009). The means of collecting data from respondents was dependent on a case study and purposive sampling techniques with primary and secondary data collection techniques as the main sources. The primary technique of data collection depended on an interview guide and questionnaire. While the secondary data originated from external and internal records relating to the research study, as the industry is an important source of economic growth. Various research shows a diverse relationship between theoretical and empirical research and either using fiscal and monetary policies, macroeconomic variables or the banks' internal control variables or a combination. These factors simultaneously, positively or negatively and significantly affect the financial performance of universal banks. Fiscal and monetary policy tools functioning as macroeconomic factors for sustainable economic stability and bank financial performance are very essential for future research by looking at the extent to which these policies affect the financial performance of universal banks in Ghana and the county’s economic growth and development. The study simultaneously assesses the over increasing trend of the independent variables and their effects on the financial performance (ROA and ROE) of the universal banks in Ghana from 2006 to 2021.

## Research Aims and Objectives of the Study

The various roles played by fiscal and monetary policy tools on the financial performance of Ecobank and the universal banks in the economy are very significant in assessing management quality. The main purpose of the study is to assess the impact of fiscal and monetary policy tools on the financial performance of Ecobank and the economy in Ghana from 2006 to 2021.

The specific objectives of the study include:

1. To identify the fiscal and monetary policy tools employed in the economy and their effects on the financial performance and profitability (ROA and ROE) of Ecobank Ghana Ltd.

2. To identify the impact of macroeconomic variables on the profitability (ROA and ROE) of Ecobank Ghana Ltd.

3. To examine the impact of Ecobank's internal control factors (CAMELS) on the financial performance and profitability (ROA and ROE) of Ecobank Ghana Ltd.

## 1.4 Nature and Significance of the Study

### *Nature of the Study*

The study methodology relates to the employment of a triangulation of concurrent transformative mixed method design involving the usage of quantitative and qualitative surveys (Greene et al. 1989). The research design representing the study involves an overall tactical framework of methods and technical procedures conforming to the answering of the research questions and the testing of hypotheses. This is to arrive at a reasonable logical conclusion, efficiently solve the research problem and generate a valid and reliable research outcome (Bhat, 2018). The various component of the research design includes data collection methods, category of instruments employed, sampling frame, measurement and analysis of data generated in terms of the research questions and objectives in a research manuscript. The study adopted a case study type of research approach involving an in-depth description and analysis of Ecobank Ghana as a single phenomenon, triangulated to provide a holistic study (Saunders et al., 2009).

The method of data collection for the research study based on the primary and secondary techniques as a standard research method is to achieve the objectives of the study. The administered primary technique depended on a survey questionnaire and interview guide, to collect the primary data, consistent with the set aims and objectives of the study (Saunders et al., 2009). The data collected from respondents of Ecobank Ghana limited was within the Kumasi Metropolis. The secondary data collection strategy employed involves both qualitative and quantitative data obtained through newspapers, journals, financial statements and annual reports from concerned organizations. The purposive sampling technique is the focused point as a subjective and judgmental sampling contrary to random selection to collect data and to test the credibility and conformability of the collected data (Lund and Lund 2012).

The analysis of the study data is dependent on qualitative and quantitative methods, with the application of descriptive and inferential statistical analysis. The data collected was by the use of a questionnaire and interview guide and document checklist, related to qualitative and quantitative descriptive and statistics analysis (Saunders et al., 2007). The analysis depended on the employment of central tendency in describing and explaining the levels of tensions among different elements and separation to draw a reasonable conclusion. The computation done is to determine the existence or non-existence of the relationship between the bank's performance indicators and the fiscal and monetary policies tools, the macroeconomic and the internal control variables (CAMELS). Conclusions in terms of the reliability and generality of the study findings enumerated depended on the regression and the correlation coefficients (O'Leary, 2004).

### *Significance of the Study*

The significance of the study is to reveal the important effect of the fiscal and monetary policy instruments as factors affecting the financial performance and profitability of banks in terms of their lending and borrowing and investment characteristics. Forming an important issue for the board of directors and the banks' management and other stakeholders. Since the policies strictly end up affecting the banks saving deposits, portfolio investments of individuals and corporations and the profitability of the banks.

The findings are to establish the knowledge of the influential factors that affect the financial industry’s profitability and related performances and its effect on the economy as a whole and the macroeconomic performance. Thus establishing the specific role of the banking industry in the attainment of the nation’s socio-economic welfare, providing credit for economic growth and development.

The outcome is to establish recommendations for the promulgation of vital and comprehensive policies for the management of the banks. Thus helping to improve the financial

performance and the profitability in the banking industry by achieving higher levels of financial intermediation. At the same time providing solutions relating to structurally tangled challenges facing its performance through structural adjustment in the fiscal and monetary policies. This is to help policymakers in providing knowledge and formulating appropriate strategies relating to the outcomes of fiscal and monetary policies on the activities of the financial institutions.

The significance of the study outcome is to lead to the formulation of future policies with specific objectives to revamp the financial system and financial performance of the banking industry. The outcomes and the findings of the study will be very essential and relevant to the banks' customers and potential customers monitoring the changes in the cost of borrowing and lending behaviours.

The introduction of different fiscal and monetary policy implementations affecting the various services in the banking industry needed a discloser to the customers and the subsequent effects on the services available in the banking industry. Thus motivating the potential customers in making efficient and effective use of the findings in predicting their investment portfolios, borrowing and lending decisions.

The study will further contribute to the stream of existing literature and knowledge in the field of fiscal and monetary policies and the bank's operations to be very valuable to researchers, serving as an academic reference and guiding document contributing to academic reference materials and identifying other areas for further research.

## 1.5 Research Questions

RQ1. What are the fiscal and monetary policy tools used in the economy of Ghana and how do these affect the financial performance and profitability (ROA and ROE) of Ecobank Ghana Ltd.?

RQ2. What effect do macroeconomic variables have on the financial performance and profitability (ROA and ROE) of Ecobank Ghana Ltd?

RQ3. What are the internal control factors (CAMELS) used by Ecobank Ghana Ltd in determining its financial performance and profitability (ROA and ROE) and why and how?

### *1.6 Research Hypotheses*

The aim is to test the determinants of Ecobank's' financial performance and profitability using fiscal and monetary policy tools and the bank's specific internal control factors (CAMELS). The following hypotheses stated in nulls and alternatives formulated were to guide the study.

They include,

H1o: The fiscal and monetary policy tools employed in the economy do not have any relationship with the financial performance and profitability (ROA and ROE) of Ecobank Ghana.

H1a: The fiscal and monetary policy tools employed in the economy do have a relationship with the financial performance and profitability (ROA and ROE) of Ecobank Ghana.

H2o: There is no relationship between macroeconomic variables of GDP growth, interest and inflationary rates and the financial performance and profitability (ROA and ROE) of Ecobank Ghana Ltd.

H2a: There is a relationship between macroeconomic variables of GDP growth, interest and inflationary rates and the financial performance and profitability (ROA and ROE) of Ecobank Ghana Ltd.

H3o: The bank's specific internal control factors (CAMELS) do not have any relationship with the financial performance and profitability (ROA and ROE) of Ecobank Ghana Ltd.

H3a: the bank's specific internal control factors (CAMELS) do have a relationship with the financial performance and profitability (ROA and ROE) of Ecobank Ghana Ltd.

# CHAPTER 2

# LITERATURE REVIEW

## 2.0 Introduction

The study assesses the impact of fiscal and monetary policies on the financial performance of universal banks in Ghana and its effect on the economy using Ecobank Ghana Ltd as a case study. The chapter reviewed theoretical frameworks and various empirical studies based on the study purpose of assessing the impact of fiscal and monetary policies on the financial performance of universal banks in Ghana and its economic effect through macroeconomic variables and the bank's internal variables, with the application of triangulation in obtaining the breadth and depth of the research problem.

The theoretical review synchronizes by synthesizing relevant theories and empirical studies in terms of explaining the key types of theories, the elements employed in assessing their problems and their usefulness in influencing the success and/or the failure of the economy. They include the Classical Theory of Economics, the Keynesian Theory of Economics and the Liquidity Preference Theory, the Monetarist Theory of Economics, the Neo-Keynesian and Neo-Classical Economics and the Great Depression of 2008.

The relationships between the various theories explored particularly between the Neo-Keynesian and Neo-Classical Economics and the Great Depression of 2008 by the linkages of the various components and criteria. Not leaving out the internal and the external coordination existing in the perspective of the problems of both fiscal and monetary policy tools applications for the integration of real macroeconomic variables and financial systems. Thus possesses the ability to boost GDP growth and aggregate demand through interest rates and inflation rate reductions. Thereby, encouraging consumers and industries to increase their borrowing ability to spend leading to economic growth and sustainability (Mankiw, 2008).

The chapter shows the significant or nonsignificant and positive or negative relationship between fiscal and monetary policy tools of government spending, taxation, borrowing, open market operation, central bank rates and cash reserve ratio and bank's performance by affecting positively or negatively the universal banks' profitability and economic growth. Examining the effect of macroeconomic factors including inflation rates, interest rates, exchange rates, GDP growth and internal determinants such as capital adequacy, assets quality, management operating efficiency, bank's credit risk, profit margin, liquidity and sensitivity to market risk on the universal banks' profitability either positively or negatively. It reviewed the theoretical frameworks of fiscal and monetary policy tools. They include the nation's fiscal and monetary policies trends and developments, public debt dynamics, policy and the banks' lending rates, with their two major types of expansionary and contractionary effects (Labonte, 2019).

The assessment of the financial institutions internal variables relates to the CAMELS' model of capital adequacy, asset quality, management quality, earnings, liquidity, and sensitivity to market risk (Kagan, 2018). It critically analyses existing theories and empirical studies relating to the study in identifying the interrelationship to and deviation from contemporary theoretical and empirical studies (Sunday, 2018). The theoretical and literature reviews, fiscal and monetary policies and CAMELS' model are to prove the reliability and viability relating to the research study objectives and problems.

## 2.1 Theoretical Framework and Industry Field

### 2.1.0 Introduction

Theoretical framework and industry field focus on the state-of-the-art developments within a specific period, definitions, hypotheses, concepts and theories that underline various studies. The study relates to the theory and phenomena of fiscal and monetary policy concepts emerging in various literature by looking at it from the 1870s of Karl Marx and Adam Smith's period of economic analysis. It also involves the theory and phenomena of John Maynard Keynes and Milton Friedman from the 1930s (Young, 2019). The study further looked at the Monetarist concerned, with monetary policy in changing the monetary rate and other tools, which influences the growth rate in aggregate demand, money supply, interest rates and prices and their effect on the macroeconomic activities.

The study also analysed some of the views of the modern Neo-Keynesian and Neo-Classical Economics as contemporary macroeconomists from the 1950s who were concerned with the various controversies and the modernization of the two major economic theories and their contemporary economic implications (Mankiw 2019). Lastly, the Great Depression of the 2008s by identifying the likely directions of the Keynesian and the Monetarist ideology of fiscal and monetary policy and macroeconomics variables controversies.

### 2.1.1 Classical Theory of Economics

Classical economists believed in a self-regulating free-market economic system without the intervention of government, through free trade and competition with fluctuation in prices dependent and determined by shortages and surpluses of products (Harcourt, 2016). Called the free market system of demand and supply or the "invisible hand" as the economy was able to achieve an equilibrium state through the free flow of goods and services by the operation of the market

forces of demand and supply. The system operates without artificial barriers and tariffs, which are detrimental to the economy (Young, 2019).

It opposes any governmental interference and functions as a capitalist system in business affairs. Influenced by natural laws of productivity and exchanges, referred to as the "laissez-faire" system of a democratic and capitalistic market system of operation, in terms of cyclical swinging of labour and productivity to restore economic growth. Controlled by an "invisible hand" of the forces of demand and supply adjusting its levels of supply and demand and the market prices to a state of equilibrium of an equilibrium position (Young, 2019).

There is the existence in the market system of what is self-adjustment mechanisms in a period of economic boom or recession to the natural level of real GDP. The system operates by restoring the economy to its natural position of real GDP. Leading to efficient and rational pricing of goods and services in the supply and demand market in the long run. Specifically on aggregate supply in eliminating any imbalances in the system (Harcourt, 2016). The theoretical foundation of the classical conceptual framework is the fundamental principle of the self-regulating economy. Which operates through the efficient utilization of the nation’s economic resources in terms of full employment as the economy possesses the potential capability of self-achievement and sustenance of real GDP in terms of the national income level of output.

The underlying fundamental principles were Say's Law which states "supply creates its own demand" and the flexibility of prices, wages, and interest rates (Davidson, 1999). To Keynes, the free market economies operate in a situation where there was a crucial economic problem of depression of low consumption and low spending in an economy (Young, 2019).

### 2.1.2 Keynesian Theory of Economics

The Keynesian Revolution started in 1936 after the Great Depression by John Maynard Keynes through the publication of his "General Theory of Employment, Interest and Money" with the objective aim of developing a new outlook relating to spending, output, full employment, and inflation. The Keynesian theoretical proposition was published in the period when inflation, slow growth and the economic situation called "stagflation" affected the majority of the developed nations (Chappelow, 2019). To Jahan et al. (2014), Keynes believes in the countercyclical fiscal policy of taxation and government spending for achieving macroeconomic stability. This was in terms of prices and wages, full employment, aggregate demand and GDP growth optimization by the government through changes in the quantity of money in circulation (Mankiw, 2008).

During the existence of the Great Depression of the 1930s, available economic theories and concepts such as the Classical Theory were incapable of explaining the causative factors and the effects of the great economic recession and collapse and of the appropriate policies capable of solving the depression and revamping the economy to full employment. To give a better integration to the Classical Theory, Keynes stated that the changes in the quantity of money affect only such nominal variables as prices and wages, rather than employment and output, which were real variables in the economy forming the long-run neutrality of money (Jahan et al., 2014). Thus disputing the fact that low wages were capable of restoring full employment, as industries were incapable of employing labour to increase the level of productivity due to low demand for goods and services. Rather it influences industries to lay off workers, machines and equipment to reduce capital investment (Chappelow, 2019).

Keynes's theory stipulates that the driving mechanism within an economy for achieving full employment and stability of prices was aggregate demand, by a countercyclical fiscal policy of government injecting money by investing in infrastructure and the reduction in taxation and interest

rate (Mankiw, 2008). According to Issing (2005), fiscal policy possesses the capability of promoting macroeconomic stability through “automatic fiscal stabilizers,” with the capability to respond in a foreseeable and timely manner and operate consistently within the economic cycle. This occurs by the sustenance of aggregate demand and private sector incomes in periods of economic recession and in times of economic growth in moderation of economic activities. Resulting from fluctuations in the government budget with the application of tax collections and transfer payments linked to the cyclical position of the economy.

The Keynesian theoretical proposition was the stabilization of an economy through governments’ policy interventions of increasing spending to prime pump with a corresponding decrease in taxes. The essence was stimulating aggregate demand in the short run rather than prices and interest rates and recovering the economy from economic recession to a successful state of economic growth (Chappelow, 2019). The objective was to increase consumer spending and investment decisions of institutions without any effect on prices and wages resulting in inflation and an increase in interest rates.

To Mankiw (2008), the government is the last resort to undertake deficit financing and infrastructure spending of injecting income. Starting a cascade of events leads to general spending in the economy, stimulating more productivity and investment, thereby generating a vibrant and prosperous economy. Thus boosting investment and stimulating consumer spending to increase aggregate demand through marginal propensity to consume and the multiplier process of multiple aggregations in demand. The effect leads to a corresponding increase in overall aggregate demand resulting in higher employment in the economy to alleviate the depression (Mulwa, 2015).

This is because the free markets system lacks the self-balancing mechanisms as compared to government intervention with the ability to stabilize the economy with appropriate monetary and fiscal policy tools. An increase in investment and consumer spending ends up generating full

employment and a multiplier effect on the economy. However, this was contrary to his opponent's view of recessions and booms being associated with the natural order of economic change and that government intervention through seigniorage led to a wasted period of the recovery process (Jahan et al., 2014).

To Keynes, monetary policy per se does not influence economic activity as its impact manifested in an indirect interest rate mechanism. Making it the responsibility of the government to adopt fiscal policies in stabilizing the economy to achieve economic growth. At the same time blending it with the monetary policy on some occasions, as monetary policy was capable to fail in achieving its objectives. Disaffirming the monetarist view of the use of monetary policy to remove crisis and money supply affecting the output (Issing, 2005 & Jahan et al., 2019).

#### *2.1.2.1 The IS-LM Curve Model*

According to Guru (2021), the IS-LM model is a way to explain and distil the economic ideas put forth by John Maynard Keynes in the 1930s. The economist John Hicks developed the model in 1937 after Keynes published his magnum opus The General Theory of Employment, Interest and Money in 1936. The IS-LM curve model, as an extended Keynesian model, emphasises the interaction between the goods and money markets.

The IS-LM model depicts the junction of commodities and the money market as a graph. The letters IS represent Investment and Savings, while the letters LM represent liquidity and Money. The IS-LM demonstrates how the national income level and rate of interest are jointly influenced by the equilibrium position of the interdependent goods and money markets. The IS and LM curve models are now standard tools of macroeconomics and through which the effects of monetary and fiscal policies are analysed and evaluated (Krugman, 2021)

The IS represents the goods market, which is in equilibrium when aggregate demand (determined by consumption and investment demand) is equal to income, as in the Keynesian

model. Where investment demand is influenced by interest rates as an endogenous variable, the two are thus inversely related. A fall in interest rates causes the level of investment to increase. Resulting from the fact that the cost of investment in projects falls, compelling businesses to undertake greater investment at a lower rate of interest raising the profitability of the investment.

Aggregate demand will therefore increase due to an increase in investment demand and hence the equilibrium level of income. The derivation of the IS Curve helps in the determination of the equilibrium level of national income, resulting from the equilibrium level in the goods market due to changes in the level of investment brought about by a given rate of interest. The IS curve demonstrates a given level of different equilibrium levels of national income with various rates of interest, which is thus negatively correlated (Guru, 2021).

The LM curve is the set of interest rates and income levels that bring the money market to a state of equilibrium. The LM curve is from the examination of money market equilibrium in Keynesian theory. Transactional and speculative motives determined the demand for money to hold. It is the amount of money stored for transactions, which is a function of income (Rekhi, 2022). The higher the level of income, the more money is retained for transactions.

The demand for money is determined by the level of income. Money demand is influenced by the rate of interest, which is the cost of keeping money. This is because one must forego interest by retaining money rather than lending it and purchasing other financial assets. The LM curve connects the level of income to the rate of interest determined by money-market equilibrium at various levels of money demand. The LM curve predicts the various rates of interest at various income levels. However, the money demand curve, or what Keynes refers to as the liquidity preference curve, cannot predict the exact rate of interest (Guru, 2021).

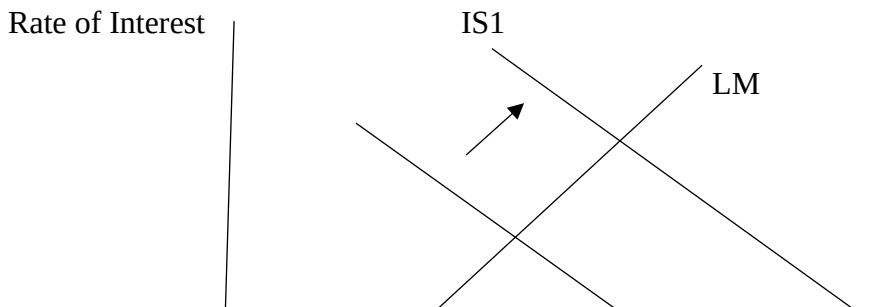
The IS and LM curves are about national income and the rate of interest. The income and the rate of interest variables are determined when the IS and the LM intersect each other at the

point of equilibrium, synthesising the monetary and fiscal policies. This causes the goods market to be in equilibrium where the aggregate demand is equal to or level with the aggregate output. It also causes the demand for money to be in equilibrium with the actual supply of money (Guru, 2021). The IS-LM curve model relates to the investment demand and consumption functions, as well as the money demand function and the quantity of money.

It demonstrates the effects of changes in saving and investment, capital productivity and propensity to consume and save, as well as the monetary factors of demand for money and supply of money, which are influential joint determinants of interest rates and income levels. It provides a straightforward and useful framework for examining the effects of monetary and fiscal policy changes on GDP or output demand and interest rates (Rekhi, 2022).

The shift of the IS or LM curve, therefore, causes changes in the equilibrium positions of the rate of interest and income, thus explaining the effects and the importance of fiscal and monetary policies in an economy. Showing that government intervention through fiscal and monetary policy tools can affect the level of economic activity. The IS-LM model shows the effects of changes in fiscal policy by the government (Guru, 2021).

An increase in the level of government expenditure or the adoption of a decrease in the level of taxation (expansionary fiscal policy), which is autonomous, increases disposable income. It thereby raises the aggregate demand level for goods and services and causes an outward or rightward shift of the IS curve to establish a new equilibrium and hence an increase in the level of income and the rate of interest. Unlike Keynes's multiplier model, the rise in interest rates by the IS-LM model causes private investment to fall, thus expansionary fiscal policy crowds out private investment in the economy (Krugman, 2021).



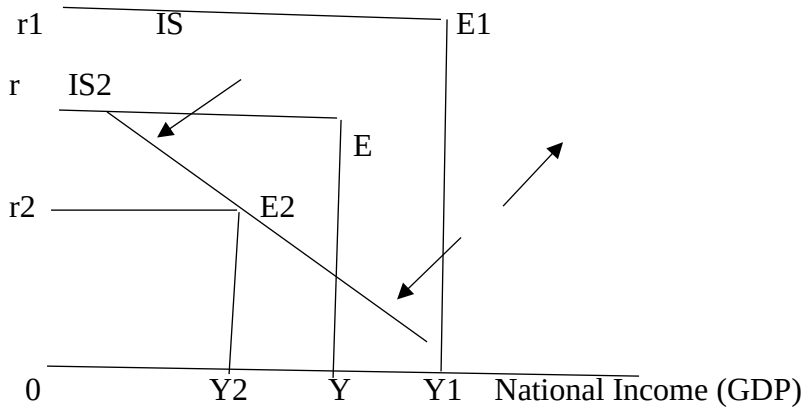
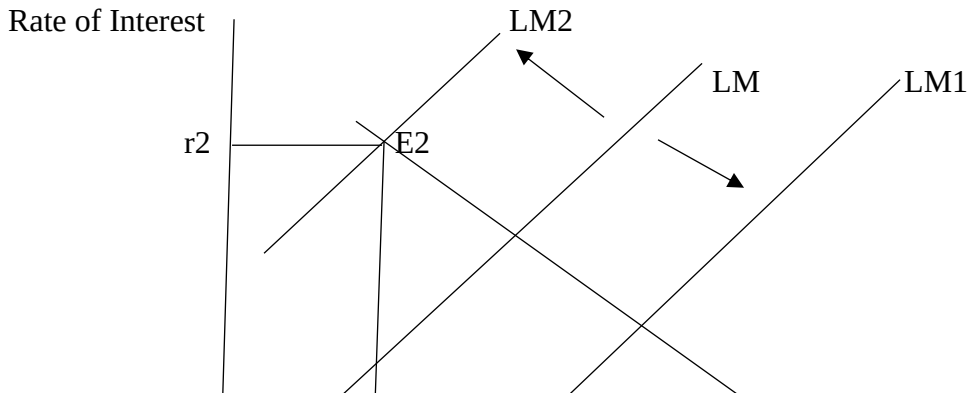



**Figure 2.1:** *Fiscal Policy and the IS-LM model*

There is also the impact of monetary policy on the IS-LM model, through either expansionary or tightening of monetary policy, thus affecting the level of economic activity. Monetary policy may also be expansionary or contractionary depending on the prevailing economic situation. An expansionary monetary policy causes the LM curve to shift to the right, whereas a contractionary monetary policy causes the LM curve to shift to the left (Guru, 2021).

An economy in recession implements an expansionary monetary policy, which involves increasing the money supply in the economy, resulting in a fall in the interest rate. The fall in the rate of interest increases investment through a multiplier process, which also causes aggregate demand for goods, services, and income to increase. The opposite is true for an economy suffering from inflation. A government, through the central bank, can boost the economy's vitality by printing more money this comes at the expense of rising inflation. The IS curve shifts inwards as inflation rises. As a result, interest rates are rising again, and the economy is slowing (Krugman, 2021).



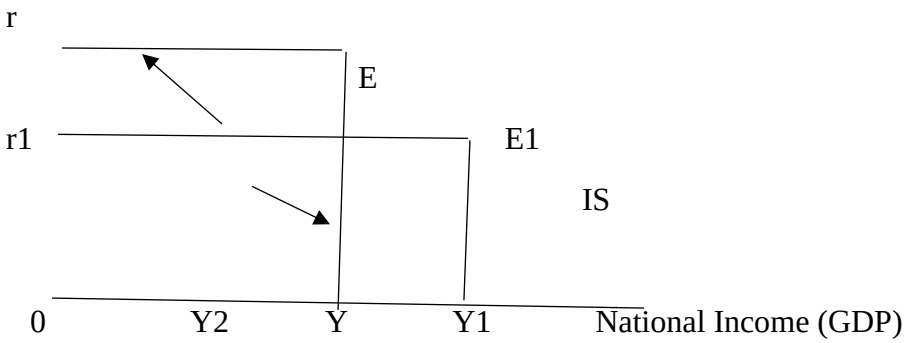



**Figure 2.2:** *Monetary Policy and the IS-LM model*

### 2.1.3 Monetarist Theory of Economics

Milton Friedman developed the Monetarist Theory in his book "A Monetary History of the United States" during the monetary history of the United State from 1867 to 1960. Monetary economics is concerned with the role played by money in economic development and growth and the circulation of money in the economy through monetary theory and policy. Relating to changes in the monetary rate and its impact on growth rate in aggregate demand, money supply, price and inflation (Mwangi, 2016). To the Monetarist, growth and sustenance directly correlated to the money supply growth rate by monetary policy serving as a more powerful weapon than fiscal policy. The application of monetary policy affects every aspect of the economy including inflation, interest rates, GDP growth and employment (Amadeo, 2019).

Monetary supply is used in controlling inflation and the rate of interest in achieving policy goals and objectives in an economy as it influences economic growth and leads to changes in exchange rate values. It affected macroeconomic activities such as incomes, output and prices (Adelina-Geanina, 2011). More money created in the short run leads to more demand for money hence more productivity, demand for goods and services and jobs but a temporary boost. In the long run, it increases inflation due to excess demand over the supply resulting in a price rise (Amadeo, 2019). Monetarism emphasizes the role of monetary aggregation in economic policy

analysis through the quantity theory of money. This emphasizes the short-run monetary effects due to non-neutrality, the long-run neutrality effect of money supply and the non-existence of a trade-off between inflation and unemployment in the long run (Mulwa, 2015).

To the Monetarist, "inflation is always and everywhere a monetary phenomenon," implying that excess increase in the money supply over real growth in the economy leads to a rise in interest rates. It looks at the effect of money supply growth, which is inflationary. It also involves central bank operations in maintaining the stability of price through their powers of controlling the amount of money supply in the economy and monitoring the real interest rates. It nullifies the effects of inflation against the nominal interest rates, manipulating reserve requirements, and the application of open market operation tactics (Bajpai, 2019). The monetary theory relates to the control of the money supply in the economy to influence inflation by lowering inflation and keeping it stable and as it also applied to interest rates (Lioudis, 2019).

To the Monetarist, Keynes's theory of revamping economic downturns by the application of government fiscal policy spending was inappropriate and ineffective. It was not a good path for economic stability by restoring growth in recessions, compared to monetary policy effectiveness (Amadeo, 2019). However, the fiscal and monetary policy aim at ensuring positive economic growth, full employment and minimising inflation at a low level. Thus ensuring a reduction in cyclical instability in the economic cycle in terms of the application of monetary policy to lower inflation through demand and supply of money and interest rates and fiscal policy to revamp the economy through government spending and taxation (Segal, 2021).

The Monetarist, strongly criticized and opposes the creation of the Federal Reserve, but rather campaigned for the existence of a central bank policy with an objective value of increasing the rate of money supply growth parallel with increasing demand and supply for goods and services. The view of the central bank plays a major role in controlling the circular flow of money

in the system, as changes in money supply in the short-run affect national income and output and the general price level in the long run (Amadeo, 2019). The rationale behind the theory is the sustainability of the inflation rate to be as low as possible through the manipulation of the money supply by targeting its growth rate. Thus preventing too high or too low of money supply in the economy for economic growth as against discretionary monetary policy.

The monetary economist looks specifically to a monetary policy role in the economy, the level of inflation and its rate of growth and the determination of price level (Walsh, 2010). The adoption of a medium-term orientation by the European Union in its monetary policy strategy is seen as appreciable and economically reasonable in coming to terms with Friedman's long-run and Keynesian short-run views. Relating to economic self-stabilization and economic fine-tuning respectively (Issing, 2005).

Economists and politicians in recent years have advocated in favour of the monetary policy, forming the basis of macroeconomic policymaking, even though with unwanted consequences, for the stabilization of output and inflation. It has rendered fiscal policy impotent, due partly to the continuous existence of budget deficits and inadequate capability on the part of the political system in making adequate tax and spending decisions promptly in achieving desirable stabilization purposes (Mishkin, 1995).

### 2.1.4 Liquidity Preference Theory

Liquidity preference theory in macroeconomic theory by Keynes relates to the liquidity demand for money as a medium of exchange, store of value, and unit of account (Chen, 2019). The theory was to solve the economic problems including persistent unemployment, which the quantity theory of money failed to resolve in the economy. To Keynes “the possession of actual money lulls our disquietude; and the premium which we require to make us part with money is the measure of the degree of our disquietude” (Pal, 2019).

The liquidity preference theory is the reward of income for doing away with liquidity for a specified time. Showing that the interest rate is solely a monetary phenomenon, in that the concepts of demand for and the supply of money determine the rate of interest (Suman 2019). The theory shows that savings that depend on keeping non-bearing interest liquid money or investing in interest-bearing assets such as bonds and securities lead to demand for money. Keeping cash in terms of abstinence from investment and time preference due to anxiety and future uncertainties generate no interest, but investing in income-bearing assets of securities instead of money generates interest (Pal, 2019).

Liquidity theory contrary to the classical model, states that the equilibrium interest rate is determined by 'real' factors of the supply of saving and the investment demand. The interest rate as the price for money borrowed is a "monetary phenomenon," purely determined by monetary factors. Making monetary policy very crucial in influencing economic activities by changing variables such as the rate of interest, output and income and the aggregate demand. An increase in money supply causes the interest rate to fall, thereby increasing the corporate and individual demand for money and hence investment, increasing effective demand, employment, income and output. Changes in income cause liquidity preference to change resulting in a change in the equilibrium interest rate (Muley, 2019).

### 2.1.5 Neo-Keynesian and Neo-Classical Economics

#### *The importance of fiscal policy and monetary policy in eradicating recessions*

To Mankiw (2019), the school of contemporary macroeconomics constitutes the New Keynesian economics to respond to criticisms of the new classical macroeconomics and thereby provide microeconomic foundations for Keynesian economics. Renowned economists from the 1950s to the 1970s developed new theories of macroeconomics synthesizing the strengths of Keynes's theory with that of neo-classical models of economics. They include John Hicks, Franco

Modigliani and Paul Samuelson recognized as the neo-classical synthesis, with relevant core models of a series of new ideas in microeconomics, forming the basis of neo-Keynesian economics (Mankiw, 2019).

To Anushree (2019), Friedman challenged the view of Keynes relating to the importance of fiscal policy as a critical factor in eradicating recessions in the economy than monetary policy. Keynes emphasized the fact that the effect of changes in the rate of interest on demand and output was insignificant based on the steep nature of the IS curve. Thus making monetary policy ineffective but fiscal policy very effective and directly affecting aggregate demand and output. Friedman argues that changes in money supply directly affect output with the belief that monetary policy failure of decreasing money supply through the banks was the cause of the great depression (Mankiw 2019).

The controversies of new classical and new Keynesian economists led to the emergence among macroeconomists a new synthesis, explaining the essential role of fiscal and monetary policies and the economic fluctuations in the short run. With the new classical models, a variety of tools models necessary to make decisions on behalf of households and firms over time (Mankiw 2019). Whereas with the new Keynesian models, the effect of monetary policy in the short run on employment and production comes from price rigidities, except the monopolistic competitive firms where price changes intermittently. Although to the theories of the new Keynesian, recessions in an economy, originate from market failure in an economy in terms of absolute deviation from the normal efficient functioning of markets (Blinder, 2019).

The neo-classical synthesis emphasizes strongly that, fiscal and monetary policies were capable of achieving full employment. Nevertheless, the new classicalism rather believed that price and wage adjustment has the potential of automatically attaining full employment in the short run. This contradicts that of the new Keynesians. Paul Samuelson resolved through neo-classical

synthesis that, the integration of the Keynesian economics theory of fiscal policy by the government and the central bank monetary policy could result in full employment. It involves bringing the classical analysis of monetary theory and the Keynesian analysis of income theory together (Anushree, 2019).

The economists of Keynesians and Monetarists have concluded that fiscal and monetary policy impact greatly on the economy's aggregate demand and the two must juxtapose together, as policymakers are concerned about the level and the composition of output (Blinder, 2019). In the 2008 global financial and economic crisis, the New Keynesians emphasizes the benefits of the integration of monetary and fiscal policies as macroeconomic policies, international economic organizations and the establishment of a controlled trading system. Affirming the idea, that self-regulation is practically untenable, therefore resulting in the implementation of anti-Keynesian cyclical appraisal of monetary and fiscal policies in the economy (Anushree, 2019).

### *The concept of coordination failure and the nature of wages and prices*

To Mankiw (2019), the remarkable distinction between the new Keynesian and the new classical economists relates to the quickness of the changes in wages and prices. The new Keynesian sees stickiness in wages and prices, the new classical economists see flexibility in wages and prices as an assumption in their macroeconomic theories.

To the new Keynesians, the price was sticky because firms felt reluctant in adjusting their prices relative to charges by other firms to avoid the fall in demand for their products. With the fact that not all firms in the economy adjust prices. The result was causing staggered adjustment of prices in the economy and therefore complicating the setting of prices. The staggering slow the adjustment in prices, making price level sluggish (Mankiw 2019).

New Keynesian economists with their belief in the rigidities of prices and wages, which keeps the economy from reaching a full-employment equilibrium and the failure of the classical dichotomy, accepted the neutrality of the long-run analysis of the new Classical economists. They accepted that an increase or decrease in money supply by the central bank directly influences and affects prices, wages and exchange rates as nominal variables, without any effect on real variables such as employment, investment, consumption and GDP growth (Gafencu, 1994).

The new Keynesian concept of coordination failure was developed to analyse recessions and unemployment. Some new Keynesian economists were of the view that economic recession was the outcome of what is coordination failure, which was dependent on the setting of wages and prices, by price and wage setters. The concept explains that coordination failure leads to economic downturns because the free market mechanism fails to coordinate the optimal flow of production and consumption (Mankiw 2019).

The new Keynesians in the theories of unemployment explained the reasons behind the failure to clear the labour market and hence the failure of the market-clearing mechanism and the

efficiency wage models. The basis of the efficiency wage hypothesis was dependent on the fact that labours' productivity and wages positively related to each other and that payment of wages above market clearing was profitable to industries, as increases in wages go with increases in workers' productivity (Katz, 1986).

### 2.1.6 Fiscal and Monetary Policies in the era of the 2008 Great Depression

The 2007–08 great depression has resuscitated the Keynesian and the Monetarist ideology into economic theory and policies in recent times. In responding to this crisis, many economists and governments have resorted to the application of the Keynesian fiscal policy approach in solving the crisis of recessions and depressions. As it remains, the fundamental principle of modern macroeconomics in explaining the difficulties confronting current economic fluctuating issues (Blinder, 2019). This should not exclude the integration of real macroeconomic variables and financial systems with special reference to the central banks and their monetary policy tools. For they possess the capability to boost equity values and aggregate demand through interest rate reductions which encourages consumers and industries to increase their borrowing ability to spend (Mankiw, 2008).

The great depression of 2007 was attributed to the high level of leverage from the various economic activities by industries, financial institutions, governments and individual businesses (Russo and Katzel, 2011). Another cause was allowing the derivatives market to flourish, trading the derivatives over the counter without any control. The regulators of the financial institutions throughout the various economies were sleeping through the boom years.

The worse of the causes was the repeal of the Glass Steagall Act in 1999, which came into force to enforce banks to choose to be universal banks or investment banks (Crawford, 2011). It resulted from a monetary policy challenge of loose policies and regulations by the financial institutions. They extended and expanded their borrowing activities universally with the help of

the central banks and the governments, making access to money artificially accessible and affordable. This was in line with the recklessness of the lending behaviours and abilities of the financial institutions and their risky banking practices (Russo and Katzel, 2011).

The global recession in the US and the rest of the world was eliminated through an increase in money supply and lower interest rates to revamp and stimulate the economy. It was very influential in the decision of the US central bank to recover from the global recession through the stimulation of the economy by increasing the money supply (Jahan and Papageorgiou 2014). This did not occur independent of the fiscal policy but was mutually inclusive as both macroeconomic theories' implementation is for the recovery of the nation's economy from the brink.

The government interventions were increasing spending as an effective policy to increase aggregate demand and the Fed's introduction of quantitative easing of increasing the money supply and the policies of near-zero interest rate to keep inflation above 0% (The Motley Fool, 2019). Monetary policy alone cannot stimulate economic growth in recent periods but also depended on the vicious cycle of productivity and investment. It also depends on the government possessing more power to control money by fiscal policy effectiveness (Amadeo, 2019).

The years preceding the global economic crisis witnessed high growth with exceptional macro stability, monetary stability, low inflation rates, and financial and innovation in mortgage-backed securities (Mizen, 2019). The general effect results in increasing demand and supply of productivity, employment, global savings glut and boosted economic growth. These to some economists resulted in the 2008 global economic crisis, recession and the great depression. Worsened by the bankruptcy and collapse of Lehmann Brothers an investment bank in 2008, and the subprime and full-fledged mortgage crisis (Sraders, 2019).

These led to a credit crunch by freezing the entire credit system with the global financial system almost collapsing, housing prices falling abysmally, with an increase in subprime mortgage

defaults (Mizen, 2019). The results were unprecedented job losses and a heavy reduction in the GDP growth globally, particularly in the Western countries, making it comparable to the great depression of the 1930s. It prompted investors to reassess the riskiness of high-yielding securities, bank collapses and failures, and the quick rises in the spreads of funds in interbank markets (Jahan and Papageorgiou, 2014).

### 2.1.8 Theoretical Framework

The study's conceptual framework involves the linkages of certain fundamental key concepts within the literature review to establish the research direction in terms of explaining and generalizing the study findings as well as establishing the basis for the research problem, the purpose of the study, and the research question. The study looks at the impacts of the three major independent variables on the dependent variable. Thus, the extent to which fiscal policy tools like government spending and tax revenue affect the profitability of universal banks (Segal, 2021). Fiscal policy involves the introduction of new laws in terms of changing and adjusting government spending levels, borrowings and tax rates to influence aggregate demand and stabilize the national output and the nation's economy and control the economy to achieve economic growth (Segal, 2021).

Government spending is the distribution of revenue to various sectors of the economy to boost economic growth and stabilize macroeconomic activities through spending on goods and services resulting from increases in disposable income and profits (Kramer, 2021). Taxation is a compulsory levy by the government to generate a quantum of revenue from co-operating entities and individuals for economic growth and development (Amadeo, 2019).

The changes in the fiscal policy tools increase either government expenditures or lower taxes, which involve revamping the nation's economy and development during economic slowdowns. It increased employment levels and raised living standards. The ultimate aim of changes in fiscal

policy is to ensure changes in the inflation gap, either by restraining the economy and decreasing inflation rates or otherwise. An economy that is facing an overheating economy, inflationary pressures, high-interest rates, deficit financing and a high growth rate sees the application of contractionary fiscal policy as an appropriate measure (Amadeo, 2018).

The changes in fiscal policies end up affecting households' disposable income and the profit margins of businesses, which consequently affect investment expenditures and GDP growth to eliminate inflationary or deflationary gaps. It is a phenomenon of the government combating interest, inflationary levels and other economic distortions by introducing a budgetary deficit or surplus. This changes the nation's economy either by raising or by lowering real GDP growth, inflation and interest rates as macrocosmic variables. The aim of fiscal policy in terms of a healthy economic level is to eliminate inflation through the government's expenditure, subsidies, transfer payments and taxes to change the quantity of money in the system, by changing money demand, money supply and purchasing power. This has an impact on investment and business profits (Amadeo, 2018).

Monetary policy refers to the application of strategic measures by the central banks of toolkits of discount rates, interest rates, cash reserve requirements, open market operations and foreign exchange rates. Monetary policy is the process whereby a country's monetary authorities influence the level of economic activity by controlling the quantity of money in circulation in the country, targeting inflation and interest rates and ensuring price and exchange rate stabilization. The monetary policy of the central bank influences the nation's money creation and manages the liquidity supply for economic growth (Chappelow, 2019).

According to Terra and Arestis (2017), monetary policy tools such as open market operations, policy rates, and cash reserve requirements affect the profitability of banks. The essence is to control the quantity of money in circulation, thereby managing economic shocks and their

effects on inflation, interest and exchange rates. It is the stabilization of inflationary and deflationary gaps, interest and exchange rates, aggregate demand and liquidity, that eliminates macroeconomic instability (Chappelow, 2019). This implies that the key role of monetary policy is to achieve price stability and stability in inflation, thereby managing economic fluctuations (Segal 2021).

The monetary policy tool of the discount rate is the rate at which central banks lend to universal banks when they are short of reserves. The rate at which central banks lend to universal banks when in need of excess liquidity to meet reserve requirements (Bajpai, 2019). To Amadeo (2019), reserve requirements constitute a fraction of the customers' deposits and savings that the financial institutions hold in cash as liquid assets in their vaults or deposited at the central bank, per the nation's central bank directives. Open market operations refer to the management of the supply of money in a country where the central bank undertakes the buying and selling of financial instruments from the universal banks and other financial institutions in exchange for money on deposit at the central bank (Amadeo, 2019).

These monetary policy tools are the most important and most flexible tools for the implementation and control of monetary policy worldwide. In effect, they change interest rates in the economy by raising or lowering them. They are very effective in controlling the flow of money in the hands of universal banks and financial institutions and in managing the rise and fall of interest rates, inflation rates, GDP growth and the profitability of the banks (Kenton, 2019). The primary objectives are to change interest rates, aggregate demand, and the overall GDP growth of the nation's output and the ever-rising inflationary gap and liquidity. Thus, to create the availability or shortage of money for borrowing from the financial institutions and revamp businesses' spending and investment decisions (Bajpai, 2019).

The impact of macroeconomic variables on GDP growth, inflation rates and interest rates through fiscal and monetary policy influences the profitability of the banks. Adeusi et al. (2014) explain that the major determinants of the banks' profitability are specifically economic growth, inflation, exchange, and interest rates. These external factors influence the profitability of commercial banks statistically and significantly.

Inflation is the loss of a nation's currency buying power due to an increase in general prices throughout the economy. Inflation encourages people and businesses to spend more by investing, which in turn leads to economic growth and boosts inflation, creating a potential catastrophe by causing the supply of money to outstrip demand, thereby raising the cost of borrowing (interest rates) and a weak currency, leading to slumping exchange rates. This brings the central bank's control of inflation through money supply in terms of open market operations, required reserves and discount rates (Floyd, 2021).

Interest rates are referred to as the price or the cost of borrowing money. Interest rates are the conditions under which money is exchanged for money or things at a later period. It serves as an instrument of the central bank to achieve the monetary and economic policy goal of price stability or low and stable inflation. An expansionary monetary policy affects the cost of loanable funds to fall, thereby increasing investment, productivity and consumer spending. This, however, subsequently discourages saving deposits (Hall, 2019). The real interest rate, which is the nominal interest rate less expected inflation, is the rate that determines saving and investment decisions. Interest rates indirectly influenced inflation through domestic demand for goods and services and their effect on the exchange rate.

Lower interest rates reduced capital inflows, making the local currency weaker and imported goods more expensive; yet, in the internationally exposed sector, they increased activity, profitability and the ability to pay. It makes saving less attractive for households and boosts

consumer demand as borrowing becomes less expensive, resulting in increased investment. This, in turn, stimulates demand and increases the prices of goods and services (inflation) as well as earnings. The central bank increases interest rates when inflation is high above its targeted inflation rate. Lower interest rates lower the cost of borrowing, raise disposable income and so increase consumer spending growth, raise inflationary pressures and cause the currency rate to depreciate (Pettinger, 2021).

Contractionary monetary policy as a primary macroeconomic objective is to increase interest rates, reduce investment in business cycle expansion, aggregate demand, and the overall GDP growth of the nation's output and reduce the ever-rising inflationary gap and liquidity. The effect is to reduce economic growth and inflationary pressures. The application of the contractionary policy by the central banks is to reduce the financial institutions' credit facilities, making them less creditworthy to make money available to lend, resulting in the charging of higher interest rates (Amadeo, 2019). If the central bank is concerned that inflation will rise, it may opt to raise interest rates to limit demand and slow economic growth. The increase in interest rates may cause bank profit margins to reduce, while commercial rates remain stable. This depends on whether or not interest rate rises affect consumers (Pettinger, 2021).

Real gross domestic product (GDP) measures the economic production and growth and the health of a nation's economy by factoring in inflation from a base year. It is a representation of the total monetary value of an economy in terms of the total output of all goods and services produced by that economy over a specific period. Used by central banks to evaluate the economic health status of a country and set the target interest rates for an economy. Real GDP is calculated (GDP=C+G+I+NX) based on the price deflator where C is consumption, G is government spending, I is investment, and NX is net exports, and serves as a measure of inflation in the economy (Kramer, 2022).

Real GDP assessed is based on the positive GDP growth rates of different times. Thus, assessing how the economy is flourishing because of activity, stability, and growth of goods and services as opposed to negative GDP growth, which indicates that a country's economy is in or approaching an economic downturn or a recession. Significant percentage changes in the real GDP, either positively or negatively, have a significant impact on the stock market as negative GDP growth means lower profitability for industries (Kramer, 2022).

Amadeo (2021) argues that the government can stimulate and influence GDP growth with expansive fiscal policy by either spending more or cutting taxes, or both, leading to deficit spending, thereby slowing economic growth as the debt-to-GDP ratio approaches 100%. This affects foreign investors and stops them from investing their funds in the country as their money becomes worthless. For economic growth sustainability and conservative fiscal policy measures, the need to cut back on spending and raise taxes in a growing economy. This occurs through a nation's central bank through an incentive or encouragement to spur growth with the application of monetary policy, such as increasing the money supply. This in turn lowers interest rates, thereby increasing bank loans and hence boosting consumer spending and economic growth.

Finally, the effects of the internal factors used in assessing commercial banks' profitability were determined through CAMELS analysis. The CAMELS rating system of financial institutions consists of capital adequacy, asset quality, management quality, earnings quality, liquidity and sensitivity to market risk (Kagan, 2019). The conceptualizations in the literature review were assessed by practice, in terms of their similarities and differences, through the acts, policies and practices of the universal banks in Ghana and their effects on the banks' finances.

The banks' financial performance of profitability depended on ROA and ROE, which represent the dependent variables of the study. According to Lan (2018), the profitability of the bank involves the assessment of the financial institution's trends, stability and ability to generate

an appropriate good income and return for the bank’s growth. It shows the firm's all-embracing efficiency and performance in terms of the bank's potential losses and the bank’s ability to pay its dividends. It relates to the assessment of the institutions' level of expenditure on operations; earnings volatility in terms of market risk, including interest rates, foreign exchange rates, and price risks; the rating of net interest margin; valuation allowance accounts and net worth level.

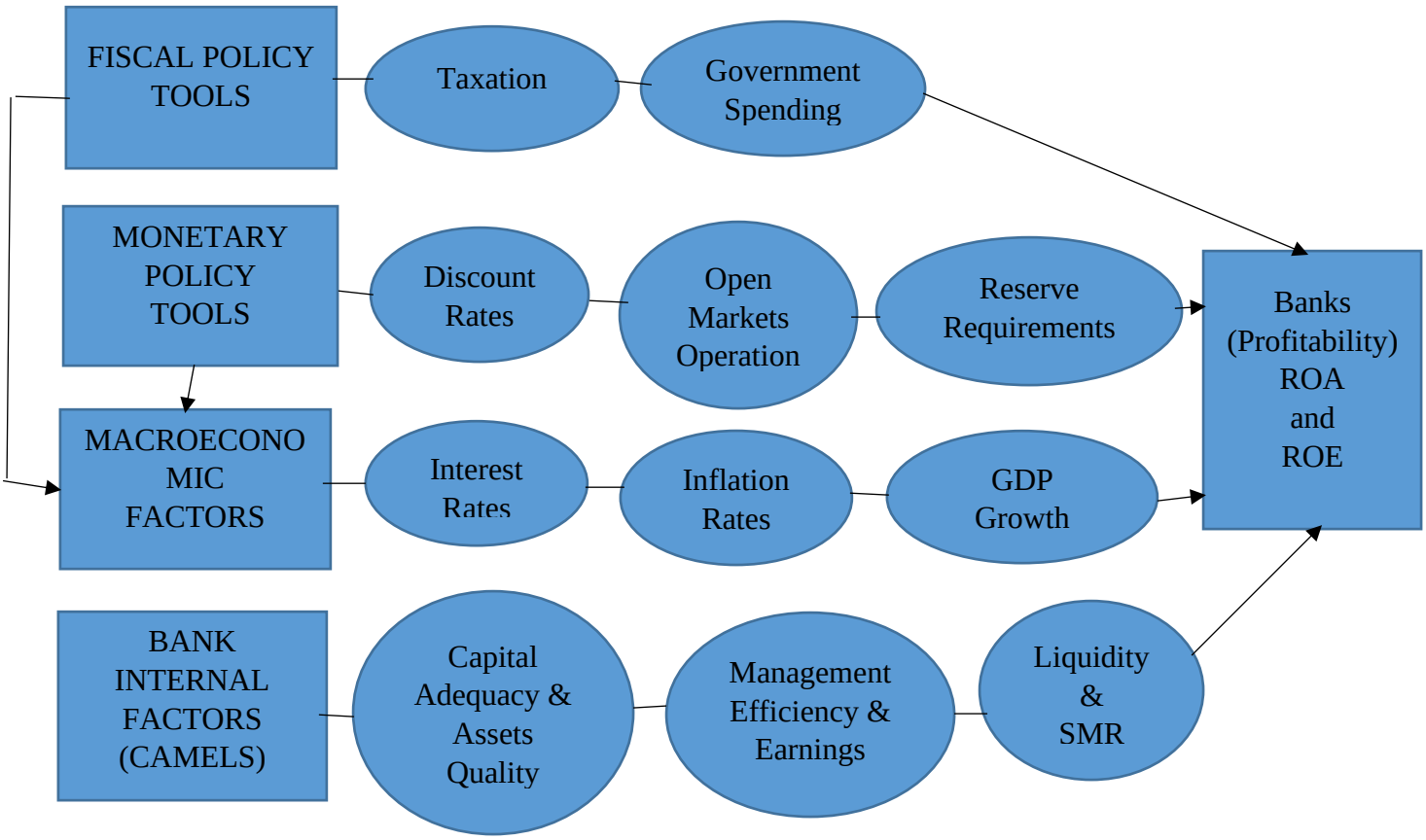
According to Ongore (2013), return on assets (ROA), which is the measurement of the firm's profit earned relative to its level of investment in total assets, involves revenue generated from the total assets. It is the measurement of the capability of the institution's management in assets, in terms of the use of business assets in generating revenue and determining the efficiency of the company’s resources to generate revenue. The higher the return on assets, the higher the efficiency of management and the bank's resources (Lan, 2018). Thus, the corporation is doing a good job of boosting its profits with each investment it makes if its ROA increases over time.

To Ongore (2013), return on equity refers to the rate of return on the amounts of money invested by the shareholders or investors in the company. It is the proportion of a company’s profit made or net income after taxes to the quantum of equity share capital invested. Return on equity involves measuring the level of income accredited to shareholders as against the shareholders’ investment in the company. It is the measurement of net income less preferred dividends to total stockholders' equity, taking into consideration the quantum of debt a company utilizes (Lan, 2018).

The theoretical framework points to the fact that there is some relationship between the independent variables and the dependent variable, either positively or negatively, with significant or insignificant impact. Thus, the impact of fiscal and monetary policies, macroeconomic variables, and the bank's specific internal factors on the financial performance of the bank in terms of return on assets and return on equity is paramount. The purpose is to help the researcher critically examine the profitability performance of the bank in terms of return on assets and return on equity.

**Figure 2.3:**

*Theoretical Framework*




Source: Derived From Literature, 2022

## 2.2 Empirical Review of Literature

### 2.2.0 Introduction

There are several documented research studies on the effects of fiscal and monetary policies, macroeconomic variables and internal specific factors on the financial performance of financial institutions with particular reference to universal banks worldwide. Where the various studies one way or the other employed either fiscal or monetary policy tools or macroeconomic variables and internal specific factors or a combination of them in analysing universal banks' financial performance and profitability. The empirical literature review consists of diverse studies from different countries that are very relevant to the research study.

This section reviews various empirical studies' inferences to the international and national evidence based on internal and external determinants of banks' financial performance in terms of profitability. The review of the various studies in this section relates to major determinants of banks' financial performance such as fiscal policy, monetary policy, macroeconomic variables and internal factors. The study assesses whether these determinants, in reality, exert some impact in affecting the profitability of financial institutions. Does the effect positively, negatively, significantly or insignificantly influences the financial performance of universal banks and the economy as a whole.

### 2.2.1 Fiscal Policy

#### *2.2.1.1 International Evidence*

Kipkemoi et al. (2016) studied the impact of government expenditure and taxation as a fiscal policy tool on the profitability of universal banks with particular reference to Kenya's commercial banks within the period 2006 to 2015. The researcher adopted a descriptive analysis with the application of a simple linear regression model and with the employment of correlation analysis as a statistical tool. The result of the findings shows that the banks’ profitability in terms of return on assets and

fiscal policy tools such as government spending, taxation and borrowing significantly and positively correlated. The outcome of the study shows that there was a direct and strong positive relationship between government spending and bank profitability before tax.

The outcome affects positively and significantly the banks' performance and economic growth. This demonstrated that an increase in government spending leads to a proportional increase in economic growth and bank growth and finally an increase in banks' profitability. Thus, government expenditure directly relates to investments, which also directly affect and boost economic activities and growth. Reveals that the effect on the variability in the banks' profit and growth emanating from government expenditure explains 95%.

The findings of the study were in line with Afonso and Sousa (2011) findings, which posit that government adjustments of its fiscal policy tools such as government spending and taxation are used in manipulating and influencing economic growth and development, particularly in periods of recessions and inflationary booms. The submission was contrary to the findings of Blinder (2006) who stated that deficit financing by the government leads to a situation where the government and the public including companies in the private sector compete for financial assistance in terms of liquidity from the commercial banks. This pressure on demand for money causes an increase in the real and the nominal interest rates, which also causes a decrease in private sector investment, productivity and economic growth and its negative impact on the profitability of the commercial banks.

The study again postulated that there is a direct and strong positive relationship between the taxes of the government and profits before tax of the banks and economic growth. Showing that the variables were strongly and positively correlated and that taxation as a determining factor positively influences the quantum of liquidity held by individuals, investors and governments' to spend in the economy. Meaning that an increase in taxation reduces the amount of money in the

hands of the public and hence the economic growth and profitability of the financial institutions. This submission of the study conforms to the findings of Heyne et al. (2002) showing that tax was a positive influential factor that determines the quantity and the amount of expenditure of money in an economy. In the hands of both the individuals and the government, showing that decreasing taxes was an influential factor in enhancing companies and families' spending, which end up revamping the economy as a whole.

The results of the study further show that the application of fiscal policy tools of government spending, taxation and borrowing within the economy in stabilizing other macroeconomic factors influences the profitability of commercial banks. The government uses fiscal policy tools as an instrument of aggregate demand control to influence the economic activities in terms of adjusting expenditure levels and income in achieving economic growth either expansionary or contractionary, by increasing or reducing employment level, and inflation in terms of price stability in periods of inflationary gaps or deflationary gaps as a macroeconomic objective. The outcome of these findings conforms to that of Mankiw and Gregory (2003). They stated that governments in their strategic policy implementations use fiscal policy tools of taxation, government spending and borrowing as a direct control measure in achieving an economic policy objective of price stability through inflation control, full employment and GDP growth by levelling aggregate demand in the economy.

Ogar et al. (2014) conducted a study on the effect of fiscal and monetary policy instruments on the economic growth of Nigeria from 1986 to 2010. The study employed a methodology of ex post facto research design and the employment of the ordinary least squares method of statistical analysis. It used a systematic empirical study depending on secondary data, from the Central Bank. As per the study, there were a positive correlational impact and statistically significant relationship between government revenue and GDP growth. Implying that government expenditure and

economic growth were positively and significantly correlated, an increase in government spending results in an increase in demand and supply for goods and services, investment and therefore GDP growth.

Other findings of the study submitted were that money supply through government spending impacts positively, statistically, and significantly and influences the GDP growth in the economy. Indicating that a fall in money supply as a monetary and fiscal policy tool through taxation and government spending leads to a reduction in inflation and GDP growth. The study findings conform to the studies of Nzotta (2004), Jhingan (2005), and Ajayi (2006) who confirmed that monetary policy and fiscal policy implementation by the central bank and the government greatly influences and affects positively and significantly the growth of the economy in terms of inflation, employment and investment.

Munteanua and Göndörb (2012) also embarked on a study to look at the impact of the stabilization policy of fiscal policy tools of taxation and public spending on the performance of banking systems of all the commercial banks listed and traded on the Bucharest Stock Exchange in Romania. The methodology of the study was the use of market-based performance indicators with the application of a simplified version of EVA within the period 2008 to 2011. The outcome of the findings of the study revealed that the fiscal policy adopted by the government was a pro-cyclical instead of stabilizing fiscal policy. Leading to what is called high macroeconomic volatility, implying that there was instability in the macroeconomic variables such as inflation, investment, full employment and GDP growth, which also resulted in negatively affecting the economy by minimizing and reducing the economy's real capital investment and human resource capital and the banking system performance and profitability.

The outcome of the study further shows that there was a positive relationship between fiscal policy and investments and banking behaviour. Implying that decreasing banking performance in

the economy directly correlated to decreasing aggregate demand brought about by restrictive fiscal policy implementation. The outcome of the study indicates that there was a declining trend in the banks' performance with a negative impact resulting from decreasing demand brought about by the restrictive fiscal policy in the crisis period.

#### *2.2.1.2 National Evidence*

Asamoah (2016) carried out a study with the objective aim of assessing the effects of fiscal policy as a macroeconomic factor on lending interest rates in Ghana from 1970 to 2013, using secondary data from commercial banks. The study employed the Autoregressive Distributed Lags Model. The outcome of the study posits that fiscal deficit in the short run positively and greatly influences the retail interest rate causing the retail interest rate to increase thereby negatively affecting the economy. However, portrayed an inverse relationship in the long run by causing the retail interest rate to fall and impact positively the economy.

It shows a positive relationship between the fiscal deficit and retail interest rate in the short run through excessive government domestic spending and borrowing from the public sector as against the long-run correlation. Moreover, government short term spending within the economy is financed by local financial institutions within the banking sector in terms of granting loans to the government. This finding of the study conforms to the findings of Ford and Laxton (1999), Ducoudré (2005), and Ardagna (2009) which revealed that a continuous increase in national debt with the government embarking on a continuous fiscal deficits financing ends up positively and significantly affecting interest rates and that of anticipated inflation.

The findings further postulated that household consumption positively correlated to lending interest rates. That rising household consumption through the implementation of fiscal policy deficit financing by the government as a macroeconomic factor causes the lending interest rates in

the economy to increase. This submission relates to Runkle's (1991) findings, which show that there was a positive relationship between demand for money and interest rates.

The findings again reiterated that the private sector claims and the retail interest rate negatively correlated. The findings further stated that in terms of the long run, economic growth negatively influences the lending interest rate, showing that an increase or a decrease in the economic growth in the nation inversely causes a decrease or an increase in the retail interest rate respectively. In that, an increase in economic growth leads to a decrease in interest rates, which directly is linked to the rising risk of non-performing loans. The finding of the research study conformed to Marotta (2009) and Greenwood-Nimmo et al. (2011) findings on the adverse selection hypothesis. It affirms that the information asymmetry leads to adverse selection difficulties, as rising interest rates call for riskier borrowers in the loan market. Thus making funds available particularly to the government for spending and thereby crowding out the private sector within the economy, which affects the private sector investment and economic growth.

The findings of the study furthermore propounded that inflation growth rate and interest rate correlated negatively to each other in the short run due to low investor confidence and the yield of income from investments in government short-term instruments. Shows that changes in inflation rates, either an increase or a decrease influence and cause the interest rate to decrease or increase respectively in the short run. The findings later show that the long-run inflation rate positively influences sticky retail interest rates, affirming Fisher’s hypothesis on the relationship between inflation and interest rate. Reveals that an increase or a decrease in inflation rates positively influences interest rates to increase or decrease respectively in the long run.

### 2.2.2 Monetary Policy

#### *2.2.2.1 International Evidence*

Meshack and Nyamute (2016) in evaluating the monetary policy research on its effect on the financial performance of 11 commercial banks listed on the Nairobi securities exchange from 2005 to 2015. The designation of the study was the employment of a descriptive survey with regression and correlation statistical analysis with reliable secondary data from the central bank and the stock exchange. The research study outcome demonstrated that open market operation as a monetary policy tool and financial performance in terms of commercial banks' returns positively and significantly correlated.

A change in open market operation leads to a proportional change in commercial banks' returns. Meaning that an increase or a decrease in open market operation positively causes an increase or a decrease in commercial banks' returns respectively. The findings corresponded to that of Hördahl and King (2008) findings who asserted that open market operation as a monetary policy tool was essential to the central bank, serving as a source of information on market expectations and a flexible tool in liquidity management and control. The findings of the study again established that the central bank rates and cash reserve ratio and the financial performance through the returns of the commercial banks show a negative and significant correlation. Showing that an increase in central bank rates and cash reserve ratio causes a decrease in the returns of the commercial banks. The submissions show that monetary policy tools of central bank rates and cash reserve ratio have a varying correlation with the performance of the banks.

The submission corresponded with Fatade (2004) findings, which attested to the fact that monetary policy, directly and indirectly, positively influences the performance of banks in terms of their profitability, deposit and savings revenues and lending of loans and advances. In that, the effective performances of the banks depend on existing macroeconomic policies and tools and economic situations.

The findings relate to Ahumada and Rodrigo (2004), Friedman (1963) and Lee (1992) findings, on the basis that monetary policy implementation by the central bank greatly influences and impacts macroeconomic variables such as interest rates and money supply which also affect investment decisions of banks and their financial performance. These, in turn, affect inflation and economic growth through exchange rates, unemployment rates and output.

Nwannebuike (2015) assesses the impact of monetary policy tools on the profitability of commercial banks in Nigeria using the Zenith Bank Plc experience as a case study from 2005 to 2012. The study used a descriptive research design and the Pearson correlation coefficient techniques. The study adopted the use of secondary data of time series data collected from the financial statements of the bank and published bulletins of the Central Bank. The study findings asserted that there was no significant relationship and effect between the interest rate and the profit of the bank before tax.

The study, however, demonstrated that the cash reserve rate shows no significant effect but positively correlated to profitability before tax. Postulating that an increase in the cash reserve rate directly affects profit before tax. The various findings of the study stated above show inconsistency with the findings of Punita and Somaiya (2006). Signalling an inverse but significant relationship among bank rate, cash reserve ratio, statutory ratio and profitability of universal banks, showing that monetary policy tools negatively affect profits.

The study further indicated that liquidity rate was insignificantly but statistically highly negatively correlated to profitability before tax of the Bank. Thus, an increase in liquidity rate causes profit before tax to fall without any serious effect. The submission of the study agrees with that of Ajayi (2012) showing that liquidity rate and cash reserves inversely affect the banks' total credit and hence the bank’s profitability. An increase in any of the variables negatively influences profitability. The outcome of the findings was inconsistent with Younus and Akhta (2009) findings,

showing that a fall in statutory liquidity requirement results in a positive effect on bank credit and investments.

The study again reiterated that interest rate was insignificantly but semi highly inversely correlated to the banks' profitability before tax. However, the finding of the study was contrary to the findings of Okoye and Eze (2013), showing that the lending rate and monetary policy rate significantly and positively relates to the performance of the deposit money banks in Nigeria.

#### *2.2.2.2 National Evidence*

Quarteya and Afful-Mensah (2014) assessed, by reviewing the financial and monetary policies and current trends pursued in Ghana and their impact on the economy from 2005 to 2012. The study findings show that there was a consistent positive relationship between the Central Bank's policy rate and real and nominal interest rates through inflation rates. However, in terms of savings rates, the study discovered that there was a consistent negative relationship between the central bank's policy rate and real and nominal savings rates. Reveals that there was discouragement in savings and hence loanable funds, investment and economic growth.

The findings further postulated that the monetary policy rates have a direct relationship with the banks' lending rates. As it did not reflect on the banks' lending rates charged, implying that there were other factors influencing interest rates. The study further submitted that effective monetary policy and fiscal discipline positively correlated. In that, fiscal policies relate directly to easing monetary difficulties in periods of high budget deficits.

It enforces the government to embark on heavy borrowing with high budget deficits, with the overall effect of increasing interest rates. There was also heavy dependence of the government on internal borrowing from the banking sector, which greatly influences lending rates as the cost of credit. It affected the private sector borrowing through the crowding-out effect. The study again

discovered that inflation and interest rates were directly and positively related, implying that higher inflation rates lead to higher interest rates.

### 2.2.3 Macroeconomic and Internal Determinants

#### *2.2.3.1 International Evidence*

Maigua and Mouni (2016) studied the impact of interest rate determinants on the performance of commercial banks in Kenya using descriptive research design, inferential statistics and multiple regression analysis with a sample size of 26 commercial banks. The study's research submitted that there exists a positive and significant relationship between the discount rates and the performance of commercial banks. The findings of the study again revealed that inflation rates, reserve requirement ratio and exchange rates have an inverse and significant relationship to the performance of commercial banks. Proving that falling inflation rates, reserve requirement ratio and exchange rates improved and increased the commercial banks' profitability.

The findings of Otuori (2013), Waseem et al. (2014), Aburime (2008) and Bergen (2010) indicated this. This posits that there was a negative correlation between real interest rate, inflation rates, monetary policy and foreign exchange and that of commercial banks' return on assets and profitability. The rising rate of inflation causes return on assets, return on equity and net interest margin to fall, which affects the profit margins of the banks.

Shamim et al. (2018) examined macroeconomic specific factors as the determinants of the profitability of 12 local commercial banks in Saudi Arabia ranging from 2009 and 2015. The study employed multiple regression and panel data analysis. The study revealed a positive and significant correlation between bank size and capital adequacy and the banks' profitability. The submission was that as the size of banks and capital adequacy increases the bank's profits increases by a similar proportion. Further findings show that an increase in the bank's liquidity results in a decrease in

the profit margins of the commercial banks. Showing the existence of an inverse and a significant correlation between the banks' liquidity and the banks' profitability.

Their outcome was per that of Ibrahim (2016), Chowdhury (2015) and Karim et al. (2010) who submitted that liquidity level and return on assets negatively correlated. To them, a rising liquidity level influences return on assets and profits to fall. This outcome of the study findings was however contrary to that of Eljelly (2013) who propounded that liquidity and return on assets positively correlated. Demonstrating that the rising of banks' liquidity influences returns on assets and profits to rise.

The study again asserted that there was a negative and significant relationship between the bank's credit risk and profits. The lower the credit risk the higher the banks' profits and the higher the banks' credit risk the lower the bank's profitability. This falls in conformity with the studies of Abdullah et al. (2014), Ahmed et al. (2011) Karim et al. (2010) and Chowdhury (2015) revealing that credit risk correlated negatively to and in effect affects the bank profitability. Further submission of the study revealed that operational efficiency negatively and significantly correlated to the banks' profit, showing that in periods of bad operational efficiency the profitability of the banks falls due to an increase in the expenditure patterns of the banks.

The findings of the study again proved that some specific macroeconomic variables of GDP growth and inflation rate were negatively but insignificantly correlated to the banks' profits. Thus in periods of high inflation rates resulting in an inflationary gap, the profitability of banks decreases. The study outcome falls in line with that of Aslam et al., (2016) and Abdullah et al., (2014) whose findings show that the return on assets to profitability was inversely affected by GDP growth and inflation rate. The finding was however unrelated to the findings of Chowdhury (2015), whose study shows that inflation positively affects the return on assets and that of a bank's

profitability in the long run. Thus, rising inflation causes the return on assets to rise, which in effect affects the profits of the banks in the long run.

Kostikov et al. (2019) in their research investigated the quantified impact of market interest rates on Czech commercial banks' business mix from 2014 to 2018. The result of the findings of the study posits that a bank's profitability in terms of return on equity correlated positively to and influenced by profit margin, liquidity and mortgage loan volume. Implying that a decrease or an increase in liquidity and mortgage loan volume directly decreases or increases the return on equity and profit.

The findings conformed to that of Ongore and Kusa (2013). In that, internal control variables of capital adequacy, asset quality, and management efficiency significantly and positively affect the banks´ profitability. The findings again in terms of lower interest rates show that lower interest rates directly influence the bank's profitability. Lower interest rates lead to lower interest margins and lower profitability of commercial banks. The submission of the findings was contrary to that of Borio et al. (2017) and Claessens et al. (2018) indicating that low-interest rates inversely influence banks' net interest margins and banks profitability. The lower the interest rate the greater the profit margins.

#### *2.2.3.2 National Evidence*

Tuffour et al. (2018) conducted a study by examining the internal and external determinants of banks' profitability of six Ghanaian commercial banks listed on the Ghana Stock Exchange. The period of the examination falls from 2010 to 2015. The study employed pooled regression models and panel regression techniques for the analysis. The research study outcome demonstrated that commercial banks' profitability of return on assets and return on equity highly negatively and significantly influenced the bank's liquidity. Showing that an increase in banks' liquidity leads to a decrease in banks' profitability.

The result again revealed that bank operating efficiency and return on equity negatively and insignificantly correlated. Showing that efficient profit-making banks were operating at a lower cost, implying that the lower the operating cost the higher the banks' profitability. The finding supported by Bourke (1989) and Jiang et al. (2003) findings, reveals that banks' profitability and bank operating cost efficiency are inversely correlated. Signifying that lower expenses of the bank's management result in earning good profits and hence better performance.

Further submission of the study revealed that banks' capital adequacy and banks' total assets positively and significantly correlated to return on assets and return on equity, showing that high capital adequacy and total assets lead to high return on assets and return on equity, which in effect leads to higher commercial banks' profitability. The findings on capital adequacy conform to the study of Bourke (1989), who submitted that capital adequacy significantly and positively influences and relates to the banks' profit. The finding on total assets was, however, inconsistent with that of Sinkey (1992). In that, firm size and the profitability of the banks negatively correlated for large banks but positively related to small ones.

The findings further show that GDP growth and real interest rate positively correlated to banks' profitability of return on assets and return on equity. This implies that a higher GDP growth rate and real interest rate in an economy leads to higher growth in the bank's profitability. However, the growth of GDP has no significant effect on banks' profitability, while the real interest rate was having a significant effect on banks' profitability. The outcome of the GDP growth rate conforms to Gerlach et al. (2004) and Staikouras and Wood (2003) findings, which stated that rising growth, rate results in less credit risk and hence high banks profitability. Falling interest rates and slow growth in loans and low profitability due to an increase in loss of loans positively correlated.

Hanweck and Kilcollin (1984) study confirmed the submission on the real interest rate of the positive and significant relationship between the interest rate and bank profitability of smaller

banks. This ends up increasing saving and borrowing rates spread. The submissions of Staikouras and Wood (2003) and Cheang (2005) also show that in periods of recession where the interest rate was going down, loans were marginally growing leading eventually to an increase in loan losses. Further submission of the study revealed that asset quality positively and insignificantly correlated to banks' profitability. Demonstrating that efficient mobilization of banks asserts improves asset quality, which leads to higher banks' profitability.

Asare (2019) evaluated the impact of interest margin on the profitability of banks in Ghana, using Fidelity Bank Ghana Limited as a case study, from 2013 to 2017. Using Pearson Correlation to analyse the secondary data relating to the annual reports of the bank. The study findings show that interest rate margin positively correlated to bank profitability in terms of return on assets and return on equity. Implying that when the interest rate margin increases return on assets and return on equity also increases causing an increase in banks' profitability. The study outcome conformed to Javiad et al. (2011) and Claessens et al. (2018) findings. Showing that higher interest rates positively and significantly correlate to net interest margins and profitability. As interest rates of the banks, increase net interest margins and profitability also positively and significantly increase in the same trend.

In addition, there was a positive and significant correlation between profitability and interest rate, which was determined by the level of competition in a particular environment. Low competition leads to higher interest rates, and higher profitability, and higher competition results in lower interest rates and lower profitability. However, the study findings contradict the research study by Borio et al. (2015) whose findings show that interest rate margins and bank net interest margins do not show any relationship to profitability in terms of return on assets. However, at lower interest rate levels, net interest margins were much more robust. The findings of English (2002) also stated that changes in interest rates do not affect net interest margins.

Nkegbe and Ustarz (2015) carried out a study on the determinants of commercial banks' performance in Ghana from 2000 to 2010. He used a panel data regression model and estimation techniques analysis. Market share of loans exerted a positive and significant influence on the performance of banks, indicating that a fall in market share of loans reduces the banks' profitability, acknowledging the relative market power hypothesis.

According to the estimated results, non-performing loans affect the return on assets and equity negatively and significantly, but in contrast, positively correlated to net interest margins. Shows that poor bank performance correlated inversely to high non-performing loans because loans form the greatest share of the banks' assets generating revenue through investment (Ongore & Kusa 2013). The study submission was contrary to Garza-Garcia (2011) findings, indicating that, non-performing loans have a positive relationship with commercial bank performance and that banks' performance increases with credit risk, as the cost was transferable to customers.

Furthermore, the study results reveal that operational efficiency affects banks' performance indicators such as return on assets, return on equity and net interest margins and the profitability of the banks showing a positive and significant relationship. This implies that an increase or a decrease in the internal variables of the study as mentioned above positively and significantly increases or decreases the banks' performance indicators and profitability.

However, the findings of Ahokpossi (2013), Bawumia et al. (2009) and Kwakye (2010), show that non-performing commercial banks with a higher cost of operation shift the high costs incurred to customers. This is to improve their performance indicators by raising lending rates and lowering deposit rates, leading to widespread interest rates, and creating a huge disparity between lending rates and savings deposit rates in the banking industry in Ghana.

The study again reveals that bank size and liquidity positively and significantly correlated to the performance of the banks' profitability through return on assets, return on equity and net

interest margins. Implying that the greater the share of the bank in the market, the greater the profit emanating from economies of scale and higher efficiency. Demonstrating that an increase in the bank's liquidity leads to an increase in return on assets, return on equity and net interest margins, brought about by less liquidity risk and financial crisis effects. This submission strongly conformed to Ongore and Kusa (2013) findings, showing that bank liquidity positively and significantly correlated to banks' profitability.

Finally, in terms of the macroeconomic variables, the study shows that there was a positive and significant relationship between inflation and return on assets and net interest margins. Nevertheless, negatively correlated to return on equity, as return on equity disregards the higher risks in line with higher leveraged, as it was an internal measure of performance. Thus, local banks' anticipation of higher levels of inflation correlates to higher interests and profitability, in terms of return on assets and net interest margins but correlated negatively to return on equity. The study revealed that GDP growth was negatively but significantly related to return on assets and net interest margins models, making the banks not benefit from economic growth.

## 2.3 Fiscal and Monetary Policy Impacts

### 2.3.1 Fiscal Policy Impacts

#### *2.3.1.1 Fiscal Policy*

Fiscal policy also known as discretionary fiscal policy involves the introduction of new laws in terms of changing and adjusting government spending levels, borrowings and tax rates to stabilize the national output and control the economy to achieve economic growth and stabilization in times of recessions or booms (Segal 2021). It relates to the management of government financial budgetary statements and involves a government budgetary preparation within a fiscal year in terms

of government spending, taxation and borrowing to influence aggregate demand to stabilize the nation's economy (Nash, 2018).

To Surbhi (2015), fiscal policy is the strategic application of government expenditure and deficit financing on socio-economic activities. Influencing the economy by promoting growth sustainability and poverty reduction with the application of government spending and taxes. It includes the generation of revenue from taxation in a nation's budget in achieving economic goals through its impact on the overall demand and supply of goods and services in the economy. Strategically manipulating and influencing the nature of the economy and its macroeconomic factors during periods of economic crisis for its sustainability, growth and development through changes in aggregate demand (Segal, 2021).

The intention is to adjust government spending levels, borrowing and taxation in stabilizing a nation's economy through macroeconomic variables such as savings, investments, distribution of income and aggregate demand (Segal, 2021). Fiscal policy through government budgetary statements encourages sustainable economic growth by reducing the level of fluctuations in the economy and the business cycles. Used as a measure in altering the real national output in terms of optimum allocation of resources, combating inflation through price stabilization thereby stimulating economic growth, equitable distribution of wealth and employment (Amadeo, 2019).

#### *2.3.1.2 Types of Fiscal Policy Tools*

##### 2.3.1.1.1 Taxation

The first fiscal policy tool serving as a primary source of income for the government is the tool of taxation. It is a compulsory levy by the government in generating a quantum of revenue from co-operating entities and individuals either as a direct or indirect liability for the economic growth and development of the nation (Amadeo, 2019). The generation of revenue through the imposition of levies on households and corporate bodies by the government in financing its expenditures relating

to various public activities (Kagan, 2019). Taxation results in lowering the disposal income of households and an increase in the cost of industry's productivity, leading to a decrease in consumption, investment, productivity, and GDP growth (Amadeo 2019).

There are several categories of tax revenue, which include income tax, capital gains tax, property tax, and sales tax serving as a major revenue source to fund government spending. Others include taxes imposed on goods and services, payroll taxes, and taxes levied on transfer and ownership of property (Amadeo, 2019). The charges of taxes as a fiscal policy tool influences consumer's income as taxes on income and industry's profitability as taxes on profits, which subsequently affects savings, consumption, investment and economic output (Nash, 2018).

#### 2.3.1.1.2 Government Spending

According to Amadeo (2019), government spending involves the purchases of goods and services, spending on salaries, which directly gives immediate satisfaction to individuals and the communities, investments such as public project works, infrastructure and subsidies to create future satisfaction and transfer payments. Government spending as an important part of fiscal policy is the distribution of revenue to various sectors of the economy in boosting economic growth and the stabilization of macroeconomic activities through spending on goods and services resulting from increases in disposable income and profits (Kramer, 2021).

The essence is influencing economic growth by the government in achieving its economic objectives through transfers, salaries, investment in projects and subsidies, and welfare activities (Borad, 2018). This spending in the economy by the government possesses the power in raising or lowering real GDP growth and influences the level of economic output. Done through the introduction of subsidies and/or negative taxes giving the businesses and the public who possesses the funds more money to spend. Thus freeing and keeping businesses running by hiring additional

workers in creating employment thereby increasing both supply and demand for economic growth (Amadeo, 2019).

#### *2.3.1.3 Types of fiscal policy*

##### 2.3.1.2.1 Expansionary Fiscal Policy

According to Amadeo (2018), expansionary fiscal policy is a policy situation in which the government minimises tax rates and increases public spending. It relates to expanding deficit and national debt to grow the economy through economic stimulus. It is increasing public spending and reducing taxes thereby creating both short-term and long-term jobs. It lowers unemployment by increasing disposable income, aggregate demand and GDP growth to revive the economy thereby moving the national debt to an unsustainable level if possible.

To Kramer (2021), it results in lowering taxes and/or increasing government spending, making households and firms possess a lot of disposable income to spend leading to increases in consumption, investment and growth in a nation's economy, thereby eliminating recessionary pressure and revamping the economy. It is the process of increasing the size of the government budget deficit and decreasing taxes leading to a higher disposable income for the households and firms and resulting in the closure of a deflationary gap (Amadeo, 2018).

According to Borad (2018), expansionary fiscal policy depended on economic downturns with a surplus budget, recessionary pressure with disinflation, low employment and low growth rate. It involves the government employing automatic stabilization or discretionary stabilization through reduction in capital gains taxes, corporate and income tax cuts, increasing subsidies and transfer payments. It is an increase in spending on infrastructure, which increases the quantity of money in an economy by giving individuals and businesses, an increase in purchasing power, hence an increase in demand, investment, employment and net export (Amadeo, 2018).

The purpose of expansionary fiscal policy is to stimulate private investment opportunities in periods of recession with high unemployment and low business cycles (Kramer, 2021). This is to boost the growth of the economic level by increasing aggregate demand in a healthy manner when there is a recessionary period or cyclical downturn in the business cycle and the economy. Resulting in increasing employment, which ends a recession to prevent depression (Amadeo, 2018). The expansionary fiscal policy increases government expenditures and lowers taxes in revamping the nation's economy and development during economic recessions and slowdowns. It increased employment levels and raises living standards (Borad, 2018).

#### 2.3.1.2.2 Contractionary Fiscal Policy

To Borad (2018), contractionary fiscal policy is a macroeconomic tool that focuses on raising tax rates and/or reducing government spending. It ends up negatively affecting households' disposable income and the profits margin of businesses and hence investment expenditures and GDP growth to eliminate the inflationary gaps and pressures. It is a phenomenon of the government in combating increasing inflation levels and other economic distortions in terms of introducing a budgetary surplus. Where the amount of government income emanating from taxes and duties is far more than its total expenditures because the economy experiencing inflationary pressure.

To Amadeo (2018), contractionary fiscal policy is a reduction in expenditure, transfer payments and/or raising the level of taxes to contract the economy by reducing the quantity of money in circulation from individuals and businesses to spend. By implication is a restrictive type of fiscal policy where the government increases taxes and reduces public expenditure to curtail inflation and prevent the economy from spoiling (Borad, 2018).

The purpose of applying the policy is to dis-stimulate the economy by reducing aggregate demand, lowering the general price level in terms of inflation, cooling down the economic pressure and lessening growth to eliminate inflation. The effect is to reduce investment, and business profit

and force businesses to decrease employment and the cost of production. Done in periods of economic boom and high business cycles in terms of reining the growth of the economy, with very little money circulating within the nation's economy for developmental purposes. Thus slowing economic growth by retracting more money from circulation due to the rapid growth of inflation. (Kramer, 2021).

The ultimate aim of a contractionary fiscal policy is to ensure the closure of an inflation gap by restraining the economy and decreasing inflation rates. A country's economy, which is facing an overheating economy, inflationary pressures, low unemployment level, deficit financing and high growth rate, sees the application of the policy as an appropriate measure (Amadeo, 2018).

### 2.3.2 Monetary Policy Impacts

#### *2.3.2.1 Monetary Policy*

Monetary policy refers to the application of strategic measures by the central banks of toolkits of discount rates, interest rates, open market operations, cash reserve requirements and foreign exchange rates. The monetary policy as a macroeconomic policy involves the process where a country's monetary authority influences the level of economic activity by controlling the quantity of money in circulation in the country by targeting inflation and interest rates and ensuring price and exchange rate stabilization (Chappelow, 2019).

According to Terra and Arestis (2017), monetary policy deals with the operationalization of the central banks in influencing the nation's money creation and managing the liquidity supply for economic growth and development. With the application of open market operations, reserve requirements, discount rates and other interest rates. Segal (2017) also added that it involves controlling the state of the quantity of money supply, which in turn influences the rate of interest and inflation to attain certain policy objectives. To grow and stabilize the economy in terms of

dealing with the various risks associated with financial stability, such as the stability of prices, inflation rates and volatile exchange rates.

The focus is on regulating and controlling the value, the cost of money and supply through designed measures by counteracting negative trends in the economy in terms of stabilisation and sustainability policies. To Surbhi (2015), the monetary policy adopted as a strategic action by the central banks is to stabilize specifically certain macroeconomic policy goals by controlling and regulating the flow of money supply quantity, composition and the circulation of credit and the direction of money and the structure of interest rate in a nation's economy.

The essence is to control the quantity of money in circulation, interest and the exchange rates coming with economic shocks in achieving the macroeconomic goal of economic growth. There is the need to manage economic shocks with their concomitant effect on inflation, which manifests itself in the short term. It is the stabilization of inflationary and deflationary gaps, aggregate demand and liquidity in eliminating macroeconomic instability (Chappelow, 2019).

#### *2.3.2.2 Types of Monetary Policy Tools*

##### 2.3.2.2.1 The Discount Rate

According to Bajpai (2019), the discount rate is the rate at which central banks based lending to universal banks when they are short of reserves. The rate of borrowing by the universal banks when in need of excess liquidity to meet reserve requirements. It comes because of withdrawals and by extension of giving more loans to customers and for loans termed as short term and to other depository financial institutions for taking loans from the central bank discount window. The central banks use this as a complement to open market operations in satisfying the targeted federal funds rate. Thus serving as a complementary source of liquidity for universal banks (CBB, 2018).

It is the value of money as a return charged by the central banks on loans to the universal banks and other financial institutions as loaned capital for short-term payment and operating

requirements. By the discount window, it is a charge on a loan or lending facility in the fulfilment of shortfalls in funding for the avoidance of liquidation and bank failure (Chappelow, 2019). However, the prevailing interest rates keep on fluctuating with different categories of loans given different tiers of discount and interest rates for diverse reasons (Heakal, 2019).

#### 2.3.2.2.2 Reserve Requirements

To Amadeo (2019), reserve requirements, which are the universal bank's cash proportion set aside by the nation's central banks, constitute a fraction of customers' deposits and savings that the financial institutions hold in cash as liquid assets in their vaults or deposited at the central bank, per the nation's central bank directives. It involves holding a certain proportion of all deposits as cash, which are not part of loanable funds nor does it earn interest (CBB, 2018).

According to Chen (2019), is a repository of the reserve used in controlling the liquidity in the financial sector by setting out the minimum quantity of money reserve that universal banks must hold, falling in conformity with customers' deposits made at the various banks. Serves as reserves the banks cannot give out as loans to customers. The goal is to limit the amount of money that universal banks can grant as loans to the public and its customers as approved liquid assets (Amadeo, 2019).

To Barone (2019), it involves changing the proportion of total assets that universal banks are eligible to hold in reserves. The greater proportion of the assets as cash is invested in illiquid assets such as mortgages and loans, thus changing the availability of loanable funds and money supply and hence the financial institutions leading capacity. Thus yielding a negative or positive effect on financial institutions' performance and profitability (Chen, 2019).

An increase in reserve requirements reduces the amount of money available as funds at the monetary base in the banking sector for individuals, corporations, and the bank's capacity to lend. In effect, it ends up reducing the amount of money available to the banks as demand for currency

in the banking system (Amadeo, 2019). To Chen (2019), the higher the percentage rate of the reserve requirement the lesser the profit the banks generate with their bank deposits with a strong impact on smaller banks.

#### 2.3.2.2.3 Open Market Operations

One of the most important and the easiest flexible tool for the implementation and control of monetary policy worldwide is open market operations. It is very effective to employ in the control of the supply of reserve balances held by universal banks and financial institutions and in managing the rise and fall of short-term interest rates when the need arises (Kenton, 2019).

To Hayes (2022) open market operations refer to the management of the supply of money in a country where the central banks undertake the buying and selling of financial instruments such as government bonds or treasury notes or mortgage-backed securities, from the various universal banks and other financial institutions, in exchange for money on deposit at the central bank. In effect, changes interest rates in the economy by raising or lowering them (Amadeo, 2019). The operationalization of the open market operations is to adjust and manipulate the central bank funds rate, at which various banks lend reserves to each other (Kenton, 2019).

To CBB (2018), is a tool employed by a nation's central bank in expanding or contracting the quantum of the money supply to inject liquidity into the economy by regulating liquidity in circulation. Thereby stimulating economic growth or the extraction of liquidity in circulation and in the banking sector to contract economic growth. It is the buying and selling of government bonds and securities by the central banks to and from the financial banking and non-banking institutions and the general public with the sole aim of influencing bank reserves and the management of liquid money (Kenton, 2019).

The selling of government securities such as bonds and treasury notes as a contraction of the money supply drains the banks' reserves, money stocks and loanable funds from the financial institutions and the public. This in effect slows down inflation and economic growth and ends up raising the interest rates of the financial institutions, manifesting from the increase in the cost of credit to the public and the reduction in the nation's monetary base (Boundless Business 2016).

According to Hayes (2022), the buying of government securities expands the quantity of money supply in terms of raising domestic banks' reserves and the liquidity of the sellers of the bond securities by crediting their accounts and finally expanding the total monetary base. Thus, the purchasing of securities and injection of funds in effect lower fed funds rate and interest rates, thereby lowering unemployment and stimulating economic growth. It thus gives the various banks many funds to lend to their customers (Amadeo, 2019).

#### *2.3.2.2 Types of monetary policy*

##### 2.3.2.2.1 Expansionary Monetary Policy

According to Pettinger (2020), expansionary monetary policy involves a situation where monetary authorities adopt a system of increasing the quantity of money supply to lower interest rates, thereby easing financial institutions' credit restrictions to increase the facilitation of loans and advances. This occurs through the decreasing of discount rates, reserve requirements and the purchases of bonds and treasury securities through open market operations from the financial institutions, brokerage houses and the public.

To Hall (2019), expansionary monetary policy is an implementation of a loosening nation's policy by the central bank to increase the quantity of money supply in circulation by growing the economy using instruments including the purchase of government bills and bonds, decrease in reserve requirement rate, reduction in the discount rates and the interest rates. This is done with the objective purpose of increasing the excess liquidity reserves available to universal banks for money

creation (Pettinger, 2020). It is a loosening policy to increase the quantity of money supply in circulation through the application of open market purchases of government bonds, the lowering of discount rates chargeable to universal banks and the lowering of the required reserve ratio (Amadeo, 2019).

The effect of the expansionary monetary policy is to revamp the economy by influencing corporations, investors and individual consumers to increase their borrowing at a cheaper rate toward risk assets due to the reduction in the cost of borrowing. This affects the cost of loanable funds to fall thereby increasing investment, productivity and consumer spending. This however subsequently discourages saving deposits, making government bonds and treasury bills less attractive (Hall, 2019). To Bajpai (2019) the increase in consumer spending due to more money in circulation in the economy affects microeconomics factors manifesting into businesses enjoying higher economies of scale by expanding businesses and employing more workers, thereby increasing the well-being and the standard of living in the economy. The increase in money supply in the economy creates the availability of money for borrowing from financial institutions and revamping businesses spending and investment decisions (Pettinger, 2019).

#### 2.3.2.2.2 Contractionary Monetary Policy

Contractionary monetary policy as a macroeconomic tool involves a reduction in money supply in circulation in an economy by a central bank through increases in various base interest rates, which influences money supply growth in the economy. It is a monetary measure designed to reduce inflationary pressures in terms of reducing the quantity of money in circulation and other distortions in the economic systems brought about by various government interventions for economic and financial stability (Chan 2020).

Contractionary monetary policy also known as a restrictive monetary policy deals with the view of reducing the quantity of money in circulation by tightening policy. It is decreasing the

quantity of money supply in circulation by the application of open market sales of government bonds, raising discount rates chargeable to banks and raising the required reserve ratio. It decreases the money reserves available to commercial banks for money creation, which reduces returns on loans to banks. The central banks also use the bank rate, which involves the rate used by the various bank to borrow liquidity from each other by meeting the reserve requirement overnight to raise interest rates. It decreases the volume of money supply, business borrowing and operations, aggregate demand, general price levels and inflation (Amadeo, 2019).

The primary macroeconomic objective is to increase interest rates, reduce investment in business cycle expansion, aggregate demand, and the overall GDP growth of the nation's output and reduce the ever-rising inflationary gap and liquidity. The effect is reducing economic growth and inflationary pressures. The application of the contractionary policy by the central banks is to reduce the financial institutions' credit facilities making them less creditworthy to make money available to lend, resulting in the charging of higher facilities of interest rates (Amadeo, 2019).

## 2.4 CAMELS Rating System and Performance Analysis

### 2.4.0 Introduction

The CAMELS' Rating System is a standardised system of operation used in rating financial institutions international by supervisory authorities. The assessment depended on the financial statements of the financial institutions (Rahman and Islam, 2017). To Kagan (2018), based on specific factor ratios, with an assigned score of one, as the best quality institution with the certification of strong performance, with safe operations. Furthermore based on a rating of five, as the worst institution with an unsatisfactory abysmal poor performance (Balikai & Bannigol, 2019). The CAMELS rating system and performance analysis analysed below are used in assessing the universal banks' financial performance.

### 2.4.1 Capital Adequacy

Capital adequacy involves the measurement of a bank's financial ability with the application of its equity capital funds with the expectation to maintain by financing likely potential losses about the bank's risks such as credit risk, market and operational risks in terms of weighted assets and current liabilities (Hayes, 2019). Capital adequacy, which describes the acquisition and sources of capital to risk assets, is the examination and the rating of organizations' level, quality of banks' capital to credit, market risk and trends and financial conditions by analysing their capital performance. It involves investment collection relating to the quality and strength of earnings, rules and practices relating to the reasonableness of dividends and interest Referred to as the capital to risk-weighted assets ratio by comparing the bank's capital to its assets in terms of protecting the bank's creditors (Kagan, 2018).

It is ensuring the bank's ability in absorbing a substantial amount of losses in conformity to the bank's statutory capital requirements. To prevent the banks from possible liquidation and bankruptcy by revealing the bank's growth to profitable but risky ventures thereby enhancing the confidence of depositors (Odame-Gyenti, 2019). The bank's assessment is dependent upon the minimum ratio of capital to risk-weighted assets of 8% to Basel II and 10% to Basel III. A high capital adequacy ratio or percentage value above the stated least requirement of 10% is capable of ensuring the sustainability of the bank in meeting its financial obligations by absorbing losses with a low bank's risk of failure, insolvency and winding up (Hayes, 2019).

The capital adequacy which is positively correlated to the bank's profitability is calculated as the bank's capital (Tier 1 capital + Tier 2 capital) divided by its risk-weighted assets. To the methodology of Ferrouhi (2014), debt to equity serves as a proxy for the measurement of capital adequacy. The debt-to-equity ratio relates to the measurement of the value of debt capital such as the company's current and long-term liabilities including accounts payable, accrued expenses,

mortgages, and long-term leases a company employs in comparison to the value of equity capital employed by the company such as shareholders' equity and companies retained earnings. The debt-to-equity ratio shows a firm’s debt as a percentage of the company’s total market value, indicating the percentage of debt value the firm employs to finance its assets, including buildings and equipment. It involves the use of total debt such as short and long-term interest-bearing debt or the application of only long-term debt in the numerator.

To Odame-Gyenti (2019), capital adequacy with a higher ratio and a good rating of 1 is an indication that there is the possibility of the banks meeting their unexpected losses. The bank can have an excellent capitalized level with no exposure to earnings and credit deficiencies and is capable of absorbing current and anticipated losses of risk-based net worth requirements. A bank is safe by registering a higher ratio with the ability to fulfil its financial obligations to depositors by protecting their assets. While a lower ratio or rating of five is an indication of higher interest rate risk and credit risk with poor asset quality and undercapitalization (Hayes, 2019). Again, a ratio of 1 implies that in the event of a theoretical liquidation the firm uses all the amount of debt as equity with nothing left for the shareholders, meaning that creditors to the company have access to all assets. A rising ratio over time shows a dynamic growth strategy financed by debt. Nevertheless, the rising leveraged is an indication of risk to the company resulting from increasing expenses of higher interest costs emanating from the rising debt (Lan, 2018).

### 2.4.2 Asset or Loan Quality

To Chen (2019), asset quality, which relates to loans provided by the banking institutions, involves the rating of an organization's soundness of assets such as current and fixed assets, credit portfolio, investments and operations and loan quality in terms of earnings from investments. Thus, the appropriateness of risk factors to earnings from the institution's capital that demonstrates its

stability to risk. It assesses the fairness of the diversity and the quality of investments, loan portfolios and the market value of investments to the book value (Priya 2019).

It is the critical analysis of a credit risk aliened to a particular asset in terms of assets loss of value with the generation of interest or payments, which relates to investments and loan portfolios relating to non-performing loans to total loans ratio. Demonstrating the number of loans offered by the banks and investment portfolios such as stocks, and bonds regarding existing and potential credit risk and the manager's ability to recognise and deal with and practise prudent credit risk (Chen, 2019).

It evaluates the adequacy, efficiency, and effectiveness of investment and loan policies, procedures and practices within a company and non-performing assets relating to balance sheet activities both on and off transactions. It is critically assessing the financial institution's effectiveness in managing, controlling, monitoring and evaluating credit risk by ensuring the bank's stability in times of risk (Kagan 2018).

Asset quality forms the bedrock of the quality of the loan portfolio and the administration of credit. It serves as a crucial element in influencing the bank's profitability, rating and evaluating the bank's operating performance and management. It involves the evaluation of an institution's assets to its credit risk attached to assessing the loan quality by the provisions of earnings, and the ability in identifying and manage the credit risk (Abata, 2014).

The underlying factors influencing asset quality are the loan and investment portfolio quality and credit administration programme. Good quality loans such as government bonds and treasury bills generate better returns as compared to poor quality loans including junk bonds and corporate credits, which generates low returns with the probability of turning into non-performing loans. Poor loans detract the institution from managing other areas successfully and profitably because lenders

failed in fulfilling owed principal and interest, interrupting the bank's cash flows thereby increasing their costs of debt collection (Kagan, 2019).

For loans constitute a greater proportion of the bank's assets and a determining factor of the commercial bank’s profitability with direct correlation. It also forms the greatest risk to the capital with particular reference to non-performing loans, which have a negative correlation with the profitability of the banks, serving as an indication of bank liquidation and bankruptcy (Abata, 2014). To the methodology of Ferrouhi (2014), loan loss provisions to total loss serve as a proxy for the measurement of asset quality. The assessment is based on factors such as portfolio diversification, credit risk regulations and efficient utilization operations (Kenton, 2018).

To Kenton (2018), a higher ratio of valuation or a rating of one is an indication of a good asset quality and bank performance with minimal credit risk in terms of lower non-performing loans to total loans and a lower cost to money and the availability of liquidity. A good rating of an asset quality emanates from a situation where a bank can have an excellent minimal portfolio risks level with exposure to conducive, safe operations with credible lending policies, investment policies and financial procedures. While a lower ratio or a rating of five shows deficiencies and incapability of the bank in absorbing anticipated losses with asset problems on earnings and level of capital. It is a sign of an increase in the exposure of credit risk, poor asset quality and banks portfolio and poor management principles. (Kagan, 2019).

### 2.4.3 Management Quality/Efficiency

To Kagan (2018), management efficiency, which relates to the management of risk at each level of operations, involves the diagnosing and administering of an oversight responsibility by management to the financial stress of the bank. Referring to the performance of management's ability and capability to plan, come out with and able to quantify, manage and reduce the risk of the company per day’s operations and the general performance of the company and its risk portfolio

(Priya, 2019). This is done by management by identifying, measuring and controlling the company's risks of daily activities and looking at the accurateness and the effectiveness of management information and risk control, monitoring and evaluation systems (Segal, 2019).

It assesses the depth and the succession plan of management through compliance with policy laws and the application of internal and external policy regulations and controls (Kagan, 2018). Management efficiency, which is measured through diversification ratio and following the portfolio theory deals with the application of a mixture of verities of investment portfolios as a strategic measure of risk management (Segal, 2019). To Odame-Gyenti (2019), the institution's ability in responding to financial stress and crises falls within management's determination in complying with the internal and external policy regulations in ensuring the smooth operational performance of the company. It is a vital framework of the CAMELS model in terms of the sustenance and the improvement of the bank's operations in terms of resonating efficiency of management in the execution and performance of their duties through the designation of compensation policies (Rahman and Islam, 2017).

The purpose of management efficiency is for yielding higher returns by the bank in diversifying the associated risk on different entities in the long-term resulting from full diversification. This is to lower the risk associated with the bank's investments, resulting in a cost-effective level by investing in different securities in achieving diversification benefits and income stability. It shows the pro-activeness, effectiveness and dynamism of management leadership in the changing market environment, administrative compliance, competence and innovativeness through the delegation of responsibilities of management (Segal, 2019). A good efficient management system leads to the introduction of a vital control measure relating to the risks in the banking industry, ensuring sound and safe operation in adherence to and upholding set regulations, norms, policies and applicable laws (Rahman and Islam, 2017).

A good rating of one with a higher ratio of management efficiency is an indication of management and directors responding effectively to changes in socio-economic situations, coping efficiently with past, present, and emerging future challenges in the conduct of their duties and operations. While a rating of five is an indication of incompetence emanating from the severity of management ineffectiveness in restoring a safe banking system of operations (Odame-Gyenti, 2019).

According to the methodology of Ferrouhi (2014), returns to equity serve as a proxy for the measurement of management efficiency. To Ongore (2013), it refers to the rate of return on the amounts of money invested by the shareholders or investors into the company. It is the proportion of a company's profit made or net income after taxes to the quantum of equity share capital invested. Another ratio is the operating expense ratio, which involves the measurement of firms operating expenses in terms of cost incurred in operating an asset to its revenue generated. Rising operating expenses in terms of maintenance expenses are an indication that less profit will be generated, hence management inefficiency and incompetency (Hayes, 2019).

### 2.4.4 Earnings Quality

To Kagan (2018), earnings ratio, which relates to earnings potentials and quality, sustainability, and trend, involves the evaluations of the long-run core earnings abilities of the bank from diverse operations and non-traditional sources that form the components of the bank's earnings. It is the assessment of a financial institution's trends, stability and ability to generate appropriately quality and good sources of income and returns for the bank's growth. It shows a firm all-embracing efficiency and performance, which is measured against its capital adequacy in terms of the bank's potential losses and the bank's ability in paying its dividends (Lan, 2018).

It is the assessment of the company's level of expenditure on operations; earnings volatility in terms of market risk including interest rates, foreign exchange rates, and price risks; the rating

of net interest margin; valuation allowance accounts and net worth level (Hardin, 2016). It is one of the financial criteria employed for analysing, evaluating and demonstrating to shareholders and investors the firm's ability in generating and making profits comparable to revenue and operating costs, shareholders' equity and assets to profitability ratios (CFI, 2015).

The purpose is to evaluate the banks' earnings performances in terms of the past, present, and future earnings prospects under some economic conditions relating specifically to net interest margin and income quality, the ability in absorbing financial shocks and composition (Hardin, 2016). The rationale involves maintaining competitive leadership, quality of existing assets of the institution and adding up to capital through retained earnings as an influential factor to measure its continued viability (Kagan, 2018). Thus showing the company a competitive edge in quality, efficient production techniques and perception or branding. Given the company a competitive advantage to charge more for its products. It shows an overall operating efficiency through the aggregation of all the expenses of daily business activity. Otherwise, the firm will suffer as competition increases thereby forcing gross profit margins to downturn (Lan, 2018).

The assessment is based on the bank's strength in creating incomes on its assets for growth and the provision of enough earnings and capital for the bank. It is dependent on assessing the quality of the existing asset of the banks through return on assets ratio, net interest margin, and net worth level. (Kagan 2018). As potential investors are concerned about this ratio in terms of deciding whether to invest in the company or not. A firm that can efficiently create earnings with the application of its assets records a high ratio (Schönfeld, 2018).

According to the methodology of Ferrouhi (2014), return to assets serves as a proxy for the measurement of earnings performance. Return on assets and equity are the most proxy and the best indicators for assessing banks' earnings performances. To Ongore (2013), it involves revenue generated to the total asset. It is the measuring of the capability of the institution's management in

assets in generating revenue and determining the efficiency of the company's resources to generate revenue. Return on assets assesses the net income returned to equity holders as against total assets financed by debt and equity.

A higher return on assets leads to an efficiency of management and the bank's resources (Lan, 2018). A good rating of one or a higher percentage of earnings is an indication that the company is better off and doing a good job in utilizing its assets to generate revenue, thus measuring the efficient utilization of assets. Showing management effectiveness and efficiency in terms of shareholders' capital. Enabling the business to make large payments of dividends to shareholders and a remarkable amount of retained profit for business growth (Schönfeld, 2018). For a financial institution, registering returns of 7.5% and above is an indication that for GHc1 of a firm's assets, there is a generation of GHc0.075 in net income by the firm (Lan, 2018).

### 2.4.5 Liquidity Management

The liquidity component of assessing the financial institution relating to the flow and the availability of liquid cash involves the determination of the bank's ability in achieving its short-term commitment to satisfying its unexpected depositor's withdrawals without having any effect on its daily operations and loan obligations. It goes with the readiness in maintaining liquid cash and the easiness of converting the bank's marketable assets into cash (Chen 2019). It assesses the financial institution's ability in generating a lot of liquidity in meeting their commitments and the risk of sensitivity to interest rates and the availability of convertible assets into cash without excessive losses. It relates to fulfilling its financial obligations, withstanding any unanticipated depositors' withdrawals and potential fluctuations, which can lead to liquidity shocks (Kagan, 2018). It is the management of a bank's balance sheet risk through the assets and liabilities in terms of interest rate risk and liquidity, cash flow risk sensitivity and exposure and the convertibleness of ready assets into liquid cash (Odame-Gyenti, 2019).

It evaluates the sources of liquidity availability and adequacy and the company's ability in meeting the past, present and future liquidity needs without negatively influencing its operations and conditions (Chen, 2019). It assesses the institution's ability in having access to the money markets and other related sources of funding in terms of short-term volatile sources of financial resources, such as borrowings to fund long-term assets and investment and the strength in selling some accumulated assets for liquidity financing (Kagan, 2018). Liquidity serves as an essential factor for banks in meeting their short-term commitments and loan responsibilities. It assesses the easiness of dissolving an illiquid asset such as real estate or security including bonds at their intrinsic value into cash through market price disposal (Chen, 2019). Liquidity plays a major role in determining the failure, survival and growth of the banks and is an influential factor in inspiring the confidence of depositors and lenders (Odame-Gyenti, 2019).

According to the methodology of Ferrouhi (2014), deposits to total assets serve as a proxy for the measurement of liquidity performance in terms of debt-to-assets ratio and debt-to-capital ratio. The debt-to-assets ratio measures the amount of the firm's asset base in financing debt. Measured as the percentage of total assets financed by a company's debt. A high value indicates that the company is employing a greater amount of financial leveraged which increases its financial risk in the form of fixed interest payments (Lan, 2018). A good rating of one or a highly liquid bank is of interest to professionals, businessmen and investors and shareholders alike as it shows the bank's adequacy and consistency of cash flows to debts and interest payments and other fixed charges and the less risky position of the bank. On the other hand, a firm with low liquidity or cash flows is likely to overburden with debt and hence be forced into default.

A ratio indicating limited or low liquidity serves as a signal of problems ahead to potential investors and at the same time serves as a risk to the firm in a stressful economic situation. Higher leveraged leads to financial risk, pinning down the company to a stricter debt agreement, thereby

restricting the growth opportunities and ability of the firm in paying or raising dividends (Auerbach, 2019). A debt ratio of 0.5 is an indication that debt is twice of asset and thus a firm's equity totals are twice its debt. The debt-to-capital ratio is measured as the percentage of total capital such as liabilities plus equity, financed, by a company's debt such as interest-bearing notes and short-and long-term debt. A high ratio shows high financial leveraged and risk (Lan, 2018).

### 2.4.6 Sensitivity to Market Risk

Sensitivity to market risk looks at the effect of market fluctuations on the performance of the banks resulting from unexpected changes in foreign exchange rates, derivatives, interest rates etc. and its associated risk on loans and deposits and the bank's operations. It relates to assessing the structure of the bank's assets and liabilities; the board of directors' regulations and policies for limiting, tolerating, and managing risk and risk reporting; and the bank's protective cover from the bank's earnings and capital (Stackhouse, 2019).

To Kagan (2018), it is assessing an institution's sensitivity to exposure to market risk effects on its financial earnings and operations. It emanates from unfavourable fluctuations in interest rates, derivatives, and foreign exchange rates, influenced by trading and non-trading positions, foreign operations and prices of equities and derivatives. It is the operational capability of management of credit and lending ability through identifying, measuring, monitoring, and controlling the institution's exposure to market risk. It relates to a situation where interest rates, foreign exchange rates, equity prices and commodity prices negatively influence the earnings of the financial institutions.

Sensitivity to market risk looks at the impact on the financial institution's earnings resulting from market changes and fluctuations in interest rates, products and equity prices and foreign exchange rates with its concomitant effect on the bank's financial health and operations. This calls

for the management of interest rates concerning market risks such as repricing risk, basis risk, prepayment risk, options risk and yield curve risk (Stackhouse, 2019).

A strong and good rating of one or a higher ratio of market sensitivity describes management effectiveness in identifying the level of market risk such as interest rate risk, equity prices, international operations risk, analysing, and controlling them to the benefit and soundness of the institution operations, earnings and handling risks (Priya, 2019). While a weak and a bad rating of five or a lower ratio of market sensitivity demonstrates that management is inefficient in handling earnings, risks, and operations and that the bank is at a critical financial risk and weakness with the likelihood of failure if serious attention is not given (Kagan, 2018).

## 2.5 Financial and Banking Institutions in Ghana

### 2.5.1 The Structure and the Role of the financial Industry

At the apex of the financial institutions in Ghana is the central bank, which is independent with national authority with oversight responsibility for the external stability of the nation's currency. It also looks at stimulating the good performance of the financial system through regulation of the financial sector markets activities and providing financial services. The primary purpose of the Bank of Ghana is conducting and embanking on the employment of any sound monetary policy tools through money supply operations with the framework aiming at the stabilization of an inflationary outlook through price stabilization. The achievement is dependent on the application of the Monetary Policy Rate (MPR) as the primary and the basic policy tool to control the inflationary spiral in the nation's economy.

The essence is developing an attractive environment that results in sustainable economic growth and development in the country (Bank of Ghana, 2018). According to Antwi (2015), banks are financial intermediaries that accept deposits from surplus spending units and channel these in the form of loan products to deficit spending units in the economy. Commercial banks are the main

controller of the financial system in Ghana performing financial intermediation. They control a greater portion of the investment funds from domestic deposits and are the main creditors of the corporate bodies, SMEs and individual investors. As Ghanaian banking and financial industry is well capitalized, profitable and liquid (PwC 2014).

To the Bank of Ghana (2020), regulated institutions in Ghana were made up of 23 Universal Banks consisting of Bank and Non-Bank institutions, 15 Finance Houses, 145 Rural and Community Banks, 25 Savings and Loans Companies, 180 Microfinance Institutions, 1 Mortgage Finance Company, 1 Leasing Company and 426 Foreign Exchange Bureaux.

### 2.5.2 The Financial Sector Reforms

#### *2.5.2.1 The Financial Sector Reformation since 1986*

The financial system and the banking industry in Ghana have gone through reformations and restructuring transformation since 1986 with particular reference to the introduction of the Financial Sector Adjustment Programs (FINSAP) I and II through its implementation in the late 1980s up to the middle of the 1990s. This has resulted in the privatization of most state-owned banks and the influx of new privately owned domestic and foreign banks without governmental ownership and interferences. The banking system since the reformation with the introduction of new regulations and rules has become effective, functioning well and very competitive. Concerning efficient and effective intermediation processes with inventions, innovations, dynamic governance structures, procedures, and practices (Adjei & Chakravarty, 2012).

The emergence of the new domestic and foreign banks and investors in the banking sector has increased competition among the banks leading to strong business practices, an impetus for dynamic efficiency and the use of technological products. The purpose of the reform was based on the introduction of an improved regulatory and supervisory framework, revamping the banking and

the non-bank financial institutions and financially handicapped and insolvent distressed banks (Ackah & Asiamah, 2014).

There was also the introduction of the universal banking concept in 2003 with the license of undertaken commercial and other banking activities making the banks versatile in the provision of services to the public. The reformation led to the development of the banking and non-banking sector the introduction of the minimum capital requirements and the financial market dealing with buying and selling of financial securities including bonds, equity stocks, and foreign exchange currencies in the derivative markets. In 2006 and 2008, there was the introduction of a new payment system known as the real-time gross settlement system (RTGS) and the National E-Zwitch system respectively (Quarteya & Afful-Mensah, 2014).

The Bank of Ghana 2008 rolled out an E-Zwitch, a biometric smart card that allows individuals to send and receive money and make an electronic payment between and within banks. There were also other electronic solutions emerging from telecommunication companies like MTN. These products such as mobile money transfers aimed mostly at making simple transactions and money transfers via cell phones (Arthur, 2015). As of 2014, the total number of universal banks existing in Ghana numbered 27, increasing from a total population of 16 universal banks in 2000. There were also 137 rural and community banks existing at that period, with the non-banking financial sector comprising 58 institutions made up of mortgage and leasing firms, savings and loans and financial houses (Ackah & Asiamah, 2014).

The universal banks' executives were optimistic that the industry is on the brink of a period of significant reformation and transformation. They identified four key factors that will drive the biggest transformation in the country’s banking industry over the coming years. These factors include high competitive edges, stringent legislation and regulations, technology and innovations

and the performance of the domestic economy. The bankers consider that technological factors will have the greatest influence on the future business of the banking industry (PwC, 2014).

#### *2.5.2.2 The Recapitalisation Policy Directives since 2017*

There has been a structural adjustment in the banking sector by the Bank of Ghana based on the recapitalisation and liquidation in terms of the minimum capital directive on 11 September 2017 (PwC, 2019). This was with particular reference to the conduct and mismanagement behaviour of UT and Capital bank due to the misappropriation of customers' funds and illegal utilization of and non-availability of their stated capital. Causing the Bank of Ghana to call for the acquisition of the banks, by the GCB, after the revocation of their licences (Bank of Ghana, 2019).

This malfeasance leaves no option but to call for the raising of the universal banks' minimum capital requirement from GHS120 million to GHS400 million, and the setting of a deadline for its completion and payment which was at the end of 2018 (Myjoyonline, 2017). The clean-up exercise undertaken by the Bank of Ghana in the banking sector and intended to resolve the problems of insolvency facing some financial institutions, poses a serious risk to the banks' customers. It also involves the restoration of confidence and trust in the banking and the non-banking sectors in Ghana (Bank of Ghana, 2019). In recent times, the government at a total cost of GH21b cleaned up the financial sector. With the purpose of revitalising the banking sector in the economy (Vice President, 2021).

Thus, the major causes include the low and inadequate capital in violation of the minimum regulatory capital requirement by the Bank of Ghana. The existence of excessive risk and inadequate management of risk by the board of directors. Misappropriation of depositors' funds with liquidity problems. Weaknesses in the bank's corporate governance and misrepresentation of the true financial condition of the banks. The non-implementation of on-site examination

recommendations and non-compliance with Bank of Ghana prudential rules and regulations (The independent, 2019). Other influential factors for the withdrawal of the licenses include poor capital adequacy, a great amount of non-performing loans of the banks coupled with inefficient corporate governance with some suspicious transactions and licensing procedures (PwC, 2019).

The introduction of a recapitalisation system by the Bank of Ghana requiring universal banks to raise their minimum capital led to uncertainties about the future of the banking industry. There is the fear of scarcity of potential investors who will be unwilling in providing the required capital with the existence of a high risk of non-performing loans, the decline in shareholders' funds, and a continuous fall in the value of the local currency. However, the uncertainty that was befalling the banking industry is significantly been taken off resulting from the compliance outcome of various banks and the elimination of several malfunctioning banks by the revocation of their licences with the implementation of the universal banking licences system (PwC, 2018).

The recapitalisation processes have resulted in banking crises in Ghana and have affected both the public and private banks including the foreign banks to raise the status and the performance of the banking industry giving them greater responsibility for commercial decisions. The impact of the restructuring in management and the banking operating procedures in the banking sector has affected many distressed banks leading to either consolidation or takeover or an absolute closure (Bank of Ghana, 2019). The clean-up activity in the banking sector not leaving out the specialized deposit-taking sector and the non-banking financial institutions have brought about the extinction of many financial institutions.

The result was the revocation of 9 universal bank licences, 347 microfinance institutions with already 155 collapsed companies, 2 non-bank financial companies which were already out of business, the revocation of 39 micro-credit firms and money lenders with 10 out of operations, and 23 savings and loans institutions including 8 finance house businesses. The revocation of the

licenses is with the objective aim of cleaning up the financial sector thereby restoring stability and resilience (Ghana Web, 2019).

#### *2.5.2.3 The Impact of the Minimum Capital Requirement and the Digitisation Policy*

The minimum capital requirement and the digitisation policy from the directives through to its full implementation have influenced greatly the banking operations in Ghana, from mergers and acquisitions to winding up and closure of some banks. The banks pruned down heavily from 34 as of 2018 before the introduction of the minimum capital directive to 23 universal banks capable of meeting the requirement. Representing a 32% drop for a better resilient banking industry (PwC, 2019). To the Bank of Ghana (2019), the structure of the banking sector as of 2019 consists of 23 operating universal banks with 1,225 branches cutting across all 16 regions in Ghana. Out of the 23 universal banks, 14 represent foreign-owned with nine designated as domestically controlled banks and two as Government-owned banks (PwC, 2019).

Inclusive to the 23 banks is a Consolidated Bank Ghana Limited (CBGL) consisting of 3 major collapsed banks, merged into a CBGL and capitalised and supported with an amount of GH¢450 million. Due to the revocation of the failed bank licenses, an amount of GH¢11.2 billion has been secured as depositors' funds in the settlement of the collapsed bank depositors. In addition to this, an amount of GH¢925 million has been issued by the Central Bank in the settlement of 386 microfinance institutions owned by the banks' depositors. In addition, the indigenous banks struggling to meet their minimum paid-up capital demanded by the Bank of Ghana, have secured some funds provided to keep them solvent by the Ghana Amalgamated Trust (Ghana Web, 2019).

There is also the survival of 144 rural and community banks, largely responsible for the provision of financial services to individuals in the rural communities, having the ARB Apex Bank Limited as their "mini"-central bank and the supervisory body regulated by the Bank of Ghana. The non-banking financial sector consisted of 56 institutions (Bank of Ghana, 2019).

The recapitalisation exercise has yielded a positive result with the industry remaining resonant, solvent, liquid and profitable, resulting in a 14.7% increase in banks' total assets in 2018 in terms of the bank's paid-up capital and deposits growth. Thus making the baking sector well capitalised with sustainable growth in its assets through increasing deposits and paid-up capital (Bank of Ghana, 2019). There are prudential regulations and the tightening of the supervisory systems, strengthening of the financial sector and recapitalisation in terms of adequacy stated capitals by the financial institutions and good management performance.

The clean-up exercise restored confidence in the banking sector, saving about 2,655,100 deposits from distressed customers and also over 3,000 jobs with total banks' assets increasing to an amount of GH¢112.8 billion. Thus making the universal banks strong and richer with a continuous fall in the interest rate. For economic growth and stability, the Bank of Ghana is to ensure the resilience, inclusive, and supportive nature of the remaining financial institutions. By enforcing compliance with the statutory and prudential requirements by launching, the Ghana Deposit Protection Scheme in 2019 to secure and protect depositors' interests (Ghana Web, 2019).

#### 2.5.2.4 Policy Support and Regulatory Reliefs

Based on effective regulation and supervision, the Bank of Ghana implemented several changes to increase the safety and soundness of individual banks and the whole banking industry. This was accomplished through regulation and governance, such as the Capital Requirement Directive (CRD), which reduced the leverage ratio from 6% to 4.5% and changed the Common Equity Tier 1 capital to include 50.0% of unaudited earnings (Tier 2 capital). IFRS 9 Expected Credit Loss Impairment of the Bank and Guidelines on Prudential Treatment of Moratorium. The Bank of Ghana has released regulatory guidance on the prudential treatment of moratoriums and IFRS 9 projected credit loss impairment, as well as requirements on credit data submission (Bank of Ghana, 2020).

There was also the Ghana Sustainable Banking Principles, which served as a set of guidelines for banks to develop efficient environmental and social risk and management policy frameworks. This entails identifying environmental and social risks, opportunities, and good governance practices, as well as facilitating financial inclusion and compliance reporting. Others include establishing fair corporate governance and ethical standards, promoting gender equality, and facilitating resource efficiency and sustainable consumption and production (BoG, 2020).

The Bank of Ghana also implemented internal changes to strengthen bank supervision structures and improve its financial monitoring system and supervisory methodology. An Online Regulatory Analytic Surveillance System (ORASS) (eFASS) replaced the old Electronic Financial Analysis and Surveillance System. The purpose of the ORASS, which thus established as a single interface, is to provide a platform for facilitating timely submission of information (returns), improving data integrity, reducing the regulatory burden on supervised institutions, and improving offsite analysis and onsite evaluation for bank supervisors and other staff. To meet the annual test calendar, there was also a "virtual onsite" monitoring (Bank of Ghana, 2020).

During the COVID-19 pandemic, the central bank of Ghana introduced a robust monetary policy modernisation intervention to hold inflation expectations and exchange rate dynamics. This is to help the measures propounded by the government to contain the pandemic and create policy space supported by a strong and well-capitalised banking sector. Due to the reduction of the primary reserve requirement for banks to 8% from 10% to facilitate liquidity support by the banks to critical sectors of the economy. To provide the needed financial support to the economy, the capital conservation buffer (CCB) cut for the banks was 1.5% from 3.0%. Microfinance institutions' loan repayments that were 30 days past due were to be considered "current" (Bank of Ghana, 2020).

### 2.5.3 Ecobank Ghana Limited

#### *2.5.3.1 History and Overview of Ecobank Ghana Limited*

Ecobank Ghana Limited founded and incorporated in January 1989 in Ghana with its headquarters located in Accra is a subsidiary financial institution to Ecobank Transnational Incorporated formed in 1988 with its headquarters in Togo. Ecobank Ghana was with an initial focus on operating and serving as a merchant bank when licensed through the Bank of Ghana in November 1989, with the commencement of operation in February 1990 fully concentrating on commercial banking. From its beginning, the bank was a private regional banking institution in Ghana with its shareholding standing at 100% owned by institutional and private investors (Ecobank Ghana, 2019).

Based on the introduction of the universal banking system in Ghana in 2003, Ecobank in that year acquired universal banking licenses to operate as a universal bank, shifting from wholesale banking into retail banking with its stocks listed on the Ghana Stock Exchange in July 2006. The bank has grown its performance since its inception in the country counted among the best universal banks as a well-recognized corporate banking firm in the banking industry. The bank renders convenient, reliable and accessible services to customers, inclusive of multinationals and regional corporates by delivering such services as payments, transfers and foreign exchange transactions (Ecobank Ghana, 2018).

Ecobank Ghana has 67 branches with more than 230 ATMs scattered across the country with mobile and telephone banking services, internet and e-banking services through the Ecobank 24/7contact centre as of 2019. The Ecobank group renamed itself to be the Pan African Bank, with a new brand identity of being the largest bank in Africa, with a continuous provision of quality financial assistance to business institutions, customers and the general public (Ecobank Ghana, 2018).

The performance of the bank since its incorporation needed emphasis. The bank's total asset size in Ghana amounts to GHS10.45 billion in 2018 and GHS9.09 billion in 2017 as compared to

GHS8. 05 billion in 2016. The profit after tax amounted to GHS339.968 million in 2018 and GHS253.645 million in 2017 and GHS327.896 million in 2016. The Shareholder's equity of the bank amounted to GHS1, 326, 219m in 2018 as against GHS1, 036, 825m in 2017 and GHS964, 076m in 2016. Furthermore, the return on average equity and return on average assets registered 25.4% and 3.0% in 2017 and 28% and 3.5% in 2018 respectively. Showing good financial performance on the part of the bank (Ecobank Ghana, 2018). The employment status of the bank as of 2017 was 1,583 and 1,407 in 2018 in the 67 branches distributed in all the 16 regions in Ghana (Ecobank Ghana, 2018).

#### *2.5.3.2 Ecobank Ghana Products Delivery*

As competition increases, banks worldwide and Ecobank in particular, have been motivated in providing better innovative products and services to their customers, by introducing new products and expanding their service hours. The influx of new banks into the banking sector has brought about interns competition. Ecobank product delivery currently falls within the electronic services, with the bank trying to move away from a cash-based system into an internet and e-banking services, due to the significant demand for alternative payment methods by customers and the state of competition in the banking industry. Leading to technological innovations with the introduction of products such as automated teller machines and telephone and SMS banking (PwC, 2014).

The products delivered involve the provision of banking services in areas such as commercial banking, corporate and investment banking and consumer banking, dealing with the provision of the premier, advantage and direct banking services, to over 1.9 million customers nationwide. The general operation of Ecobank Ghana typically relates to offering products in areas including current and savings accounts, term deposits accounts, and personal and mortgage loans. Others also include remittances, mobile and e-banking, Xpress Point, microfinance and business loans (Ecobank Ghana, 2019).

The operations aimed at bringing out retail banking strategies relating to new products such as debit and credit cards, consumer credit, home loans, and microfinance. There is also SME financing in terms of setting up SME desks, in providing specialized banking services to the SMEs. The rationale is for the creation of value for their numerous customers. Other financial solutions of the bank fall within the provision of services such as short and mid-term finance, trade and project finance, investment, securities and capital market services and mergers and acquisitions.

Currently, Pan African Bank Ltd operates in diverse ways, focusing on the provision of high-quality state-of-the-art technology and innovative products, with the use of debit cards with savings and checking accounts. These have increased greatly concerning ATM transactions, due to their convenience and cost-efficiency. Others include the point of sale systems, and mobile and internet banking, which are also widely accessible in most areas (Ecobank, 2019).

The bank focuses on expansion and growth within its system of operation by improving and introducing new products and services to customers and getting new customers. It involves operating a new technological system of an instant transfer of money and making of payments by the use of Ecobank Rapid transfer, Ecobank mVisa P2P, Ecobankpay Scan+Pay through Masterpass and Mcash from one Ecobank to another freely or another sister banks at a cheaper cost, within Ghana and across Africa. Other digital services of electronic banking solutions for retail customers include the payment of utility bills, school fees, purchase of airtime and making donations and subscriptions. There is the generation of payment through Ecobank Xpresscash, undertaking cardless ATM withdrawals (Ecobank, 2019).

Again, there is the application of an Ecobank Xpress point, which involves the delivery of financial services to customers and the public at their doorstep, by collaborating with pharmaceutical firms, fuel and gas stations, supermarkets and shopping malls and mobile money agents. This system of operation is providing convenient and efficient cash-in and cash-out services

to underprivileged customers' in urban communities by facilitating the provision of cashless banking. The system helps the unbanked and underbanked in the country in having access to banking services in terms of retail outlets. The service delivery of the bank makes them remain focused and committed to the products and services provided which meet the standard of the day-to-day banking transactions such as financing, investment and transactional needs of the customers (Ecobank Ghana, 2019).

There is the Pan-African Card payment gateway with solutions-oriented delivery strategies and services. Serving the banking wants of various large institutions and companies, small to medium scale enterprises, not leaving out the public with reliable excellent customer services and telecommunication system. Ecobank, the Pan African Bank, operates under what it calls the ''One Bank" construct by offering customers unique network services on the integrated information technology platform throughout the 67 branches in Ghana and 1,265 branches in the 36 countries in Africa and the world, irrespective of the geographical area. Thus, providing worldwide and standardised procedures and processes throughout the 2,690 ATMs, and 13,800 POS machines, known as the Oracle FLEXCUBE. It gives the bank customers diverse access to the modern banking system of operations and services through the comprehensive retail footprint in the nation (Ecobank, 2019).

## 2.6 Overview of Ghana's Economic Outlook since 2006

### 2.6.0 Introduction

The economy of Ghana has passed through certain macroeconomic, fiscal and monetary policy challenges and deterioration since 2006 with various effects and impacts, which persist up to 2019. The overview of Ghana's economic outlook since 2006 relates to the fiscal policy trends and

development, the monetary policy trend and development and the macroeconomic indicators trends and developments.

### 2.6.1 Fiscal Policy Trends and Development

#### *2.6.1.1 Fiscal Deficit*

The fiscal performance of a nation goes with total revenue and developmental grants to balance off the government payment of expenditures, anything beyond that put the nation's economy under pressure (Ministry of Finance, 2019). Resulting in fiscal deficits in terms of excess gross national expenditure over revenue in achieving economic growth. This leads to deficit financing which relates to spending over and above revenue financed by borrowing from the national bank or through money creation or increasing of tax rates (Muley, 2019). The fiscal policy which plays a major role in the country's economy as a result of economic development and growth ends up in deficit financing in the economy due to political and administrative mismanagement by the governments. The nation total spending amounted to GH¢110.4 b in 2021 forming 25.1% of GDP, falling below the targeted value of GH¢113.8 billion of 25.9% of GDP. Thus forcing the national debt to hit GH¢344.5 billion in November 2021 forming 78.4% of GDP. Domestic debt amounted to GH¢179.4 billion of 40.8 of GDP, while external debt amounted to GH¢165.1 billion of 37.6 of GDP, compared to GH¢291.6 billion forming 76.0% of GDP in 2020 (Bank of Ghana 2022).

Fiscal policy implementations within the macroeconomic framework have gone through various challenges of pro-cyclical fiscal policies through an increase in tax revenues with the strategic objective of macroeconomic stability for economic growth. Irrespective of the fiscal consolidation efforts and IMF intervention support programmes, there has been an unsustainable accelerated growth of the fiscal deficit with an average of 6.5% of GDP. Showing the weaknesses in the budgetary policy planning, implementation, monitoring, evaluation and unfavourable

financial management practices in the economy (IEA Ghana, 2015). The fiscal deficit recorded an average growth rate to GDP of 5.9% in 2005, 6.3% in 2006, 4.3% in 2007 and 5.9% in 2008. It increased from 5.6% in 2009 to 7.2% in 2010 and declined to 4.2% in 2011. It suffered an accelerated increase to 12.1% in 2012 significantly higher than the badgered target of 6.7%, registering the highest percentage in the economy (UNEP, 2014).

The major causes include the single-spine salary implementation and its challenges, non-realization of grants from development partners, a shortfall in projected income particularly corporate income tax, an increase in utility and fuel subsidies, high government spending on goods and services and short term debt financing (UNEP, 2014). With the objective of the government improving revenue mobilization and rationalization of government expenditures with efficiency and financing methods review, the government's deficit declined to 10.9% in 2013 and 9.3% in 2014 above the budgeted target of 9.0% and 8.8% respectively (IEA Ghana, 2015).

The fiscal deficit although dropped from 2013, failed to reach the budgeted set target and register a surplus despite the fiscal consolidation efforts, increase in oil revenues, a good system of tax collection, reduction of the wage bill and the slowdown in the implementation of certain measures. The major causes relate to policy slippages; payment of unwarranted wages and salary arrears due to demand for higher wages and salaries in terms of the single spine salary structure. The high subsidies to the energy sector result from the nation's energy crises high investment in infrastructure developments; high expenses on social mitigation from global shocks. The rising cost of debt-servicing and external shocks resulting from the depreciation of the cedi to foreign currencies and the decreasing prices of key export products such as gold, cocoa, and oil (WBG, 2018).

The fiscal deficit for 2015 was 2.5% of GDP, which was financed from both domestic and foreign financing with a 26% and 37% mix respectively, rather than from Bank of Ghana credits

or overdrafts, fulfilling the Bank of Ghana zero-financing for the first time in Ghana's economy. The achievement resulted from a major policy shift in fiscal management by looking at other alternative sources of generating revenue such as using the Ghana Stock Exchange to sell, buy, and refinance government bonds (Ayamgha, 2016). The fiscal deficit increased to 9.3% in 2016, due to weak revenue generation as against expenditure measures (WBG, 2019).

With the government embarking on prudent fiscal consolidation, the fiscal deficit drops to 5.9% of GDP in 2017, below the targeted value of 6.3% of GDP for the first time since 2011, which recorded a fiscal deficit of 3.9% of GDP, as against the budgeted fiscal deficit target of 5.1% of GDP. This was due to an increase in total revenue and grants, signifying a significant reduction in government total expenditure by 6.1% in consolidating the economy. Based on the slow response in revenue inflows corresponding to a 6.03% reduction in revenues and grants. The result shows a healthy deficit as the primary balance registered a surplus of 0.5% of GDP to a budgeted target surplus of 0.9%. Showing a good indication of a gradual reduction of the nation's debt stock (Business News, 2018).

The fiscal deficit decreased to 3.9% of GDP in 2018 but above the targeted year value of 2.6% showing an inefficiency on the part of the government in matching its spending with revenue. However, the Government budgetary operations for 2019 recorded a deficit of 4.7% above the revised target of 11.4%. With a debt burden of 78% of GDP as of 2021 from 54.6% in 2015, 55.6 in 2016, 54.2 in 2017, 56.1 in 2018 and 61.2 in 2019 and 76.0 in 2020, the country is currently in a precarious position. It is prudent that Ghana should witness a continued reduction of fiscal deficits and slower growth in public borrowing, with the fiscal deficit finishing at 9.4% in 2021 down from a high value of 11.7% of GDP at the end of 2020, and predicted to drop further to 6.4% by the close of 2022 (Bank of Ghana, 2020 & PwC, 2022).

There is the expectation of the fiscal deficit to increase to 4.2% of GDP in 2019 above its budgeted target of 2.9% (Adombila, 2019). Fiscal consolidation is sacrificing developmental growth, which is likely to develop the Keynesian multiplier effect, which is not healthy for a developing economy like Ghana experiencing a yawning infrastructure (Business News, 2018). From the findings of Havi and Enu (2014), there is a positive and significant relationship between government expenditure and real GDP growth, in that they increase and decrease in proportion by 3.9%. Showing that changes in fiscal policy greatly affect the economy of Ghana.

#### *2.6.1.2 Public Debt Dynamics*

The country has passed through diverse and fluctuating debt to GDP ratios with an average debt to GDP ratio of 57.68%, reaching an unprecedented level of 79.19% in 2000 and a lower level of 18.59% in 2006, after 1991, it recorded the lowest of 18.47% (countryeconomy.com, 2017). Ghana 2007 after opting for debt relief and benefiting from the Heavily Indebted Poor Countries (HIPC) initiative in 2002 and the Multilateral Debt Relief Initiative (MDRI) in 2006, the public debt in terms of the nation's total debt-to-GDP ratio started showing a high and a growing level of public debt resulting from high budget deficits.

Based on the old national accounts series, it started to increase from 26.2% in 2006 to 31.0% in 2007, to 33.6% in 2008 and 36.1% in 2009 (Trading Economics, 2019). After increasing to 46.3% in 2010 and decreasing to 42.6% in 2011, it has experienced a remarkable inclination from 47.9% in 2012 to 57.2% in 2013 with 2.8% less to hit the IMF threshold of 60% (Ayamgha, 2016). The public debt increased from 70.2% in 2014 to 72.2% in 2015. The nation's total debt to GDP ratio increased to 73.4% at the end of 2016 because of an increase in the interest payments, taking about 45% of the nation's tax revenue forming 6.8% of GDP (Ministry of Finance, 2019).

However, the debt to GDP ratio dropped to 71.8% in 2017, resulting from the growth of GDP from 4.6% in 2016 to 7.9 % in 2017. With the motive of making the nation's debt ratio sustainable

through the domestic and external capital market engagements. Also enhancing the "buy back" policy and in conformity with the B ratings in the capital markets. However, the public debt to GDP ratio will not continue to decline but vary depending on certain causative factors including new loans, disbursements, the value of the Cedi, and the growth of GDP. There is the adoption of new debt management strategies such as escrow and self-financing programmes in terms of making certain projects, which are commercially viable in paying for loans through public debt. In addition, the government limited itself with stringent quotas on annual borrowing and amortization, thus minimising the "bullet" loans on the debt stock, the cost, and the risk of the public debt (Ministry of Finance, 2019).

The decline in the debt-to-GDP ratio resulted from the government taking stringent fiscal measures such as a reduction in fiscal deficit, which recorded a deficit of 6.0 in 2017 as against 9.3% in 2016. With the primary balance registering, a magnificent surplus of 0.7% of GDP as against a targeted surplus of 0.9% and debt re-profiling thereby reducing the debt stock in the economy through a reduction in the debt accumulation rate and the acceleration of the rate of economic growth at the same time (Ministry of Finance, 2018). A further increase in government economic activity and the full implementation of the medium-term debt sustainability strategy in 2018 resulted in the tightening of fiscal consolidation measures and monetary policy. These resulted in lowering costs and resolving portfolio risk with domestic financing of the government budget ending up declining the debt-to-GDP ratio further to 57.9% in 2018.

The public debt stock for 2018 thus amounted to 57.9% of GDP with 3.2% accounted for by the government financial sector bailout programme, with the real stock of debt amounting to 54.7% of GDP. Thus, the debt-to-GDP ratio recorded a further decline to 54.7 % with the exclusion of bailout-distressed costs to banks. Due to macroeconomic stability, GDP growth and debt management policies since 2014, there have been a drastic reduction in the debt accumulation rate

from 49.9% to 16.6% in 2017 and 19.8% in 2018. It declined to 26.0% in 2015 and 22.0 in 2016%. However, the IMF has made a coincidental prediction that Ghana's debt-to-GDP ratio is likely to hit 62% by the close of 2019, indicating a rise in the debt-to-GDP ratio in Ghana (IMF, 2019).

The rising nature of the nation's national debt was because of the rising nature of the government spending and taxation levels without a corresponding increase in the country's productivity. The nation's total debt amounted to GH¢110.4 b in 2021, forming 25.1% of GDP, falling below the targeted value of GH¢113.8 billion of 25.9% of GDP. Thus forcing the national debt to hit GH¢344.5 billion in November 2021 forming 78.4% of GDP. Domestic debt amounted to GH¢179.4 billion of 40.8 of GDP, while external debt amounted to GH¢165.1 billion of 37.6 of GDP, compared to GH¢291.6 billion forming 76.0% of GDP in 2020 (Bank of Ghana 2022).

### 2.6.2 Monetary Policy Trend and Development

#### *2.6.2.1 Monetary Policy Rate*

The monetary policy rate is a way of controlling the economy in achieving economic stability. The application of the monetary policy rate as a key factor for the control of inflationary pressures and its expectations in the economy is within the framework of the Bank of Ghana in stabilizing prices, exchange rate and economic growth sustainability. Others include the revamping of the financial sector with good performance with effective management procedures and supervision of banks' intermediation and disbursement operations (Bank of Ghana, 2018).

The monetary Policy rate in Ghana has seen a fluctuating but increasing transformational trend until recently. It serves as the basis for fixing other banks' rates in the economy. The monetary policy rate decreased from 21.5% in 2004 to 15.5% in 2005 and 12.5% in 2006. The Policy rate thereafter increased to 13.5% in 2007, to 17% in 2008 and 18% in 2009. The policy rate however declined to 13% in 2010, to 12.5% in 2011 and increased thereafter again to 15% in 2012, 16% in 2013, 21% in 2014, 26% in 2015 and 25.5% in 2016 (Focus Economics, 2017).

The increase in the Bank of Ghana policy rate in terms of tightening of monetary policies, which increased the cost of credit with real interest rates and other interest rates increasing to double-digit levels in the private and the banking sector from 2012 to 2015 resulted from spontaneous pressure on the ascendency of inflation. The situation originated from the demand-pull and cost-push effect of an increase in fuel and utility prices, the depreciation of the exchange rate and the implementation of expansionary fiscal policies. The rising in inflation and increasing demand for foreign exchange led to an increase in the monetary policy rate and other rates of interest, thus worsening the already high cost of borrowing (Bank of Ghana, 2018).

It causes an increase in monetary aggregation, where the money supply increased by 33.8% to 13% in 2010, with 2011 recording a growth rate of 33.2% to increase to 17% and 22.5% in 2012 with a growth rate of 24.3%. Money supply again increased to 28.5% in 2013 with a growth rate of 19.5% and increased by 36.8% to 36.8% in 2014, through an increase in net foreign assets (NFA) and net domestic assets (NDA). The accelerated growth in the money supply is an indication that there have not been any important and proper control measures implemented and a failure on the part of the government to implement its enumerated control measures effectively, which exerts a strong effect positively on inflation and interest rates (IEA Ghana, 2015).

The monetary policy rate after 2016 has experienced a spontaneous decreasing trend from 20.0% in 2017 to 18.5% in 2018 with the expectation of registering 15.43% in 2019 and 15.08% in 2020 (Focus Economics, 2019). To My Joy Online (2019), the Monetary Policy Committee has since 2017 reduced the policy rate from 25.5% in 2016 to 20% in 2017 and 17% in 2018, as the very minimum rate since 2014, which recorded 21.0%. Signifying the government's quest to embark on disinflationary, fiscal consolidation, tight monetary policy, and effective changes in demand and supply quantity (Ministry of Finance, 2019). The monetary policy rate generally trended downward after 2018, recording 15% in 2019. In May 2021, the MPC decreased the policy

rate for the first time in almost a year, to 13.5% from 14.5% in 2020 and currently 19.0% as of May 2022. (Bank of Ghana, 2020, 2022 & MyJoyOnline.com, 2021).

The Central Bank's determination in reducing the MPR from 2017 depended on the positive responses from certain macroeconomic fundamentals in the economy and the downward revision of inflationary pressures. The monetary policy intervention within the period was price stability, ensuring growth in the economy and government fiscal consolidation effort, in ensuring good financial intermediation through sound and proper stabilization of the financial system. The purpose is to enhance economic growth by the stability of prices and controlling domestic and external risks with the government's fiscal consolidation management inputs. It is the Bank of Ghana enforcing prudential regulations leading to soundness and enhancement of financial intermediation through the stabilization of the financial market (IEA Ghana, 2015).

Furthermore, the reduction thus based on the positive outlook in the country's economy and the recent Bank of Ghana regulatory measures ensuring the stability of the banking sector. This is dependent on the removal of poor banking practices and weak supervisory roles and regulations of the central bank, resulting in volatility in the banking and non-bank financial institutions (Ministry of Finance, 2019). Monetary policy has a direct relationship with interest rates through the Keynesian transmission mechanism. An expansionary policy of money supply through policy rates reduction results in the decreasing of interest rate, which in effect stimulates investment, and through the multiplier effect of increasing the level of output, fiscal aggregate demand and economic growth (Muley, 2019).

The findings of Ekpung et al. (2015) show that there was a significant relationship between monetary policy and banks' deposit liabilities and profit. As the deposit rate and the minimum discount rate negatively affect banks' deposit liabilities and while the exchange rate has a positive correlation. To Kutsienyo (2011), there was a negative but significant correlation between money

supply and banks' profits. This outcome confirmed Badaruddin et al. (2009) findings, which are consistent with the findings by stating that money supply and bank profitability correlated negatively and significantly. From the findings of Havi and Enu (2014), there is a positive and significant relationship between money supply and real GDP, in that they increase and decrease in the proportion of 4.7%. Showing that monetary policy in terms of money supply effectively and efficiently affects Ghana's economy.

#### *2.6.2.2 Banks Lending Interest Rates*

The nominal interest rates as differential charges have experienced transformational changes with the real lending rates being consistently positive. The average interest rate decreased from 25.5% in 2002 to 19.5% in 2006 and increased to 19.6% in 2007 and thereafter decreases to 18.3% in 2008 and increased to 22.8% in 2009 and decreased to 21.8% in 2010 (Ackah & Asiamah, 2014). According to Quartey and Afful-Mensah (2014), the lending interest rate decreased from 24.25% in 2006 to 24.17% in 2007 and thereafter increases from 27.25% in 2008 to 32.75% in 2009. It decreased to 27.63% in 2010 to 25.93% in 2011 to 25.72% in 2012, increased to 29.0% in 2014, and then decreased to 27.5% in 2015. With 2016 recording 31.7% and decreasing to 29.3% in 2017 (PwC, 2018). Interest rates continued to generally trend downward falling in line with the MPR by recording 26.9% in 2018, 22.9% in 2019, 21.1% in 2020 and finally 19.7% in 2021 (Bank of Ghana, 2020/2022).

The Annual Percentage Rate employed by the nation's banks indicates that the average lending rate charged by 16 banks is 30% for 2018. The high lending interest rate is a disincentive and less competitiveness to undertake investment, it leads to low production and economic growth making businesses retrogress. It is the cause of rising prices of goods and services thereby causing economic upheaval and inflation. Reducing the high lending interest rates needs the application of sound fiscal and monetary policy interventions in terms of cutting down government spending and

borrowing and the need to restructure the structural weaknesses in the financial sector (IAE Ghana, 2010).

To Mulwa (2015), the findings of certain researchers show that as interest rate rises the profits of banks also rises but are limited to smaller banks. It shows that the declining nature of interest rates particularly in recession affects the growth of loans negatively and hence the rising nature of loan loss and low profitability due to the fall in the market rate. Showing that a positive change in interest rates leads to a proportional change in banks' profitability.

The tightening of monetary policy by a reduction in the reserve requirement leads to an increase in lending rate, which affects borrowing in terms of a decrease in money supply made up of deposit liabilities. While loosening of monetary policy results in decreasing in the lending rate with a positive effect on borrowing leading to economic growth. With the postulation of a significant positive correlation between short-term interest rates and monetary policies as compared to the long-term interest rates with a loose and variable relationship (Kamau, 2015).

### 2.6.3 Macroeconomic Indicators Trends and Developments

#### *2.6.3.1 Inflationary Trend*

The critical concern of the central bank of Ghana's monetary policy is ensuring the stability of inflation through price stability and interest rates, which directly affect the state of the nation's economy. This is to ensure the achievement of the government's economic objectives of price stability leading to sustainable economic growth and development. Inflation as a determining factor in the growth of the economy of Ghana has fluctuated at an alarming rate from 2006 to 2021. The trending of inflation rates within the period of 2007 to 2013 is the best inflationary period in Ghana's economy with a considerable reduction in inflation rates, with some single-digit inflationary periods. This conformed to the aim of the Bank of Ghana to achieve an inflationary rate below a targeted rate of 10% (Knoema.com, 2019).

An inflation rate of 11. 5% in 2006 was recorded dropping from 15.1% in 2005 and further increased significantly from 10.7% in 2007 to 16.5% in 2008. These led to the tightening of monetary and fiscal policies to achieve single-digit inflation. The inflation rate dropped to 13.1% in 2009 and 6.7% and 7.7% in 2010 and 2011 respectively, below the set targeted rates of 9.2% and 9.0% and a further decrease to 7.1% in 2012 (Statista, 2019). Inflation experienced an accelerated rate from 2013 resulting from an increase in demand due to expansionary fiscal policies, an increase in fuel and utility prices and the depreciation of the nation's currency leading to cost-push effects. The inflation rate as of 2013 was 11.7% against a targeted rate of 9% and that of 2014 was 15.5% against a targeted rate of 9.5%. It increased to 17.2% in 2015 and 17.5% in 2016 with target rates of 10% and 9% respectively (Knoema.com, 2019).

To Mulwa (2015), the results of some researchers show that there is a positive correlation between inflation rate, banks' profitability and income. However, the inflationary effect on banks' performance is dependent on anticipated or unanticipated inflation. As anticipated inflation results in a positive effect on banks,' profitability and unanticipated inflation lead to cash flow difficulties, granting of loans to customers, crowding out effect and loan losses. It concluded that in seasons of high inflation in underdeveloped countries banks experienced high rising costs to income thereby affecting their profit margins, particularly with high capital ratios.

In recent developments and improvements in macroeconomic fundamental performance, Ghana's inflation has experienced a remarkable reduction from 12.4% in 2017 to 9.8% in 2018 and further dropped to 7.9% in 2019 and appreciated to 10.4% in 2020, with relative stability within Ghana's inflation target band of 8±2% and the recent single-digit inflation rate since 2012 (Bank of Ghana, 2020). However, there is the expectation that the current inflation rate is going to drop further and the probability of hitting 8% by 2024 (Statista, 2019). However, the current inflation rate in Ghana has hit 27.6% in May 2022, compared to the highest in the last 18 years, in 2004.

This is partly due to the introduction of a 1.5% tax on electronic payments in May and the poor cedi performance, which has surged the prices of imported goods (GSS, 2022).

The findings of Kutsienyo (2011) show that there is a positive and significant relationship between inflation and banks' profitability. The finding is in line with Bourke (1989), Molyneux et al. (1992) and Athanasoglou et al. (2005). They concluded that inflation and banks' profitability positively and significantly correlated. However, to Adeusi et al. (2014), inflation negatively correlated to return on assets, showing that an increase in inflation leads to a reduction in return on assets and banks' profitability.

#### *2.6.3.2 Real GDP Growth*

According to Banton (2019), the yearly percentage growth rate of real GDP is very crucial for every economy as it indicates the performance of the nation’s economy in terms of growth and development and serves as an indicator in measuring the country’s standard of living. The yearly growth rate of the real GDP in Ghana in recent times has experienced certain fluctuations, varying substantially from 2006 to 2018. The real GDP data thus, chained to the 2002 Ghana cedi value to correct inflation.

The real GDP increased from 4.0% in 2007 to 9.3% in 2008 but decreased to 5.5% in 2009. The GDP increased in 2010 to 7.9% and increased to 17.4 % in 2011 recording a double-digit GDP growth rate in the economy. However, there was a great fall to 9.0% in 2012 and a continuous decrease from 7.9% in 2013 to 2.9% in 2014 to 2.2% in 2015 and with a slight increase to 3.4% in 2016. It increased to 8.1% in 2017 representing a 4.7% GDP contribution gain. The growth in the GDP was driven mainly by the gold, the oil mining sectors, and the agriculture sector, particularly the cocoa production sector. However, there was a moderate fall in GDP to 5.6% in 2018, mainly attributed to the decline in the Oil and Gas growth rate from 8.3% in 2017 to 3.6% in 2018 (Knoema.com, 2019).

GDP growth, however, increased to 6.5 in 2019, however, observed that the COVID-19 pandemic had created a shortfall, which recorded a GDP growth of 0.4% in 2020 with industry and service recording -3.8% and 1.5% respectively. On the growth front, the nation anticipates a comeback from the pandemic, with real GDP growth rates of 4.4% in 2021. It is with the expectation that it will rise again to 5.8% in 2022, 5.3% in 2023 and finally 5.0% in 2024 (PwC, 2021), following a slowdown to 0.4% in 2020. There is again the expectation that it will grow with an average rate of 4.71% in 2021, 6.17% in 2022, 4.65% in 2023, 4.98% in 2024, 5.81% in 2025 and 5.15% in 2026 (O'Neill, 2021). This is a much slower rate of economic growth than Ghana saw in the three years preceding the pandemic, when real GDP averaged 6.8%, indicating that coronavirus have had a negative impact on consumer spending and corporate activity (PwC, 2022).

To Mulwa (2015), times of aggregate economic growth resulting from an economic boom with great demand for bank credit leads to low credit risk as the debt servicing capability of bank borrowers is improved and hence a good banking performance. However, in times of economic recession, adverse macroeconomic situations result in high non-performing loans, which negatively affect banks' performance. A higher ratio of bank asset-to-GDP positively influences the economic development of the nation resulting from great demand for banking services leading to increases in revenue, influencing potential competitors in the banking industry.

The finding reveals that the findings of Demirguc-Kunt and Huizinga (1999) show that nations with high competitive banking services generate fewer profit margins making them less profitable and those nations having less developed financial systems are inefficient depending on less-than-competitive pricing operations. The findings of Kutsienyo (2011) revealed that there was a positive and significant relationship between GDP and banks' profitability. This finding was asserted by Bikker et al. (2002), Demirguc-Kunt et al. (1998), and Athanasoglou et al. (2005), showing that economic growth was positively and significantly related to bank profits. However,

to Adeusi et al. (2014), GDP growth negatively correlated to return on assets showing that an increase in GDP leads to a reduction in return on assets and profitability.

## 2.7 The Universal Banks Outlook in Ghana through CAMELS System

### 2.7.0 Introduction

The study employed the CAMELS model of assessment and rating as a standard measuring tool. The key financial ratios used in assessing the banks' performance are related to the Bank of Ghana's Financial Soundness Indicators of the universal banks. The financial indicators related to the CAMELS' model of assessment consist of capital adequacy, asset quality, management quality, earnings, liquidity, and sensitivity to market risk (Odame-Gyenti, 2019 & Saddiq, 2017). The following are the financial indicator ratios and the performance analysis of the DMBs.

The study's justification for the use of Ecobank Ghana Ltd for the generalisation and the representation of all the universal banks is based on Ecobank's financial performance through the universal banks' operating assets. The universal banks' operating assets are dependent on all assets employed in generating interest income, in terms of cash and cash equivalents, treasury bills and bonds, interbank placements, loans and advances and CAMELS analysis (PwC, 2021).

Ecobank Ghana Ltd emerged as the best bank among the universal banks, recording 10.6% in 2020, followed by GCB 10.3%, SBG 8.6%, ABSA 8.6%, CBG 6.9% and FBL 6.4%, respectively. Ecobank Ghana Ltd emerged as the best bank among the universal banks, recording 10.8% in 2019, followed by GCB 10.6%, ABSA 10.3%, FBL 9.2%, SBG 7.5% and SCB 6.4%, respectively. Again, Ecobank Ghana Ltd emerged as the second-best bank among the universal banks, recording 12.0% in 2018 after GCB 12.1%, followed by ABSA 10.9%, FBL 8.3%, SBG 7.0%, and SCB 6.9%, respectively.

Furthermore, Ecobank Ghana Ltd emerged as the second-best bank among the universal banks, recording 11.3% in 2017 after GCB 11.4%, followed by ABSA 7.9%, FBL 7.1%, SBG 6.7% and SCB 6.0%, respectively. Also, Ecobank Ghana Ltd emerged as the best bank among the universal banks, recording 10.5% in 2016, followed by GCB 8.2%, UGL 8.0%, ABSA 7.4%, SBG 7.2%, SCB 5.9%, and FGL 5.8%, respectively (PwC, 2021).

### 2.7.1 Capital Adequacy Ratio (CAR)

According to Odame-Gyenti (2019), the essence of the application of the capital adequacy ratio is ensuring that the banks are capable of absorbing a substantial amount of losses conforming to the statutory capital requirements. Within the reviewing years, the universal banks remained very resolute and solvent by complying with the regulatory minimum capital of 10%. To Saddiq (2017), the CAR of the universal banks recorded 15.8% in 2006 of the minimum capital requirement, which however declined to 14.8% in 2007, and 13.8% in 2008. It increased significantly to 18.2% in 2009 and 19.1% in 2010 before decreasing to 17.4% in 2011. It started increasing by recording 19.1% in 2012, with a marginal decline to 18.5% in 2013, which further declined to 17.9% in 2014 and 17.8% in 2015. It declined to 16.2% in June 2016 and marginally to 14.8% in 2017. Nevertheless, indicating a greater improvement in efficiency and performance by recording 19.3% in 2018 (Bank of Ghana, 2015/18).

The banking sector's capital adequacy ratio declined to 17.5% in 2016 and 17.4% in 2017 indicating a marginal decrease but a greater improvement in efficiency and performance (Ghan, 2019). In terms of 17 selected banks out of the 23, their CAR registered values were over and above the prudential 10% limit increasing from 21.33% in 2017 to 25.43% in 2018. In terms of all the 23 Universal banks, the CAR registered values were over and above the prudential 11.5% under the Basel II/III limit, increasing from 25.3% in 2019 to 27.70% in 2020 and decreasing to 20.8% in 2021 (Banking Survey, 2021). It demonstrates the good facility for significant improvement with

the capacity of withstanding internal and external shocks, thus satisfying the Basel II Pillar 1 objective. It shows the majority of the banks have experienced an improvement in their performance making them very strong.

It is serving as an important indicator of the recapitalisation exercise with the core Tier 1 Capital measured as a going-concern capital of the banks, which consists of stated capital, retained earnings and statutory reserves of the banks to the bank's total risk-weighted assets. The prudential limit was satisfied by all 17 universal banks. FBN and FNB come out as the best banks recording 190.3% and 182% in 2018 respectively. However, for Core Tier 1 Capital, GCB and Barclays were best in terms of capitalization recording an amount of Ghs1.4bn and Ghs1.3bn for core Tier 1 respectively (Odame-Gyenti, 2019).

In terms of banks' solvency, the banking industry's capital adequacy ratio recorded an improvement marginally from 17.0% in 2015 to 17.5% in 2016 and 18.9% in 2018, which were greatly over the capital restoration plans implemented in the industry with a statutory prudential requirement of 10.0% (Zaney, 2018). This shows that on average the banking sector is very solvent in case of unexpected crises and thus considered safe with the ability in satisfying its financial obligations. The industry's Tier 1 of CAR declined from 16.3% in 2014 to 14.4% in 2015 and appreciated slightly to 14.6% in 2016 and 14.7% in 2017 but increased from 16.3% in 2018 to 19.6% in April 2019 partly due to the recapitalization exercise. The sector Risk-Weighted Assets of total assets also recorded a marginal fall to 63.4% in April 2018 from 64.6% in 2017 as against 65.2% in 2016, and 66.1% in 2015 representing a general increase in their efficiency (Bank of Ghana, 2018/19).

However, the universal Banks' risk-weighted assets to total assets reduced from 63.4% in April 2018 to 56.0% in April 2019. The universal banks' strength in absorbing losses through their solvency in terms of capital adequacy ratio increased from 18.9% in 2018 to 21.4% in April 2019.

With the Capital Requirement Directive of the prudential requirement of the banks, CAR recorded 17.4% in April 2019 and then 19.8% in 2020 (Bank of Ghana, 2018/19 & Banking survey, 2021).

In terms of the banking industry's solvency, the capital adequacy ratio was well above the 10% statutory minimum recording 19.3% in June 2018 and 19.1% in June 2019. Also about the Bank of Ghana Capital Requirement Directive (CRD) of 13.0 %, the industry's CAR recorded 16.3% in June 2019 under the Basel II/III capital framework. The Banks' risk-weighted assets to total assets also saw a reduction from 62.9% in June 2018 to 57.2% in June 2019 demonstrating an improvement in efficiency and performance (Ghan, 2019).

### 2.7.2 Asset Quality

#### *2.7.2.1 Non-Performing Loans*

Nonperforming loans to total gross loans of the DMBs recorded 21.39%, 18.19, 13.94, and 14.82 in 2017, 2018, 2019, and 2020 respectively. The average growth rate of the banking industry's Non-Performing Loans ratio from the period 2015 of June stood at 11.2%, with that of 2016 recording 18.8%, it increased to 21.2% in 2017 and 22.6% in June 2018. The NPL increased to 15.2% in 2021 comparatively to 14.8% in 2020 and 13.9% in 2019 as of December (Bank of Ghana 2021/22).

The asset quality deteriorated in 2020/21 because of COVID-19 pandemic-induced loan repayment issues and a decrease in credit growth. The banks' loan portfolio in maintaining its quality has been a major problem as the portfolio performance is weakened by the growth rate in non-performing loans portfolio increasing from 19.8% in 2017 to 23.5% in 2018 (Bank of Ghana 2018 & Zaney, 2018). However, it decreased to 18.1% in 2019 and then a further decrease to 15.7% in 2020 showing an improvement but again increased to 17.0% in June 2021 causing the asset quality risks to heighten making the banks vulnerable (Bank of Ghana, 2021). The non-performing loans for the 17 banks in the banking Industry decreased to 19.2% in 2018 from 21.12% in 2017,

showing an improvement in the performance of the credit quality. Certain banks such as Bank for Africa recorded as high as 72.0%, ADB recorded 49.0% and Access Bank recorded 32.0%, with GT Banks recording the lowest NPL by reducing from 19.9% in 2017 to 4.0% in 2018 (Banking survey, 2021).

With a loan portfolio, Ecobank remarkably increased its loan book from Ghs2.6bn in 2016 to Ghs4.1m in 2017 thereby controlling 13.0% of the market share and seeing it as the best bank at the top position. Followed by Barclays with 10.01% in 2018 compared to 8.2% in 2017 market share and GCB also recorded 8.8 % as compared to 8.07% in 2017 market share (Odame-Gyenti, 2019). The private sector accounts forming the greater proportion of the NPLs declined from 97.5% in 2017 to 90.7% in 2018. The percentage of impaired assets in the public sector recorded an increase to 9.3% in 2018 from 2.5% in 2017 (Bank of Ghana, 2018).

In reducing insolvency, risk facing banks and determining the least money to hold to solve its risk-weighted assets to total assets performance was paramount. It has seen a considerable fluctuation in recent times, increasing from 60.0% in 2014 to 74.0% in 2015 and decreasing to 70.0% in 2016 and 65.0% in 2017 a good signal and an improvement in the banking industry's risk-taking performances (Bank of Ghana, 2018). With the improvement in other financial indicators, the banks' loan portfolio has failed to show any improved quality and thus remained a major worry in the financial sector, as the NPL ratio recorded 22.7% in December 2017, dropping to 10.8% in 2018, taking into consideration the loan loss category taken care off by the banks (Zaney, 2018). According to the banking survey (2021), the NPL ratio recorded a 17.3% in June 2016, increased to 21.6% in 2017 and dropped to 18.2% in June 2018, and a further dropped to 13.9% in June 2019 but increased to 14.8% in June 2020.

The banking industry's asset quality saw improvement as the NPLs reduced by a great margin of 20.0% from 22.6% in 2018 June to 18.1% in June 2019. Thus from GH¢8.74b in June

2018 to GH¢6.99b in June 2019, in terms of 9.7% growth from 2017 to 2018. In terms of the loan loss category, there was an improvement as the deterioration of loan quality decreased from 12.3% in June 2018 to 9.0% in June 2019 (Ghan, 2019). It will be seen that the asset quality saw a significant improvement, with the universal bank's NPLs reducing greatly by 17.0% from GH¢8.63billion in April 2018 to GH¢7.16billion in April 2019 compared to an increment of 20.8% from April 2017 to April 2018. The private sector composition of the NPLs increased from 90.7% in April 2018 to 97.3% in April 2019 with the household NPLs increasing from 5.6% in 2018 to 12.1% in 2019. As the public sector's NPLs decreased from 9.3% in 2018 to 2.7% in 2019 (Bank of Ghana, 2019).

The banking sector remained the most dominant, with 23 of the universal banks owning 91.1% of the industry's total assets. The banking sector's total assets increased by 15.7% to GH149.3b in 2020, compared to GH129.1b in 2019 with a growth rate of 22.8%. In 2020, growth in domestic and international assets recorded 15.7% and 17.0%, respectively, compared to 23.0% and 19.8% in 2019. The negative consequences of the COVID-19 pandemic on the sector were evident in the decreased asset growth in 2020 (Bank of Ghana, 2020).

The credit risk within the banking sector is above 80% of the Risk-Weighted Assets. The occurrence of this made some banks take a hard stance against credit, such as Standard Chartered Bank whose credit increased by only 1% to Ghs31.8m in 2018. However, the Ecobank loan portfolio shows a significant increase from Ghs2.6bn in 2016 to Ghs4.1m in 2018 and controls around 13% of the market share, occupying the highest position among the universal banks. Barclays followed this with 10.01% as compared to 8.2% in 2017 the market share and GCB recording 8.8 % as compared to 8.07% in 2017 of market share (Odame-Gyenti, 2019).

### 2.7.3 Management Quality

The institutions' ability in responding to financial stress and crises falls within the control of management determination, complying with the internal and external policy regulations, and ensuring the smooth operational performance of the company (Odame-Gyenti, 2019). It is the assessment of management efficiency, which relates to the implementation of regulations and rules, management administrative leadership and ability and the containment of operational changes for the growth of the bank (Boateng, 2019). Interest margin to Gross income in terms of management operational efficiency recorded 47.35% in 2017, 48.69 in 2018, 52.42% in 2019 and 54.91% in 2020 representing the best performing period except 2017 (Bank of Ghana, 2020).

The universal banks' performance in general recorded Cost to income of 84.5% in 2018, 80.2% in 2019 and 2020 and improved to 78.7% in 2021. Operational cost to gross income of 52.2% in 2018, 53.3% in 2019, and 54.4% in 2020 and improved to 53.2 % in 2021. Cost to total assets also recorded 6.4% in 2018, 6.2% in 2019, and 5.6% in 2020 and improved marginally to 5.4% in 2021. Finally, Operational Costs to total assets recorded 4.0% in 2018, 4.0% in 2019, and 3.8% in 2020 and also improved marginally to 3.7% in 2021 (Bank of Ghana, 2021). Using the total cost to gross income ratio, management efficiency recorded 86.3% in 2017, which dropped to 84.4% in 2018, and a further decrease to 81.2% in 2019 and finally to 79.2% in 2020 (Banking Survey, 2021).

The various positions occupied by both the Board Chairpersons and the Managing Directors of the banks are very significant in assessing the management quality of the banks and of which most of the banks are having separation in such positions and no two personalities are appointed as Board Chairman and Managing Director. For instance, Societe General (SG) and Republic Bank are having separate personalities occupying the two positions as the Chairman is a Ghanaian and the Managing Director is a French National. In helping to promote good corporate culture and restoring confidence in the management of the banks in the banking industry. The majority of the

banks have incorporated a good succession plan in terms of independent auditors, key management oversight, directors' appointment and managing director`s tenor etc. Thus, done following the directives of the guidelines on corporate governance in 2018 (Odame-Gyenti, 2019).

According to Boateng (2019), it involves the application of net profit to total advances in terms of returns of net profit after tax to total advances given by the bank to customers. Higher profitability from the advances indicates good management performance, resulting from the utilisation of customers' deposits mobilisation. The findings show a positive and significant correlation between management efficiency and banks' performance with a unit increase leading to a 51.5% increase in ROE.

In the performance and the success of the banks in Ghana in terms of their credibility, the outcome reveals that 20 universal banks were strongly credible through Credmap technology based on corporate governance and board of directors and management quality and competence. It relates to the application of net interest margin, capital adequacy, asset quality, and return on equity and assets ratios. It was revealed however that bank directors' professional education has low priority and hence their competence and capability in supervising management. Standard Chartered Bank emerged as the best bank followed by Zenith Bank and Ecobank respectively with Republic Bank coming as the least bank (Larnyoh, 2018).

### 2.7.4 Earnings/Profitability Quality

#### *2.7.4.1 Return on Assets and Equity*

To Saddiq (2017), universal banks have repeatedly experienced fluctuations and instabilities in their return on assets and equity performances. The return on assets decreased from 4.8% in 2006 to 3.7% in 2007 to 3.2% in 2008 and as low as 2.8% in 2009. It grew moderately to 3.8% in 2010 then marginally to 3.9% in 2011, thereafter growing substantially to 4.8% in 2012 to 6.2% in 2013 and then to 6.6% in 2014 and however, dropped to 4.6% in 2015 further to 3.8% in 2016. The

return on assets forming the basis of the financial sector profitability measurement decreased to 3.4% in 2018 from 3.6% in 2017 and then increased to 4.1% as of December 2019. However, ROA further increased to 4.4 in 2020 and then appreciated again to 4.7% as of June 2021 (Bank of Ghana, 2020 & 2021). To the banking survey (2021), ROA recorded 3.8% in 2016, which dropped to 3.3% in 2017 and remained constant at 3.3% in 2018, it however increased to 4.1% in 2019 and a further increased to 4.4% in 2020.

The universal banks return on assets revealed that BOB performance is the best, although with a fluctuating rate by recording 8.5% in 2013, 7.6% in 2014, 6.8% in 2015, 7.9% in 2016 and 6.6% in 2017. The second best was BBGL recording 6.2% in 2013, 6.0% in 2014, 4.9% in 2015, 5.8% in 2016, 6.5% in 2017 and 4.3% in 2018. EBG performance was good by recording 4.0% in 2013, 5.5% in 2014, 5.0% in 2015, 4.1% in 2016, 2.8%, and 3.2% in 2017 and 2018 respectively and finally recording 3.3% in 2019 and 3.4% in 2020. UBA and GTB were best for improving their profit performance, where GTB recorded 4.8 in 2016, 4.7% in 2017, 6.6% in 2018 and 6.6% in 2020 from 6.4% in 2019 (PwC, 2021).

The banking industry's return on equity decreased from 27.4% in 2006 to 25.8% in 2007 to 23.7% in 2008 and a significant drop to 17.5% in 2009. There was an upsurge thereafter to 20.4% in 2010 and dropping slightly to 19.7% in 2011, thereafter increasing again to 25.8% in 2012 to 30.9% in 2013 then to 33.1% in 2014 and dropping greatly to 22.2% in 2015 (Bank of Ghana, 2015). The industry experienced a poor performance by recording 28.1% in 2013, increasing to 28.4% in 2014, dropping significantly to 20.0% in 2015 to 17.3% in 2016 and with moderate improvement to 19.7% in 2017 but dropping to 17.9% in 2018 (PwC, 2018). The return on equity, however, increased to 21.2% in 2019 and then decreased to 20.6% in 2020 and further improved to 21.2% in 2021 (Bank of Ghana, 2021).

In terms of the banks, UBA performance was the best recording 51.1% in 2013, 47.0% in 2014, 23.6% in 2015, 43.7% in 2016 and 40.0% in 2017 but dropped to 23.7% in 2018, 71.5% in 2019 and 54.9% in 2020. The second best was BBGL recording 32.1% in 2013, 37.0% in 2014, 30.3% in 2015, 38.4% in 2016 and 36.7% in 2017 dropping to 29.1% in 2018 but emerged as the best bank. EBG performance was good falling within the third position by recording 33.4% in 2013, 39.5% in 2014, 37.2% in 2015, and 38.1% and 32.1% in 2016 and 2017 respectively and finally 38.4% in 2018, 42.8% and 41.1% in 2019 and 2020. The fall in the performance of 2017 resulted from a 7.0% decline in interest income with impairment charges but improved its performance by recording 25.7% in 2018 (PwC, 2021).

The total asset base of the banks increased through total deposits of 10.6% growth with an annual growth rate of 12.8% in 2017 from 30.4% in 2016 to 17.6% in 2018. Thus, affecting the return on assets to see an improvement by recording 18.8 in December 2017 from 17.6 in December 2016 (Zaney, 2018). ROE in terms of after-tax net income to average shareholders' funds recorded 21.2% in June 2019 as an improvement compared to 16.8% in June 2018. ROA in terms of net income before tax to average total assets recorded an improvement of 4.4% in June 2019 from 3.5% in June 2018 (Ghan, 2019). The DMBs recorded an improvement in profitability with after-tax ROE recording an increase from 17.3% in April 2018 to 18.9% in April 2019, with ROA before-tax also recording an increase from 3.6% in 2018 to 4.1% in April 2019 (Bank of Ghana, 2019).

### 2.7.5 Liquidity

Liquidity plays a major leading role in determining the survival, growth and failure of banks and is an influential factor in inspiring the confidence of depositors and lenders. It is a satisfactory factor for new demand for loans without necessarily depending on payment of existing loans and or realization of investments in bonds. It is a satisfactory factor satisfying the demand for daily and seasonal demand deposits thereby satisfying timely withdrawals (Odame-Gyenti, 2019).

The banking industry's share of liquidity in terms of liquid funds to total deposits decreased from 55.0% in 2007 to 53.0% in 2008. It saw an upward edge by increasing from 68.0% in 2009 to 73% in 2010 and 71% in 2011 and decreased to 65% in 2012 (PwC, 2010/14). It increased from 64% in 2013 to 68% in 2014 and then decreased to 66% in 2015. It increased to 77% in 2016 and then increased significantly to 84% and 91% in 2017 and 2018 respectively. Liquidity however dropped to 64.8% in 2020 from 67.0% in 2019 and resuscitated by increasing to 67.7% in 2021. However, the industry remained liquid (Bank of Ghana, 2021).

FNB emerged the best of the banks by recording 126% in 2013, 129% in 2014, .89% in 2015, 186% in 2016, 189% in 2017 and 281% in 2018. The next on the line was BOB recording 107% in 2013, 119% in 2014, 148% in 2015, 145% in 2016 and 134% in 2017. EBG position was not encouraging in terms of comparative analysis by recording 59% in 2013, 62% in 2014, 57% in 2015, 63% in 2016, 78% in 2017 and 71% in 2018 (PwC, 2018/19).

The banking industry's share of liquidity relating liquid funds to total assets decreased from 41% in 2007 to 39% in 2008 and increased to 48% in 2009 (PwC, 2010). It saw an improvement by increasing from 52% in 2010 to 54% in 2011 but decreased to 50% in 2012 (PwC, 2014). It continued to decrease from 46% in 2013 to 48% in 2014, remained constant at 48% in 2015, and went up to 55% in 2016, 60% in 2017 and 62% in 2018. FBN has a good performance by recording 50.4% in 2013, 52% in 2014, 66% in 2015, 78% in 2016, 82% in 2017 and 89% in 2018 as the best performing bank for the year. EBG position was a little encouraging in terms of comparative analysis by recording 47% in 2013, 48% in 2014, 43% in 2015, 47% in 2016 and 60% and 53% in 2017 and 2018 respectively (PwC, 2018/19).

To Odame-Gyenti (2019), the solvency of the financial industry was good with growth in liquidity and liquidity coverage ratios (LCR). This resulted from the fact that the total liabilities of the 17 banks grew from Ghs58.2bn in 2017 to Ghs68.2bn in 2018 registering an increase of 17.3%.

GCB thus, judged as the best bank of the 17 banks earning about Ghs8.1bn as customer deposits with a 17.3% growth rate from 2017 to 2018, thus controlling about 11.8% of the market share. Ecobank controlling about 11.2% follows this. Despite the crises in the banking sector and the financial reforms in 2018, the banks' liquidity position improved (Zaney, 2018).

The banking industry remained liquid in 2020, with the ratio of broad liquid assets to total assets rising from 61.1% in 2019 to 64.1% in 2020. While wide liquid assets to total deposits fell from 92.1% in 2019 to 89.0% in 2020, core liquid assets to total assets fell from 24.0% in 2019 to 21.2% in 2020. In 2020, the ratio of core liquid assets to total deposits was 30.4%, up from 37.0 in 2019, indicating an increase in deposit growth (Bank of Ghana, 2020).

### 2.7.6 Sensitivity to market risk

It involves the assessment of the effect of risk exposures such as equity prices, exchange rates, interest rates and commodity prices on a bank’s capital in terms of profit earnings. The assessment depended on the GAP ratio in evaluating the bank’s earnings to interest rate changes, resulting from the measurement of the difference or the equality of assets value to liabilities value maturity within the same period. A ratio of one shows an equal balance and a less than or more than shows a bank’s liability risk-sensitive or bank’s asset risk-sensitive respectively.

The GAP ratio measured the Rate Sensitive Assets consisting of money at call, net investment and net advances divided by Rate Sensitive Liabilities consisting of deposits and the bank’s borrowings. The findings show that there is no significant relationship between sensitivity to market risk and bank performance by generating 7.0% as a unit increase in sensitivity to bank performance, with a significant figure of 13.9% as compared to Zafar et al. (2017) whose findings show positive and insignificant correlation (Boateng, 2019).

## 2.8 Summary

The chapter examined the theoretical frameworks and the literature reviews, which relate to the financial management and the performance of the banking industry in terms of fiscal and monetary policy issues, macroeconomic and the banks' internal variables and their impact on the financial performance of the universal banks. The relevant theories analysed include the Classical Theory of Economics, which looks at the operationalization of the market forces of demand and supply under the influence of an invisible hand without governmental intervention (Young, 2019). The Keynesian Theory of Economics and the Liquidity Preference. The theory focuses on the countercyclical fiscal policy of taxation and government spending for achieving macroeconomic stability and the determination of interest rates through liquidity preferences by the central bank with the application of monetary policy (Mankiw, 2008).

Others include the Monetarist Theory of Economics, which is concerned with monetary policy affecting macroeconomic activities such as GDP growth, employment, incomes and output and inflation in stabilizing the economic growth and development within an economy (Amadeo, 2019). Neo-Keynesian and Neo-Classical Economics is concerned with the various controversies and the modernization of the two major economic theories and their contemporary economic implications (Mankiw 2019). The Great Depression of 2008 identified the likely directions of the Keynesian and the Monetarist ideology.

The study chapter further analyses various internal and international empirical studies of the independent variables' impacts. In terms of fiscal policy, the results of the study of Kipkemoi et al., (2016), Munteanua and Göndörb (2012), Ogar et al., (2014) and Asamoah (2016) show that there is a direct and significant positive relationship between fiscal policies of government spending, taxation and borrowing and banks profitability. Which positively and significantly affected the universal banks' performance and economic growth within the economy in stabilizing other macroeconomic factors influencing the profitability of the commercial banks.

In terms of monetary policies, the research study outcome of Meshack and Nyamute (2016) demonstrated that monetary policy tools of open market operation and commercial banks' returns positively and significantly correlated whereas central bank rates and cash reserve ratio and financial performance correlated negatively and significantly. Nwannebuike (2015) findings show that there is no significant relationship between interest rate, cash reserve rate and liquidity rate and profitability, but are positively correlated except for liquidity rate which is negatively correlated and minimum rediscount rate with positive and significant correlation to profitability.

Some study findings revealed that macroeconomic variables such as inflation rates, GDP growth and exchange rates and the internal determinants including bank's liquidity, bank operating efficiency, bank's credit risk, consumer loan volume, financial leverage and the quantum of loans provided, have an inverse relationship and significant influences on the performance of commercial banks. While some of the studies revealed that, there is a positive relationship between macroeconomic variables such as GDP growth, real interest rate and higher interest rate and internal determinants such as banks' capital adequacy, bank size, interest rate margin, profit margin, operational efficiency, liquidity and mortgage loan volume.

The fiscal policy and monetary policy impacts are assessed in terms of the policy tools of government expenditure, taxation and borrowing and the central bank control through the changes in money supply by the application of the policy tools of open market operations, discount rates and cash reserve requirement. They, however, influence interest rates, aggregate demand and supply, employment level and GDP growth.

The chapter looks at the CAMELS rating assessment of the bank's financial conditions in identifying the soundness and the financial health status of the banks relating to the efficiency of management in managing risks, liquidity, earnings and sources of funds (Priya, 2019). The assessment of the banks thus based on capital adequacy in measuring the bank's financial ability in

protecting the bank's creditors and stakeholders and ensuring the capacity of absorbing some appropriate number of potential losses (Kagan, 2018). The asset quality also evaluates the adequacy, efficiency, and effectiveness of investment and loan policies, procedures and practices within a company and non-performing assets (Priya 2019). While management quality looks at the accuracy and effectiveness of board and management information and risk portfolio and control, monitoring and evaluating systems (Kagan, 2018).

Others include earnings, which show the firm's all-embracing efficiency and performance measured against its capital adequacy in terms of the level of expenditure to operations, earnings volatility to market risk, the bank's potential losses and the bank's ability in paying its dividends (Lan, 2018). Liquidity assesses the availability of convertible assets without excessive losses (Kagan, 2018); and sensitivity to market risk Looks at the operational capability of managing credit and lending ability by identifying, measuring, monitoring, and controlling the institution's exposure to market risk (Stackhouse, 2019).

The study looks at the banking sector's socio-economic growth and sustainable development in providing financial services in terms of payments, savings and granting of loans and advances. The analyses related to the structure and the role of the financial industry, the recent financial sector reformation and recapitalisation policy directives since 2017, the history and overview of Ecobank Ghana limited and the delivery of its products. The chapter again reviewed Ghana's economic outlook since 2007 by looking at the fiscal and monetary policy trends and developments. Ghana's banking sector continues to be strong, solvent and profitable amid the COVID-19 pandemic. Policy measures and regulatory reliefs introduced by the Bank of Ghana have moderated the adverse impact of the pandemic on the industry. The outlook for the banking industry remains positive and supportive of the economic recovery (Bank of Ghana, 2021).

The study further examined the macroeconomic indicators trends and developments such as inflationary trends and real GDP growth with their uncertainties and effective implementation for the development of the economy. The efficient and effective performance of the banking industry seen as the most potent for fiscal and monetary policy achievement and macroeconomic stability also evaluated in terms of the CAMELS' model of assessment as a standard measuring tool of the universal banks in Ghana from 2006 to 2021. The major dominant universal banks in the financial sector play a very important role in economic growth and the banking industry, as a whole. Thus assessing the universal banks' outlook in Ghana through the CAMELS system of rating as the banks have expanded their tentacles by providing innovative banking services (Kagan, 2019).

# CHAPTER 3

# RESEARCH METHODS AND DATA COLLECTION

## 3.0 Introduction

In assessing the impact of fiscal and monetary policies on the financial performance of universal banks in Ghana and its effect on the economy through Ecobank Ghana Ltd. The chapter consisted of the analysis of the study methodology by dealing with the research questions highlighted, which serve as the scheme and planned design. The chapter consisted of a deductive concurrent mixed-method approach to quantitative and qualitative data, with greater emphasis on quantitative and qualitative serving as a supplementary component. This consists of a general introduction; the study research approach and design; the study research population and sample; study instrumentation of research tools; operational definition of variables; study procedures and ethical assurances; data collection and analysis techniques of descriptive and inferential statistics and interpretation serving as the blueprint for.

The study further explained the approach adopted in discussing the data, concerning the selected variables and the development of empirical models and describing the validity and reliability of the research tools after the pilot testing. It dealt with the statistical and econometric techniques used in analysing the collected data to answer the study questions and test the study hypotheses (Saunders et al., 2009).

The chapter was in line with the problem of the research study, which assessed the impact of fiscal and monetary policies on the financial performance of universal banks in Ghana and its effect on the economy using Ecobank Gh. as a case study. The fiscal and monetary policies were macroeconomic factors and theories influencing the banking sector performance and profitability resulting from changes in government spending activities, borrowing policies and taxation systems

and the central bank policy tools of open market operations, discount rates, and commercial banks' reserve requirements.

The fundamental structurally tangled challenges in the economy emanating from high budget deficits propelling into higher interest rates negatively affected the credibility of the financial industry's performance (Antwi-Asare and Addison, 2000). The profitability of commercial banks has a positive correlation with government spending and taxation as fiscal policy tools for the stabilization of the macroeconomic factors of inflation, interest and exchange rates, and GDP growth in an economy (Kipkemoi et al., 2016).

To Meshack and Nyamute (2016) the central bank's monetary policy tools of the bank policy rate, required reserve and open market operation have a positive and negative correlation with the financial performance and the profitability of the banks, which invariably and significantly affected the banks' lending activities profit margins. It also affects other macroeconomic variables of inflation, interest rate, GDP growth and investment (Kimani, 2013).

However, to Nwannebuike (2015) and Mulwa (2015), the central bank's monetary policy tools of liquidity ratio, cash reserve requirement and interest rate have no significant influence on the bank's profitability. The policies of fiscal and monetary tools functioning as macroeconomic factors for sustainable economic stability and performance of banks were very essential for future research. As the policies of governments and the central banks influence the performance of the universal banks and hence, the need for a survey to appraise the bank's performance inter alia CAMELS analysis as internal factors affecting the bank's profitability.

The purpose of the triangulation of a mixed-method survey study assessed the impact of fiscal and monetary policy tools on the financial performance of universal banks in Ghana and their effect on the economy, through Ecobank Gh. Kumasi, as a case study from 2006 to 2021. The need for the study was to satisfy the concern of stakeholders relating to the financial activities and the

profitability in the banking sector not forgetting the effect of fiscal and monetary policies on certain macroeconomic variables such as the balance of payments, inflation rates, investment, interest rates, exchange rates and the overall sustainable economic growth.

The study involves the employment of descriptive and explanatory methods in obtaining an in-depth understanding of the research problem in advocating for the implementation of stable government fiscal and monetary policies in the country to revamp the financial performance and the profitability of the commercial banks in the economy (Johnson et al., 2007). The study adopted a deductive approach in assessing and evaluating the study data collected through the application of descriptive and inferential statistics based on the regression analysis, Pearson product-moment correlation analysis and other statistical tools. The study also adopted a thematic analysis of construct validity, internal and external causation and generalization (Saunders et al., 2009).

The means of collecting data from respondents was through data collection techniques of primary and secondary techniques as the main sources of data collection. Concerning the primary technique, the study data come from a survey questionnaire and an interview guide, while the secondary data also come from external and internal records specifically relating to the research study. The respondents for the research sample numbered 88 staff of the selected eight Ecobank branches in the Kumasi Metropolis.

This is dependent on the research study's aims and objectives of identifying the country monetary and fiscal policy tools and the macroeconomic variables and their effect on the financial performance and the profitability of Ecobank and the economy. It also includes the examination of the internal factors by CAMELS analysis employed by Ecobank in determining its financial performance and profitability. It finally ascertained the stakeholders' concern about the impact on the financial performance and the profitability of Ecobank in the era of fiscal and monetary policy implementations in Ghana’s economy.

The chapter examined the overall research approach of deductive and case study strategy by adopting the mixed method of both quantitative and qualitative data analysis based on a cross-sectional assessment. It also discussed the procedures of inquiry referred to as research design consisting of methods of data collection procedures and techniques, the target population and sample frame, sampling techniques and data analysis techniques and interpretation by turning the research questions and objectives into a research manuscript for hypothesis testing through theory (Bhat, 2018). Based on fiscal and monetary policies, banks' internal factors and macroeconomic issues, arriving at a reasonable and logical conclusion efficiently solves the research problem by generating valid and reliable research outcomes.

## 3.1 Research Approach and Design

### 3.1.1 Introduction

To Saunders et al. (2009), the research design is an overall strategic framework of methods and techniques relating to answering research questions and testing hypotheses based on theory resulting in a reasonable and logical conclusion. The design as a blueprint consisted of the research approach, data collection methods, instruments employed and utilization, sampling size and techniques, measurement and analysis of data through the research questions (Bhat, 2018).

### 3.1.2 The Research Approach

The study adopted a deductive approach to a mixed method of quantitative and qualitative data collection techniques and analytical procedures for data collection and analysis. By examining and reporting on the research problem for the provision of a holistic and complete understanding of the socio-economic nature of the research theory and hypotheses, the enhancement of objectivity facilitates the minimization of subjectivity. The outcomes of one method help in sharpening the

results from another method. The essence is to expand the breadth, range and depth of the research from different methods and lines of enquiry (Cresswell, 2022).

To Cresswell (2022), the purpose of the mixed data is to generate a good understanding of the study problem through more complete evidence collected concerning the quantitative and qualitative data, as a single method is insufficient in addressing the study's research problem and purpose. It brings both statistics and thematic approaches together to aid in the acquisition of balanced information. It helps in gaining in-depth and breadth data on views, experiences and subjective factors as necessities, elucidating complex situations to strengthen findings while avoiding over-reliance on one method. Thus strengthening the study's findings yielding very solid research leading to triangulation (Saunders et al., 2009).

To Saunders et al. (2007), mixed data helps the researcher combine practical and policy-related theories with hypothesis testing within a single study through inductive and deductive approaches. The mixed method is important as it helps to offset weaknesses with strengths and to overcome the weaknesses of the methods and use their strengths effectively to take advantage of their differences. Through complementarity, the researcher can use both quantitative and qualitative methods to obtain complementary results that are more complete. The outcomes from different facets of objective and subjective knowledge help the researcher in enhancing, elaborating and clarifying results from another method. Thus leading to the acknowledgement of outcomes through different methods (Cresswell, 2022).

The mixed-method facilitated the assessment and testing of the impact of the monetary and fiscal policy tools employed in the economy and their effect on the macroeconomic variables in the country and the internal factors through CAMELS analysis of the financial performance and profitability of Ecobank Ghana Ltd. and the whole economy. The focus was to analyse the research problem through diverging, converging and merging both quantitative and qualitative data. To

come up with an empirical inquiry by comparing the results and describing situations thereby obtaining valid conclusions relevant to the contemporary phenomenon of the research questions with real-life practice and theoretical context (Saunders et al., 2007).

The quantitative research approach of mixed methods is a systematic investigation of scientific mathematical properties and relationships employed, by collecting numerical data to provide quantitative data with the application of statistical analyses through logical and critical testing of hypotheses to theories (Cooper and Schindler, 2011). Allowing for measuring the relationship between the primary independent variables of the fiscal and monetary policy tools, such as government expenditure, taxation, discount and interest rates, bank reserve requirements and open market operations, the mediator macroeconomic variables and the criterion internal control variables, and the banks' financial performance indicators and the economy. The purpose is to generalize the findings by verifying, identifying, measuring and analysing the cause-and-effect relationships between the independent and dependent variables (Saunders et al., 2009).

The quantitative measurements were analysed using data analysis procedures based on statistical techniques producing designs, techniques, numerical discrete and quantifiable data, increasing the statistical reliability of the results generated (Kothari, 2004). For the mixed-method analysis, the study added a qualitative approach, which was about an in-depth description and understanding of the research study through an investigation based on subjective interpretation and involving the discovering of views, and perception by observing, listening and interpreting opinions of group phenomena (Easterby-Smith et al., 2009). This enabled the gathering of data from the respondent’s perspective, experiences, feelings and understanding of the impact of fiscal and monetary policy tools on the bank’s performance coded into categories for analysis (Saunders et al., 2009).

### 3.1.3 Data Sources and Collection Techniques

In determining the type of data needed for the study, the researcher employed both primary and secondary data sources as the main sources of data collection. The rationale behind the primary data sources depended on the representatives' experiences, background knowledge and skills in fiscal, monetary, and macroeconomic policy variables and the banking systems and operations. The goal is to incorporate more knowledge, intuition, and understanding into the study as important contextual data. It includes design, techniques, and non-discrete numerical data (Sarpong et al., 2014).

The purpose of the use of primary data sources was to enable the researcher to be involved totally and directly in the data collection process, thereby obtaining real-time data and valuable first-hand raw information, given the authenticity and ownership of the data. The primary source, although not feasible, time-consuming, expensive and require some skilled resources, is limited to the specific necessity of the research contexts with the use of a questionnaire and interview guide (Saunders et al., 2009). It helps in gathering very recent data and carefully tailoring the study towards the present situation and the research study problem. It also assists the researcher in arriving at relevant, specific research outcomes (Chaleunvong, 2009).

To Saunders et al. (2009), the secondary data sources approach, which involves existing materials gathered in the past, is less expensive, time-efficient, and more feasible. It also offers a wide range of options and findings, allowing for the examination of trends from the past, and present, and predictions for the future. The secondary data sources help to access data from a variety of sources such as the internet, institutions, and organisational reports and statements to ensure the validity of data to avoid any negative influence on the research process and outcomes. The secondary first-hand data information helps in preventing a repetition of existing knowledge and provides some existing knowledge and general information used in proving the usefulness of

the primary research and useful insight in identifying knowledge gaps. Accessed within a limited period and with limited resources, without going to the field (Chaleunvong, 2009).

The mixed method of triangulation employed multiple types of data collection tools, which resulted in acceptable validity and reliability of the data collected. The study was concerned with the primary data the study employed and administered specific tools, which include a case study, questionnaire, and semi-structured interview guide, as the main data collection tools (Golafshani, 2003). The case study, which is an in-depth intensive investigation, description and analysis of a single individual or group, was utilised as a research strategy to provide a holistic research study on Ecobank Gh. Ltd. with an in-depth explanation of the process, experience and structure of the organization (McLeod, 2008).

The case study and a survey type of research strategy approach triangulated for the research method of data collection by collecting both quantitative and qualitative data sequentially to meet the study objectives and answer the research questions. The choice thus, guided by existing knowledge and the amount of time. The research was undertaken through the adopted case study strategy, which resulted in the examination of 8 selected branches within the Ecobank organization to raise the level of confidence in the robustness of the method, and to show real-life events from numerous sources of evidence through replication. This came through by triangulating this method with other methods to approve the process validity (Zainal, 2007).

The questionnaire and the semi-structured interview guide administered were at the various workplaces of businesses of the respondents, given survey questions of the same kind relating to the research objectives of identifying the monetary and fiscal policy tools employed and their effects on the financial performance and profitability of Ecobank and macroeconomic variables that affect the economy. It also includes survey questions on the impact of the internal control

factors of the CAMELS analysis employed by Ecobank in determining its financial performance and profitability and the relationships between the variables.

The semi-structured questionnaire was a self-administered questionnaire with very clear, precise and short-simple sentence questions, corresponding to the participant's level of knowledge. The questionnaire, made up of open and closed-ended questions, was in line with the qualitative interview and quantitative hypotheses, respectively. Administered to the respondents who were staff of Ecobank in the Kumasi Metropolis, and they responded in a pre-established decree to the same set of questions (Saunders et al., 2009).

The interview guide was done not through an interview schedule and an appointed time, but as a self-administered guide with advanced and prior notice to the respondents for the interview. The interviews conducted deduced their feelings and motivation behind their actions and attitudes. Both quantitative and qualitative data collected from staff using the questionnaire and the in-depth interview guide as data collection techniques is to present narrative reporting and analysis of critical issues (Sarpong et al., 2014).

The researcher also employed a document analysis checklist and a document review for the collection of secondary data. Documents, which refer to all kinds of written and recorded data, were an important component of the research, comprising both external and internal written records, which include government macroeconomic policy documents, Bank of Ghana policies and plans, statistics, demographic trends records and the universal banks' financial records.

The secondary data covers both qualitative and quantitative data on the monetary and fiscal policy tools employed and their effects on the financial performance and profitability of Ecobank Ghana. It also includes data on internal control factors in terms of the CAMELS analysis employed by Ecobank Ghana in determining its financial performance and profitability. Data was collected on fiscal and monetary policy implementation in Ghana's economy from 2006 to 2021. The data

was gathered from journals, and websites of the institutions involved, and quantitative data was derived from official records of the bank's financial statements, national statistics, and previous research studies (Saunders et al., 2007).

### 3.1.4 Population Size and Sampling Procedures

Out of the 23 universal banks in Ghana, cutting across the Kumasi Metropolis, Ecobank Gh Ltd was procedurally and strategically selected as the case study target population based on purposive sampling techniques and a case study analytical procedure. Out of which eight Ecobank branches purposively selected within the Kumasi Metropolis represent the case study population.

This was due to time constraints, cost of transportation and proximity and the strategic location of the selected branches. The eight Ecobank branches purposively sampled in the Kumasi Metropolis out of the ten Ecobank branches in Kumasi represented 67% of the population. The study employed purposive sampling techniques to acquire the sample size population of 88 respondents for the study made up of 80 staff and 8 branch managers from the eight selected Ecobank branches.

### 3.1.5 Analysis of Collected Data

The analysis of data done through statistical and thematic analyses was by the application of concurrent transformative mixed methods. The statistical analysis involves the use of descriptive and inferential statistics. To collect data and obtain reliable and valid information for hypothesis testing, the study adopted descriptive and explanatory analysis. Both descriptive and inferential statistics were used in measuring the cause and effect relationships of the variables by describing, explaining, and validating the findings with the application of comparative and correlational descriptive analysis (AECT, 2001).

The descriptive statistics consisted of percentages, mean, standard deviation, frequency distribution tables and line graphs (Saunders et al., 2007). Hale (2018) however, stated that a descriptive research design cannot make accurate predictions and/or summaries issues in determining any causal relationship and effect. Therefore explanatory research was added to the study in establishing the cause-and-effect relationships through the observation of variation in the independent variables causing the changes and measuring the effects on the dependent variables thereof (Saunders et al., 2009).

The quantitative data collected was analysed with the application of the statistical package for social scientists (SPSS) software package version 22, since it is a versatile software package allowing for diversification of analyses, data transformations and precision in output (Arkkelin, 2014). In determining the hypothesis testing in terms of the independent variables influencing the dependent variables, the study employed regression analysis. This resulted in the computation of the coefficient of determination (R-square), ANOVA and F-statistics in testing the significant relationship between the independent variables and the bank's profitability (Saunders et al., 2009).

The study used correlation analysis to establish the relationship between the research variables. Employed in concluding the reliability and generality of the findings through the Pearson product-moment correlation coefficient. Indicating the degree of a statistical linear relationship between the study variables measured at the interval level $-1 \leq r \leq 1$ (O'Leary, 2004).

The researcher employed the deductive approach by explaining the causal relationships, contradictions and effects among the study variables. Through quantitative and qualitative measurement and statistical analysis by the generalization of the research findings in concluding, in terms of the convergent parallel mixed methods of hypotheses development and theory, by the design of a strategy in testing the hypotheses (Saunders et al., 2009).

The study further undertakes a thematic analysis of the qualitative method by categorizing data into key themes, interpreting the patterns and narrating the data outcomes to elucidate the meaning and understanding of the data in the context of the banking industry's performance. The qualitative data quantified was by converting it into numerical codes and then analysing it statistically with a descriptive method describing the phenomena as it is (Saunders et al., 2007).

The study employed key financial ratios in assessing the efficient performance of Ecobank Ghana Ltd (EBGL) based on the Bank of Ghana's Financial Soundness Indicators for the universal banks. The study utilizes the CAMELS approach to analyse the internal control factors which include capital adequacy ratio, asset quality ratio, management efficiency ratio, earnings ability ratio, liquidity and sensitivity to risk management ratio. There were also external factors influencing the bank's financial performance, which were beyond the bank's management control such as fiscal and monetary policy tools and macroeconomic factors of inflation, interest rates, and GDP growth (Sarpong et al., 2014).

Through the concurrent transformative mixed method model, the researcher examined and described the associated relationship among the variables, to establish whether the independent variables influence the bank's profitability, as depicted in the conceptual framework. Ensuring the comprehensiveness and the accurateness of the information through statistics, and thematic interpretation of the cross-sectional research (Saunders et al., 2007).

### 3.1.6 Operational Definition of Variables and the Empirical Model

There were the identification and operational definition of the study variables and the preposition of the theoretical and empirical model. Various variables incorporated into the regression models were for the determination of the performance of the bank's profitability. The dependent variables specifically selected were as measures of the bank's profitability with that of the internal and the external determinants testing the factors affecting the bank's profitability. Through inferential

statistical analysis of the data, the study outcomes computed were in the determination of the existence or non-existence of the statistical relationship between the variables.

The financial performance of the bank serves as the dependent variable made up of Return on Assets (ROA) and Return on Equity (ROE). The independent variables consisted of the fiscal policy tools of Government Spending (GS), and Taxation (TX). The macroeconomic variables of Gross Domestic Product Growth (GDPG) and Inflation Rates (INFR). Others include the bank's internal control variables consisting of Capital Adequacy (CA), Asset Quality (AQ), Management Efficiency (ME), Earnings (E), liquidity (L) and Sensitivity to Market Risk (SMR) based on the research objectives.

These were analysed based on an empirical model of $ROA_{it}$ and $ROE_{it}$ = $\beta_0+\beta_1 GE_{it}+\beta_2 TAX_{it}+\beta_3 CA_{it}+\beta_4 AQ_{it}+\beta_5 ME_{it}+\beta_6 E_{it}+\beta_7 L_{it}+\beta_8 SMR_{it}+\beta_9 GDPG_{it}+\beta_{10} INFR_{it}+\varepsilon_{it})$.
It involves the use of multiple regression analysis to ascertain the degree of responsiveness of the relationships between the dependent variables and the independent variables (O'Leary, 2004).

## 3.2 Population and Sample size of the Research Study

### 3.2.1 Introduction

The target population and sample size of the study was based on identifying all the 23 universal banks in Ghana and choosing Ecobank Gh Ltd as a case study. A purposive sampling technique was used in selecting Ecobank Gh Ltd and the Kumasi Metropolis as the company and the geographical frame, respectively. The study adopted a purposive sampling technique in selecting Ecobank Gh Ltd as a representation of the entire population and the selection of eight Ecobank branches in the Kumasi Metropolis as the sampling frame, out of which the sample size of 88 respondents was selected and examined.

### 3.2.2 Target Population

The study target population of which the researcher was concerned and researched, analysed and generalized in terms of the study findings, made up of all the 23 licensed universal banks with various branches across the country and in good standing as of 2021, under the Ghana banking Act (Bank of Ghana, 2021). The researcher further developed an accessible population as a subset of the target population in terms of an institution and geographical location giving reasonable access to the research study (Crossman, 2020).

A study employed a case study sampling to determine the worth of the study by the use of the purposive sampling technique, in which an agency and a city were selected as a representative. Ecobank Gh Ltd was chosen, serving as an accessible population and as a representation of the target population, in terms of a case study method. Eight Ecobank Gh Ltd. branches in the Kumasi Metropolis were chosen for the study as the representation of the sampling frame representing 67% of the 12 Ecobank branches in the Kumasi Metropolis and as a representative of the whole licensed universal banks in Ghana (Crossman, 2020).

The Kumasi Metropolis chosen as a geographical location forms the centre of commercial activities with large business institutions and forms the capital city of the Ashanti region and the second-largest city in Ghana. Currently, many banks have emerged in the banking sector of Ghana. However, Ecobank Gh Ltd was seen among the first ten top banks in Ghana, as one of the potential financial institutions gaming strong grounds in the banking sector and growing at a faster rate, with a modern technological system of banking operations than any other bank (Obiorah, 2018).

The bank has an extensive agency network and the application of ATM systems in the country, with comprehensive corporate and domestic banking products and services. It provided information by capturing a variety of variables to classify the complexity of the set of conditions that comes together to produce a holistic phenomenon for the study (Ecobank Ghana, 2019). It reveals the insights by providing in-depth information on events, relationships and experiences that

can be used to the generalization of the banks logically and statistically, given a true representation of all the universal banks.

It gives a detailed understanding of the study being investigated, obtaining answers relating to ‘why,' ‘what’ and ‘how,' and enables the researcher to make generalizations that are logical, analytical and theoretical (Palinkas, 2015). Choosing Ecobank Gh Ltd as a case study was more appealing, as it’s a modern bank with all modern facilities to satisfy its customers and stakeholders and the findings from this case study are more generally applicable.

### 3.2.3 Sampling Frame

The researcher adopted a purposive sampling technique in selecting Ecobank Gh Ltd as the desired representation of the entire population of all the universal banks in the banking sector. The sampling frame, forming the total population out of which the sample was selected, was represented by eight purposive selected Ecobank Gh Ltd bank branches in the Kumasi Metropolis, which were organized into eight categories of separate strata. Through the frame, every member of the population is recognised with the opportunity of being equally selected and purposively and proportionally represented as a subject. The choice of the sampling criteria related to the fact of having a fair and purposive representation within the sample population in the study. The sampled frame of the Ecobank branches as shown in Table 3.1 below.

**Table 3.1:**

*The sampling frame of the eight selected Ecobank branches in the Kumasi Metropolis*

| Strata | Population | Percentage | Sample Size | Percentage |
|---|---|---|---|---|
| A | 21 | 15.4% | 11 | 12.5% |
| B | 16 | 11.8% | 11 | 12.5% |
| C | 15 | 11.0% | 11 | 12.5% |
| D | 16 | 11.8% | 11 | 12.5% |
| E | 15 | 11.0% | 11 | 12.5% |
| F | 18 | 13.2% | 11 | 12.5% |
| G | 20 | 14.7% | 11 | 12.5% |
| H | 15 | 11.0% | 11 | 12.5% |

| | | | | |
|---|---|---|---|---|
| **Total Population** | **136** | **100.0%** | **88** | **100%** |

### 3.2.4 Sampling Technique

The sampling techniques in terms of the processes of choosing a group of people in the methodology of helping to select individuals of an agency for inclusion into the sample size. The aim was to make the sample size value, reflect the whole population as if the researcher surveyed the whole population (Lund & Lund, 2012). The purposive sampling technique was used to select the company and the geographical frame, which were Ecobank Gh Ltd and the Kumasi Metropolis, of which eight Ecobank branches were selected from the Kumasi Metropolis.

Stratified random sampling was employed as a probability sampling technique, separating the various branches as groups, which is naturally exhibited in the Ecobank business. The use of the technique requires the classification of the bank population, Kumasi, into subgroups, defined by their different characteristics, qualities and locations. With Ecobank having 12 branches in the Kumasi Metropolis, all 12 branches are classified as strata. Stratified random sampling, made up of heterogeneous subgroups, with distinct characteristics and referred to as strata, enabled the study population divided into heterogeneous subgroup bank branches. It was through this that the sampling frame and the population were selected. The various bank staff and management of each branch represent a stratum (Crossman, 2020).

The researcher focused on the non-probability technique, as a subjective judgmental sampling, contrary to random selection, to test the conformability, credibility, dependability and applicability of the research data. Purposive sampling became very useful as it offers a wide selection of non-probability sampling techniques (Lund & Lund, 2012). The establishment of the strata gave a representation of the key subgroups of the study population. The researcher used a maximum variation or heterogeneous purposive sample to select the eight stratum branches from

the 12 strata, providing a diverse range of information relevant to the phenomenon under study (Saunders et al., 2009).

These were very important to the study, to give meaningful subgroup inferences. As the selected banks were with diverse potentially influential characteristics, reflecting the pattern of the characteristics of the overall population, such as their ages, gender, work experience status, macroeconomic policies knowledge, and level of educational qualification. The stratified sampling enabled the researcher to analyse the study data (Lund & Lund, 2012).

The purpose of selecting the technique or sample design was to provide as much insight as possible, into the phenomenon under examination from the eight selected Ecobank branches. The purposive sampling technique was to allow for the choice of knowledgeable participants believed to have knowledge and insights in the study area. These gave a fair view of the selected sample population, who possesses knowledge of the fiscal, monetary and macroeconomic policy variables and banking systems and operations.

The individuals selected were based on the assumption that the respondents possess knowledge and experience with the phenomenon of interest and are capable to provide a detailed in-depth and generalizable breadth of information (Crossman, 2020). The researcher again used some form of purposive criterion related to the respondent's role in the bank, such as managers, marketing managers, accountants, and project managers, the criterion of inclusion in a certain category of criterion-i, in contrast to issues that are external to a specific criterion of criterion-e.

### 3.2.5 Sample Size

The sample size is a representation of the research respondents, participating in an investigation and serving as a representation of a target population, relates to the research objectives, questions and the researcher's analytical skills and is not strictly on any specific sample size (Saunders et al., 2009). The eight Ecobank branches sampled from the 12 branches in the Kumasi Metropolis

represent 67% and a miniature version of the sampling frame. To Gopi (2020), Crimp and Wright (1995) provided guidelines for a sample size of anything larger than 30 and a maximum of 500, as appropriate for research methods and used to select the sample population.

The researcher used a sample size of 88 respondents, selected from the sampling frame of the eight selected Ecobank branches in the Kumasi Metropolis. Participants of 80 staff drawn from the eight selected Ecobank branches, made of 10 facility management staff each, consisting of both top and middle management personnel and other senior staff in each stratum. Sample respondents of 8 branch managers from each stratum, were also selected for the interview guide.

Demographically, the participants consisted of both males and females, matured in years of age, with a good tertiary level of education. They were full-time employees with diverse positions, with at least 1 year of experience in the service, irrespective of any race or ethnicity, culture, religion, physical disability and sexual orientation. A convenience sample employed included at least some percentage of males and females. The sample size was limited to senior staff, heads of departments and management.

The rationale behind the selection of these management staff originates from their responsibility for formulating and implementing policies relating to the financial performance of the various banks, to external macroeconomic factors, which affect the bank's performance. Responsible and concerned about the consequence of the financial operations of the bank and possesses greater knowledge of fiscal and monetary policy tools, affecting the economy. It enables the generation of representative outcomes with less variance, thereby providing a greater opportunity for statistical precision.

From the eight selected stratum branches in the Kumasi Metropolis, the researcher applied a disproportional sample method in selecting the subgroups, as the sample size is not proportional and non-random to the subgroup population. The respondents sampled depended on a purposive

homogenous technique to represent the primary sources of data for the study. The rationale behind the sample size depended on the limitations of time, cost constraints and resources. For it cost less and saves time and resources to travel to all the selected eight Ecobank branches within the Kumasi Metropolis (McLeod, 2019). The fear of the company refusing to grant the opportunity to sample the other branches of the targeted population was also there.

Although there may be an automatic presence of a higher sampling error and the likelihood of the results not being a true representation of the entire population. The purpose of the study was the generalization of information from the sample size to the wider population. This was essential for the robustness of such generalizations, for, without the purposiveness, it would be impossible to be certain that the sample selected was not biased. Random selection is the only selection mechanism in large-n studies that automatically guarantees the absence of selection bias (Tansey, 2007).

## 3.3 Materials/Instrumentation of Research Tools

### 3.3.1 Introduction

To Saunders et al. (2009), under the method of triangulation, the mixed-method used both quantitative and qualitative data collection techniques consisting of descriptive and explanatory research to explain, describe and affirm the validation of the research findings. Thus, the application of both primary and secondary data sources as a standard research method for the empirical analysis of data results in the formulation of credible answers to the study questions for hypothesis testing. The research methods of the data collection techniques consist of a case study, survey questionnaire, interview guide and extant document analysis leading to acceptable validity and reliability of the study data collected (Golafshani, 2003).

To test the hypotheses empirically with the primary technique for collecting quality raw data, the study employed questionnaires and interview guides and administered them as the main data collecting instruments. Document analysis checklist and document review are employed for the collection of secondary data, which have passed through certain statistical analyses based on the study's aims and objectives. The credibility of the research tools done was through pilot testing and on the reliability and validity of the research study instruments. The study analysed the time horizon by employing a cross-sectional study (Saunders et al., 2009).

### 3.3.2 A Case Study

To McLeod (2008), a case study is an in-depth intensive investigation strategy, which provided data enriched with detailed information and the description of a process in capturing a variety of variables, thereby describing and analysing data within a specific context for the provision of a holistic phenomenon. It is an in-depth explanation of the process, experience, and structure by utilizing naturally most existing information from a detailed contextual analysis of events and their relationships (Formplus, 2019). The study adopted a single-case design selecting Ecobank Gh. Ltd. and a multiple-case design by selecting eight of its branches in the Kumasi Metropolis, to raise the confidence level and to explain the complexities of real-life situations of the method.

The essence was showing real-life events from various sources through descriptive and explanatory approaches going beyond quantitative statistical results, to elicit implicit and explicit data in understanding the behavioural conditions in supporting or rejecting propositions of the respondents. This allowed for the generalization of the findings from a single and a multiple case study to the bigger population and the formation of theories, tested against other theories (Zainal, 2007). It provides information by capturing a variety of variables to classify the complexity of conditions that came together to produce a holistic phenomenon for the study (McLeod, 2008).

It involves the examination of data through the quantitative, qualitative, surface, and deep level analytical thinking with logical and teamwork enhancement regarding the contextual analysis of data. The achievement manifests by reconstruction and analysis with the application of some other data collection techniques and strategies, leading to the generalizability of the findings by boundary formation and objective framework in a real-life situation (Zainal, 2007).

### 3.3.3 A Questionnaire

The study employed a questionnaire, which is a standardized concise series of structured multiple-choice, open, and close-ended pre-planned sets of questions. For collecting subjective and objective data in a logical flow structured based on the study objectives (Abellado, 2017). The semi-structured questionnaire is presented in a psychological order, proceeding from general to responses that are more specific. The questionnaire set up resulted from theoretical and empirical studies, giving the authenticity, reliability and validity of the study questionnaire. The questionnaire coined depended on the set up of published international journals, articles and empirical studies, which were relevant to the study (Creswell, 2009).

A self-administered questionnaire that was clear, sensitive, precise and simple sentence questions with other studies, corresponding to respondents' level of knowledge and with the confidence that all the respondents interpreted it in the same manner. The researcher adopted the 5 points Likert scale, which is a psychometric scale and was very easy to understand and answer for assessing the degree level of agreement for each question (Formplus, 2019).

The questionnaire was administered as a primary source of data collection tool with face-to-face hand-delivery and with all the techniques of the survey strategy to the respondents. The structured questionnaire detailed all the variables in terms of the study objectives with different components and categorized them into major coherent areas. It involves the demographic and attributes data of the participants, questions relating to opinions on explanatory and description of

issues on the impact of fiscal and monetary policy tools and the internal factors through CAMELS analysis on the profits of Ecobank and the economic variables (Saunders et al., 2009).

The questionnaires were administered to the respondents of Ecobank Gh Ltd in the Kumasi Metropolis who responded in a pre-established decree to the same set of questions. It was economically less expensive, although time-consuming. It allows for the easy collection of a large quantity of data for tabulation and interpretation. The researcher used this survey strategy in collecting data and analysing them qualitatively and quantitatively through descriptive and inferential statistics and explaining relationships among the variables, thereby producing models of relationships (Saunders et al., 2009).

### 3.3.4 An Interview Guide

The interview guide, which involves understanding individuals' ideals and thoughts, attitudes and behaviours, was composed of both structured and unstructured ethnographic standardized questions elucidating qualitative data (Alshenqeeti, 2014). The questions related to the identification of monetary and fiscal policy tools employed in the economy and the impact of the bank's internal factors through CAMELS analysis and its effect on the financial performance and the profitability of Ecobank and the impact of the macroeconomic variables in the economy.

The self-administered interview is other than personal and individual face-to-face interviews were granted with top management officials and the bank managers of the eight selected Ecobank branches in the Kumasi metropolis (Abellado, 2017). The respondents also answered the same set of questions helping the researcher avoid biased responses from the interviewees and the major problem of unreliability of the interviews. The interview done with the interview guide enables the researcher to have access to a quantum of information on the monetary and fiscal policy tools employed in the economy and the internal factors through CAMELS analysis and its effect on the profitability of Ecobank.

The interview helped in probing the ideas and thoughts of the respondents to unfold in-depth data about phenomenon issues of the study interest. This enables the researcher to uncover the respondents' personal information, attitudes, perceptions, and beliefs data that were inaccessible using techniques such as questionnaires and document review (Alshenqeeti, 2014). The researcher reviewed both the recorded and the written data on several occasions to produce an accurate interview report and at the same time relieve the researcher against the problem of subsequent attempts to reconstruct respondent information (Abellado, 2017).

### 3.3.5 Document Analysis Checklist

The researcher employed a document analysis checklist and document review for the collection of secondary data which were data collected for purposes not different from the purposes of the researcher's current study and which have passed through certain statistical analyses based on the study's aims and objectives. Documents that refer to all kinds of written and recorded data were an important component of the research, comprising both external and internal written records which include government macroeconomic policies documents, Bank of Ghana policies and plans, statistics, demographic trends records, and the universal bank's financial statements records.

The reason is that the various institutions such as the government institutions, Bank of Ghana and Ecobank, possess unadulterated important data that exists up-to-date on their websites and offices, which required limited effort in accessing them. Just as Bernard (1988) stated: "I see no reason to collect new data in the field if there are documentary resources already available that address some of your research questions". Some of these are related to monetary and fiscal policy tools employed in the economy and their effect on banks' financial performance and profitability and the macroeconomic variables in the economy (Abellado, 2017).

The required data was already available, inexpensive and easily accessible in obtaining very quick and relatively cheap information by providing a wide range of varieties of options and

findings and allowing for examination of trends by the researcher over the past to the present and predictions into the future (Chaleunvong, 2009). It involves time-saving and cost-efficient through the internet and journal publications (Saunders et al., 2007).

The secondary data covers both qualitative and quantitative data obtained through newspapers, journals, dailies and the websites of the institutions concerned and quantitative data originating from financial statements and statistics. The document review makes the record review a very economical, efficient, effective and very useful data collection tool for the research study. It increased the validity and reliability of the generated data for the research analysis, which the questionnaire and interview guide, were incapable of providing. It again saves the researcher from the training of interviewers, and the associated cost of sending interviewers (Abellado, 2017).

## 3.4 Operational Definition of Variables

### 3.4.1 Introduction

The analysis of the study was done through the application of the regression technique. The study employs a linear regression model in terms of analysing the panel data with Ecobank Ghana Ltd. The measurement of the profit efficiency of the bank relates to the dependent variables of the bank's Return on Assets (ROA) and the Return on Equity (ROE) (Kutsienyo, 2011). There was also the assessment of the independent variables such as the primary determinants consisting of government and the central bank policy tools, the intermediation macroeconomic variables and the criterion internal determinants within the banking operations, consisting of the CAMELS' model of assessment. Many researchers have used the study model to assess various banks' profitability functioning perfectly in its outcomes (Tuffour et al., 2018).

### 3.4.2 Empirical Model of Analysis

The internal and external factors influencing the bank's financial performance regarding the bank's profitability from 2006 to 2021 were analysed with the application of the regression technique. It provides the basis for the estimation of statistical techniques and theoretical results as an econometric tool. The study used inferential statistics through regression and correlation techniques in determining the effect of fiscal and monetary policy tools on government spending, taxation, discount rates, reserve requirements and open market operations, as factors affecting the financial performance of universal banks in terms of ROA and ROE. Other factors include macroeconomic variables such as inflation rates and GDP growth, which in turn affect the bank's internal factors (CAMELS) in the banking industry and give the chance for a wider scope of empirical tests of hypotheses in terms of revealing efficient estimates (Fingleton, 2009).

The researcher assesses the variables simultaneously as they affect the universal bank's profitability from a diverse direction. Thus, to come up with an empirical study that makes sense, government expenditure is not the only factor that affects universal banks' profitability and the economy therefore other factors need consideration. In addition, Ghana is different from other developed and developing nations. In Ghana, the government and the central bank apply the policies simultaneously, with the central bank assessing the universal banks by CAMELS. Moreover, government spending and tax revenue are under the control of the government, with their impact going in the opposite direction, hence the need to assess their effects simultaneously.

For the stabilization of an economy through governments' policy interventions, increasing spending to prime pump with a corresponding decrease in taxes. The essence is stimulating aggregate demand (GDP growth) in the short run rather than prices and interest rates and recovering the economy from economic recession to a successful state of economic growth (Chappelow, 2019). The objective is to increase consumer spending and investment decisions of institutions without any effect on prices and wages, resulting in inflation and a rise in interest rates.

While money supply through discount rates, reserve requirements and open market operations controlled by the central bank directly influence interest rates, inflation rates and GDP growth. Growth and sustenance correlated directly to the money supply growth rate by monetary policy, serving as a powerful weapon. The application of monetary policy affects every aspect of the economy, such as inflation, interest rates, GDP growth and employment (Amadeo, 2019). Monetary supply affects macroeconomic activities such as incomes, output and prices and controls inflation and the rate of interest in achieving policy goals and objectives in an economy (Adelina-Geanina, 2011).

In examining the impact of fiscal and monetary policies, macroeconomic variables and bank internal variables on the profitability of the banks, some variables were marginalised to avoid multicollinearity as they were highly correlated. The variables excluded include interest rates, discount rates, reserve requirements and open market operations, which were proxies for money supply (M2+). Thus, the regression model was developed with the following variables. The fiscal policy variables of taxation and government spending, excluding the monetary policy factor of the money supply as a proxy, form the primary variables. Others include the bank's internal-specific variables (CAMELS) as predictors, as well as macroeconomic-specific variables of GDP growth and inflation rate as mediators.

To Reyna (2007), the standard linear equation of the regression model specification is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_k X_k + \epsilon \quad \text{(eq. 1)}$$

The multiple regression equation expanded as:

$$Y_{it} = \beta_0 + \beta_1 X1_{,It} + \ldots\ldots + \beta_k Xk_{,it} + \gamma 2E2 + \ldots\ldots + \gamma nEn + uit \quad \text{(eq. 2)}$$

The researcher, therefore, undertakes the estimation of equation (2) with the fixed effects, taking into consideration the bank's characteristics concerning the differences in the intercept. With the determination of a valid functional form between the fixed effect model and the random effect

model, the study prefers the fixed effect model as a technique with the use of dummy variables on the bank (McManus, 2011).

The study undertakes the Hausman Test with the application of the major selected variables of the study with an outcome result that the fixed effect model is the most appropriate model for conducting the study. Thus, the estimation of the regression models depended on the fixed-effect model with the conduction of the Hausman test in determining the appropriate model (Kutsienyo, 2011). The fixed effect empirical regression model adopted from Kutsienyo (2011) was used for the estimation of the study results of ROA and ROE, with the application of concerned independent variables expressed specifically as follows:

Model ROAit

$$=\beta_0+\beta_1 GE_{it}+\beta_2 TAX_{it}+\beta_3 CA_{it}+\beta_4 AQ_{it}+\beta_5 ME_{it}+\beta_6 E_{it}+\beta_7 L_{it}+\beta_8 SMR_{it}+\beta_9 GDPG_{it}+\beta_{10} INFR_{it}+\varepsilon_{itt} \quad \text{(eq. 3)}$$

Model II ROEit

$$=\beta_0+\beta_1 GE_{it}+\beta_2 TAX_{it}+\beta_3 CA_{it}+\beta_4 AQ_{it}+\beta_5 ME_{it}+\beta_6 E_{it}+\beta_7 L_{it}+\beta_8 SMR_{it}+\beta_9 GDPG_{it}+\beta_{10} INFR_{it}+\varepsilon_{itt} \quad \text{(eq. 4)}$$

**Where:**

ROAit: is the return on assets for bank *i* in year *t*

ROEit: is the return on equity for bank *i* in year *t*

$\beta_0$: denotes the intercept coefficient

$\beta_i$: denotes the coefficient of each of the independent variables

GE: is the government expenditure in the economy

TAX: refers to the average tax revenue to the government

CA: refers to the capital adequacy of the bank

AQ: refers to the asset quality of the bank

ME: refers to the management efficiency of the bank

E: refers to the earnings of the bank

L: refers to the liquidity of the bank

SMR: refers to the sensitivity to market risk of the bank

GDPG: refers to the GDP annual growth rate of the economy

INFR: refers to the inflationary rate of the economy

Y: denotes the vector of year dummies

εit: denotes the error term, with εit = μi+γt

t: yearly time

i: ith individual variable

### 3.4.3 Performance Measurement: Dependent Variables

The measurement of the profit efficiency of the bank is based on the bank's Return on Assets (ROA) and the Return on Shareholders' Equity (ROE), which are the most predominant used variables in empirical studies. The return on assets measurement was based on the profitability of the firm in terms of the effectiveness of the bank in generating income through prudential management of its financial resources and real investment, that is, the total assets of the business (Tuffour et al., 2018). The calculation of the return on assets is based on the percentage measure of net profit or income before taxes over total assets.

To Kutsienyo (2011), there is also the Return on Equity (ROE), which relates to the net profit generated by the firm in terms of the amount of total shareholders' equity invested in the business, serving as an alternative measure, which depends on the capitals of the firms. It is the ratio of net profit after tax to the total equity. A higher ratio serves as an indication of good performance in generating profit and cash internally (Tuffour et al., 2018).

### 3.4.4 Performance Measurement: Independent Variables

The efficient and effective performance of the banking industry is influenced by external determinants consisting of government and central bank tools and intermediate macroeconomic variables. The internal determinants within the banking operations consisted of the CAMELS' model of assessment as a standard measuring tool for the bank (Kutsienyo, 2011). The justification of the determinants is as discussed below.

#### *3.4.4.1 The External Determinants*

The external determinants deal with the environmental characteristics that were outside the jurisdiction of the financial institution in which the banks undertake their operations. The major external determinants influencing the financial performance of the bank include fiscal policy measures such as taxation and government spending and the monetary policy measures such as the

bank's discount rates, reserve requirement, and open market operations. It includes macroeconomic factors of inflation rates, interest rates and GDP growth.

The fiscal policy measures incorporated into the regression model were two distinct variables of tax revenue (TR) and government spending (GS). The taxation variable forms the percentage of the nation’s tax revenue generated from businesses and the public used by the government in financing its expenditures. The government spending measurement relates to the productive spending by the government within the economy, which involves the quantum of monies spent on infrastructure, education, and hospitals, inter alia spending on other productive ventures (Kramer, 2021).

These variables of taxation and government spending are used as a proxy for fiscal policy. Theoretically, fiscal policy measures through taxation significantly and inversely affect the bank's financial performance and hence profitability, while government spending invariably significantly and positively affects the bank's financial performance and profitability. To Keynesian economic theory, fiscal policy tools affect macroeconomic variables such as full employment, economic growth, interest rates, and price stability, which affect the profitability of universal banks (Chappelow, 2019).

#### *3.4.4.2 The External Intermediation Variables*

The major macroeconomic factors serving as intermediation and outside bank management controls incorporated into the regression model include inflation rates (INFR) and GDP growth (GDPG). These variables affect the bank's profitability, in periods of an economic boom; it results in increasing demand for credit and loan facilities leading to aggregate economic growth. The effect is the reduction in credit risk and improving debt servicing capability of domestic borrowers and hence an increase in the bank’s profits through interest rates. On the other hand, there is a rising

condition of non-performing loans during periods of adverse macroeconomic effects (Tuffour et al., 2018).

Inflation, which is the representation of the changes in the general price used as a proxy for the aggregation of the general price levels directly or indirectly influences the banks. The continuous aggregate percentage changes in the general price levels result in an inflationary spiral. Rising inflation rates lead to rising interest rates and banks' profitability and vice versa.

Gross domestic product (GDP) directly affects the performance of the bank. A great demand for bank loans in periods of economic booming leads to higher profit margins for banks and vice versa in periods of economic recessions. Given its significant measure and positive correlation, in that, there is the emanation of less credit risk and high debt servicing capability of bank borrowers in high GDP growth, leading to a good bank performance (Tuffour et al., 2018).

#### *3.5.4.3 The Bank's Internal Control Predictor Variables*

The six major common bank performance variables known as CAMELS influence the financial performance of the bank as per the bank's financial statement and the empirical literature review. The firm-specific internal control variables consisted of capital adequacy, asset quality, management quality, earnings, liquidity and sensitivity to market risk. The variables are however limited to four to avoid multicollinearity. It is the model of assessment as standard measuring criteria or yardstick and key predictors of the universal banks based on the Bank of Ghana's Financial Soundness.

Capital adequacy (CA) as financial leveraged was integrated through Tier-1 capital + Tier-2 capital to risk-weighted assets ratio into the regression model. It examines the healthy status of the solvency of the bank and the maintenance of confidence by protecting the bank's lenders and depositors. It is the measurement of the shareholders' equity divided by total risk-weighted assets (Hayes, 2019). The higher the equity ratio the greater the profitability margin of the bank and the

lower the leveraged and insolvency, as a good financial performance for the year. Translating into lower demand for external borrowing due to the high profitability. Many empirical studies have demonstrated that capital adequacy and banks profitability significantly and positively correlates, with a higher ratio leading to higher profits (Sarpong et al., 2014).

Asset quality (AQ) which measures the bank's effectiveness in terms of screening credits and managing credit risk represented the by bank's impairment allowance to gross loans and advances ratio, serves as a measure of proxy of capital risk. Integrated into the regression model for assessing the bank's asset quality. The ratio of non-performing loans to total gross loans and advances is an indication of the quantum of the total portfolio that cannot be recovered and charged off, ending up reducing interest generated and the profitability of the bank (Ferrouhi, 2014). High non-performing loans leading to credit risk result in poor asset quality and insolvency of the bank. However, there is a positive correlation between risk and profits according to the risk-return hypothesis, demonstrating that the higher the risk the greater the profitability. There is an inverse relationship between NPL and banks' performance as a higher ratio is an indication of the rising bad quality of loans and advances and lower bank profitability (Sarpong et al., 2014).

Management efficiency (ME) is integrated into the model through the expense-to-income ratio serves as a proxy. The measurement of the ratio is a function of the operational expenses of the bank to income generated, implying that the higher the expenditure to revenue the lower the bank's profitability and poor management quality. However, efficient management quality may lead to a minimum cost and control risks, relating to the bank to revenue, given an inverse relationship between the cost of expenses and profit income. The lower the ratio, the higher the profitability of the bank and the higher the returns to the stakeholders. (Kagan, 2018).

Earnings quality (EQ) involves the measurement of net profit after tax to total income ratio as a proxy incorporated into the regression model. Earnings volatility in terms of market risk

including interest rates, foreign exchange rates, and price risks; the rating of net interest margin; valuation allowance accounts and net worth level. Showing a firm all-embracing efficiency and performance measured against the bank's potential losses and the bank's ability in paying its dividends. A rising net profit margin to income is an indication that the earnings of the bank and its profitability are increasing steadily and raising the quality status of the bank in turning revenue into profits (Hayes, 2019).

### 3.4.5 Summary of the Determinants of the bank's Profitability

The summarization of the various variables incorporated into the regression models for the determination of the bank's profitability is show in Table 3.2.

**Table 3.2:**

*Variables incorporated into the regression models*

| **VARIABLES** | **DESCRIPTION OF VARIABLES** |
|---|---|
| **DEPENDENT VARIABLES** | |
| **Profit Indicators** | **Factors indicating the profit performance of the bank** |
| Return on Asset (ROA) | ROA is the measurement of the firm's profit earned relative to the firm's level of investment in total assets. Serves as a proxy for the measurement of the profitability of the bank. |
| Return on Equity (ROE) | It is the rate of return on shareholders 'investment in the firm. Serves as a proxy for the measurement of the bank's profits. |
| **INDEPENDENT VARIABLES** | |
| **External factors** | **Policy Tools and Macroeconomic characteristics** |
| **Fiscal Policy Tools** | |

| | |
|---|---|
| Government Spending (GS) | It is the distribution of revenue in boosting economic growth and the stabilization of macroeconomic activities. |
| Taxation (TX) | It is lowering disposal income leading to a decrease in consumption, investment and GDP growth. |
| **Macroeconomic Variables** | |
| Gross Domestic Product Growth (GDP) | The gross domestic product growth serves as an indicator in measuring the country's economic output and standard of living. |
| Inflation Rates (INFR) | The inflation rate directly affects the state of the nation's economy leading to sustainable economic growth. |
| **Internal factors** | **The bank's specific control variables-CAMELS** |
| Capital Adequacy (CA) | It relates to the measurement of capital (Tier-1 + Tier-2 capital) to the risk-weighted assets ratio in assessing the solvency of the bank. |
| Asset Quality (AQ) | Measuring the bank's asset quality and credit risk. It involves the ratio of impairment allowance to gross loans and advances. |
| Management Efficiency (ME) | Expressed as total expense to total income. Lower ratios signalling efficient performance of management. |
| Earnings Quality (EQ) | Measured against the net profit after tax to total income. Assessing the bank's potential losses and paying its dividends. |
| Liquidity (L) | Measured the bank's cash as liquid funds to total deposits. Higher ratios are an indication of the availability of high liquidity. |
| Sensitivity to Market Risk (SMR) | Sensitivity to market risk looks at the bank's market fluctuations with loans and advances to total deposits serving as a proxy. |

Source: Derived From Literature, 2022

## 3.5 Study Procedures and Ethical Assurances

### 3.5.1 Introduction

The study looks at the exact procedures in collecting the study data from the 8 selected sampled branches forming the study sample size with the application of a purposive sampling technique in terms of addressing how and when the data was collected, where the data was collected, and the participants from whom the data was collected. The research has a critical connection to ethical principles, as the researcher needs to ensure that potential risks are eliminated to protect the dignity and well-being of the study participants.

There were several reasons why it is important to adhere to ethical norms in promoting values of accountability, trust, mutual respect and fairness. Certain governing principles and policies were emanating from a variety of historical and philosophical sources providing a certain framework for analysis. They include individual anonymity, confidentiality, beneficence and non-maleficence, respect for privacy and justice, data handling and reporting and mistakes and negligence (David & Resnik, 2015).

### 3.6.2 Study Procedures

The researcher sorted permission by the presentation of an introductory and authorization letter for the undertaking of the said research. The eight selected sampled branches were visited after obtaining valid and final approval from the UREC and permission from the Ecobank branch managers. The researcher for the collection of data visited the five selected sampled branches from which the sample size was drawn.

The respondents from the eight purposive selected Ecobank branches in the Kumasi Metropolis were adults with an educational background not below tertiary and full-time employees with at least 1 year of working experience, irrespective of race, ethnicity, culture, religion, physical

disability and sexual orientation. A convenience sampling technique employed was to ensure the inclusion of some proportional percentage distribution of females and males.

The purposive technique used to select the 88 respondents as the sample size, of which 11 participants were selected from each branch including the breach managers, was to ensure that every department in the banking facility was represented. The sample respondents for the interview guide consisted of five respondents, made up of the five breach managers. The questionnaire and the interview guide were distributed and administered among the selected respondents. The respondents undertook these after establishing contact with the managers and explaining the reason behind the study and they signed the informed consent forms. The questionnaire and the interview guide administered were within the specified period.

The research was not a matter of collecting information but was concerned with the dignity, rights, safety and well-being of the research participants. To ensure good ethical research certain governing principles, rules and policies were strictly adhered to, these include informed consent, anonymity and confidentiality, beneficence and non-maleficence, respect for privacy and justice, data handling and reporting, mistakes and negligence (David & Resnik, 2015).

For the success of the research, the researcher ensured that potential benefits outweigh the risks if any in terms of minimizing the risks and inconveniences and maximizing the potential benefits. Full assurance of respondents' consent and confidentiality is given, assuring the respondents that confidentiality and anonymity is been maintained and that the collected data will be solely for the research purpose without any breach of contract. There was no situation where the risk assessment overrides the benefits, hence no need for reassessment (Benatar, 2002).

### 3.5.3 Ethical Assurances

#### *3.5.3.1 Informed Consent*

To World Health Organization (2013) informed consent involves participants undertaking certain decisions to participate in the research voluntarily without undue influence with the provision of all relevant issues to the research, with knowledge of possible risks and benefits and the right to participate. This was undertaken with sufficient knowledge of the purpose, nature, duration and procedures of the study, the method adopted under the study, the inconveniences that were likely to be expected and its personal effects on making a decision. The participants' signing of a consent form shows their acceptance of participating, thereby following informed processes without glossing over the assumption that the research was harmless and free to the participants.

It also involved assuring the participants' confidentiality of the identification data and of which only aggregated results published such as age, sex, level of education etc. The respondents were made to know the methodology and non-persuasive disclaimer for protecting their anonymity and confidentiality as comprehension, disclosure, competency and voluntariness were essential parts of informed consent. Thus making the participants aware of the freedom of withdrawal, which was at the cost of the research. The research respondents were informed ahead of time exactly about the application of the data (Fouka & Mantzorou, 2002).

#### *3.5.3.2 Respect for Privacy*

Another ethical measure to maintain the safety of the research respondents was respect for privacy and avoidance of intrusion into their solitude. According to Smith (2003), upholding the right of respondent's privacy forms the central tenet of every study and it relates to issues idiosyncratic to the research participants. The freedom the participants possess in determining the time, extent, and general circumstances in deciding to share or withhold their private information, which was intimate information to the respondents.

Before the beginning of the data collection, the participants were aware of non-invasion of privacy, involving the non-disclosure of private information of participants such as beliefs, attitudes, and opinions. The invasion of privacy leads to loss of dignity, friendship, and employment, creating anxiety, guilt, embarrassment and shame for participants. It involves moral deprivation and depriving the participants of their protection from privacy and a violation of their basic rights (Fouka & Mantzorou, 2002).

The researcher respected the physical, psychological and sociocultural consequences of protecting participants during and after the research results analysis. In justifying the study's ethical integrity, the participants earned the respect of dignity from the beginning of the study throughout their participation and aftermath in terms of the preview of new information before, during and after the research (NIH, 2016).

#### *3.5.3.3 Anonymity and Confidentiality*

Confidentiality and anonymity which involves addressing and managing participants' private information occur when private information is voluntarily given to the researcher in confidence, leading to the protection of participants' names and other personal identifiers. Communicating to the individual's awareness of giving or withholding information that the researcher needs and the researcher's responsibility of upholding and maintaining that confidentiality by the application of coding systems (ORI, 2011). The selection of participants was very essential because they possess the freedom to decide what and how much of the information they wish to give and under what circumstances. There was a need for participants to agree and be aware of their data usage to avoid unethical behaviour.

The confidential collection of data was preserved in a place of limited access, storing in a way that participants were protected and cannot be recognized and stripping them of identifying information through coding data, thereby hiding identities in avoiding the breach of confidentiality.

Protecting all personal information such as physical, physiological, mental, economic, and sociocultural identity from unauthorized disclosure (Smith, 2003). The study applied the principle of anonymity in gaining access to institutional records by obtaining authorization from authorities in possession of the records (Fouka & Mantzorou, 2002).

#### *3.5.3.4 The Principles of Beneficence and Non-maleficence*

The principles of beneficence and non-maleficence deal with the potential benefits and harms of participation in research by participants in maximizing benefits and minimizing risks. Where the beneficence was the benefit of the study in providing the professional ability of successful and remarkable research in serving and promoting the welfare of the participants as against potential risks of non-maleficence of participation such as potential physical harm, psychological, social, legal and economic consequence (NAS, 1995). There was the need to identify the nature, characteristics, the scale of risks and the level and type of risks that were laid bare to the participants in the research protocol (WHO, 2013).

For the success of the research, the researcher ensured that the potential benefits outweigh the risks. In applying non-harmful procedures, risk assessment principles and concepts as a step in justifying the ethical integrity of the study, the researcher evaluated the risks and the potential benefits and informed the participants of non-potential risks and discomfort. Causing participants to make an informed judgment as to whether they will participate or not. For there are no zero risks in research and that practical solution was necessary for minimizing risks and maximizing benefits (NIH, 2016).

#### *3.5.3.5 Data Handling and Reporting*

The researcher took care of the avoidance of confidentiality risks by safeguarding storage methods and resorting to code numbers through the application of password-protected computer access, encrypted electronic messages and the preservation of keys in a secure environment by coding and

limiting its accessibility. Advocating for non-identifiable, unreachable, and untraceable data handling and reporting (WHO, 2013). The researcher embarked on destroying information and key code, as they were no longer necessary and for the reason of withholding potentially identifiable data.

The researcher foregoes reactive and adopted proactive research ethics and looks at the forces that reduce inequities in achieving justice in the research by proper handling of data and reporting. (Benatar & Singer, 2000). Affirming the commitment of agreement in respect of confidentiality and privacy, cultural sensitivities to participants and the bank by handling data in the outermost good faith (David & Resnik, 2015).

#### *3.5.3.6 Mistakes and Negligence*

There was a need in preserving participants' autonomy as the rigidity of the research protocol fails to give the participants choices. The researcher undertakes certain measures to ensure that there was flexibility in administering the questionnaire and interview guide. To utilitarian theory, the happiness of society is of greater importance and the researcher concentrated on the best interest of participants as the hallmark by democratically giving the participants the needed time on several occasions as the need arises, as deontological theory demands the moral duty of good actions (Benatar, 2002).

## 3.6 Data Collection and Analysis

### 3.6.1 Introduction

The collection and the analysis of data done were through both primary and secondary data sources and statistical and thematic analyses by the application of concurrent transformative mixed methods. To collect data and obtain reliable and valid information for hypothesis testing, the study adopted descriptive and explanatory analysis in carrying out the research. Both descriptive and

inferential statistics are used in discovering what is and measuring the cause and the effect of the relationships among the variables by describing, explaining, and validating the findings through comparative and correlational descriptive analysis (AECT, 2001).

### 3.6.2 Data Collection Procedure

The researcher visited the eight selected purposive sampled branches of Ecobank in the Kumasi Metropolis from which the sample size data collected was after replacing two branches that declined to participate in the study without any just cause. The questionnaires were distributed and administered across the selected branches, with the semi-structured interview guide also given to the branch managers. This took place after the establishment of contact with the branch managers and the explanation of the reason behind the study through a preliminary notification and the calibre of participants needed for the study in terms of age, sex, technical expertise and the various department's representatives. For the maximization of the questionnaire response and the interview guide, full assurance of confidentiality and respondents' consent was given. There was a passionate appeal to the respondents for maximum cooperation by filling out the questionnaires and providing accurate information to the best of their knowledge.

The research assistant went through a day's training session. Thereafter, proceed to the various Ecobank branches for the collection of the data, after the undertaking the pre-tested with a population of 10 respondents and working on the necessary correction accordingly. The questionnaire and the interview guide administered were within the scheduled period to the selected sample size of Ecobank Gh. Ltd. in Kumasi. The researcher used two days to distribute the questionnaire and the semi-interview guide among the selected branches, of which four weeks were given as the timeline for collection. There were several follow-up procedures during the period for feedback thereby ensuring the smooth running of the entire exercise as scheduled and the collection of completed questionnaires and the interview guide of the managers.

Some participants later declined and failed to complete and submit the questionnaires, with the understanding that the questions were too technical and beyond their technical knowledge. They declined the avoidance of giving wrong responses. The researcher has no alternative but to respect their dignity and agree with their demand to resign from participation due to the principle of informed consent and the freedom of withdrawal. The researcher and the team have to do a turnaround to some of the branches to pick the administered questionnaires from some of the respondents who needed additional days to complete the questionnaires. The research documents comprising both the collected primary research data and the secondary data were appropriately stored, imported, and incorporated into the Data Analysing Software (SPSS), and were processed, discussed and analysed through descriptive, regression and correlation analysis.

### 3.6.3 Data Sources

#### *3.6.3.1 Primary Data Sources*

The sources of the primary data involve the application of the questionnaire and interview guide for the collection of the primary data. The primary data were collected through the respondents of the 5 selected Ecobank branches in the Kumasi Metropolis. The data collected depended on the fiscal and monetary policy tools such as taxation and government spending, discount rates, banks reserve requirement and open market operations as independent variables and their effect on the profit of Ecobank, which relates to return on assets and equity as dependent variables.

The primary variables' effects were also based on their impact on macroeconomic variables relating to inflation rates, interest rates and GDP growth as mediator variables and the economy as a whole (Labonte, 2019). It also includes the extraction of data on the bank's internal factors affecting Ecobank through CAMELS analysis as the criterion and predictor variables employed in determining the bank's profitability. It also ascertains the stakeholders' concern about the impact

on the profitability of Ecobank and the macroeconomic variables in the era of fiscal and monetary policy implementations in Ghana's economy (Kagan, 2018).

#### *3.6.3.2 Secondary Data Sources*

The researcher used a document analysis checklist for secondary data collection. The secondary data was easily accessible in obtaining very quick and relatively cheap information by providing a wide range of varieties of options and findings in terms of time-saving and cost-efficient through the internet and journal publications (Saunders et al., 2007). The secondary data covers both qualitative and quantitative data obtained through the websites of the various institutions, concerned, originating from published annual financial statements and statistical reports. Certain methods used for sourcing the secondary data as bases for the secondary research analysis were to enhance existing knowledge. Initially, the researcher collected the secondary data through a personal visit to libraries, websites and the internet and the bank offices and various government institutions demanding from the authorities concerned to provide the necessary records.

The secondary data relating to the financial data on the bank was collected from 2006 to 2021 annual reports and financial statements of Ecobank Gh. Ltd. website, official publications and other reliable institutions reports. It was in the form of the annual financial reports of Ecobank Ghana, relating to the bank's balance sheet and income statements, such as data on total assets, prepaid, advances, provision for bad debt, and doubtful debt. Other data obtained were from the internet, published monthly and annual newsletters, bulletins and brochures of Ecobank Ghana. Thus used to estimate the financial ratios and the various coefficients of the internal variables comprising capital adequacy, assets quality, management efficiency, earnings, liquidity and sensitivity to market risk and their effects on the bank's profitability, relating to return on assets and equity. This gave the researcher accurate and dependable results.

There were also the external determinants of macroeconomic data on macro indicators incorporated in the regression model analysis such as macroeconomic intermediation variables of GDP growth, inflation rates and interest rates. Primary variables of fiscal policy tools consisted of taxation and government spending and monetary policy tools such as discount rates, banks' reserve requirements and open market operations with money supply serving as a proxy. Obtained from Bank of Ghana statistical bulletins, the Ghana Statistical Service statistical reports, and Ministry of Finance annual report inter alia in the period under review, 2006-2021. The collection of the secondary information is evaluated based on its applied methodology (Homework1.com, 2014).

### 3.6.4 Data Processing

The factors influencing Ecobank's financial performance in terms of profitability relates to the bank's internal and external factors. The internal factors affecting the bank's financial performance originated from the internal decisions of the bank's management and board of directors. The study employed key financial ratios in assessing the financial performance of Ecobank. The extracted data processed was by utilizing the CAMELS system of rating approach as criteria for analysing and predicting the profit margins of Ecobank. The CAMELS framework includes capital adequacy ratio, asset quality ratio, management efficiency ratio, earnings ability ratio, liquidity and sensitivity to risk management ratios (Sarpong et al., 2014).

The primary external factors influencing the bank's financial performance relate to factors beyond the bank's management control consisting of macroeconomic factors. The processing and the measurement of the primary independent variables are based on the fiscal policy tools of tax revenue and government spending and monetary policy tools of open market operations, cash reserve ratio and policy or discount rates. There were also intermediation macroeconomic variables such as inflation rates, interest rates and GDP growth influencing the profitability of the bank. This

thus, explained under the operational definition of variables. The analysis done was for each of the years and the entire research period (Labonte, 2019).

The researcher went through the sorting and the arrangement of the data collected after the collection of the questionnaires and completed the interviews for processing and analysis. The study further undertakes qualitative analysis through the application of thematic analysis with coding, categories and patterns in interpreting and analysing the data. Due to the huge volume of data generated, the research carefully planned was through theory-driven codes and the development of themes based on respondents' perspectives. Hence, analysed thereby produces the needed report of the data in correlation to the monetary and fiscal policy tools of taxation and government spending, discount rates, banks reserve requirement and open market operations and their effect on return on assets and equity. In addition, their impact on the macroeconomic variables of inflation rates, interest rates and GDP growth, not leaving out the internal controls variables (Saunders et al., 2009).

Further examination is based on the internal factors through the CAMELS analysis and their impact on the bank's profitability. This resulted in the use of qualitative analytical reasoning processes in structuring and interpreting the results based on the fiscal and the monetary policy tools, macroeconomic variables and CAMELS and their impact on the return on assets and equity. The employment of qualitative research produces a sizeable volume of data, which was overwhelming to the research activities of which the data generated required careful organization and analysis, thereby answering the research questions and solving the research problem.

### 3.6.5 Data Analysis

The research study adopted a deductive, explanatory, pragmatic, and case study strategy by utilising the concurrent transformative mixed method of both quantitative and qualitative data analysis based on a cross-sectional study. The study data collected was through questionnaires and

interview guides and from Ecobank's data records and other institutions' data records such as the Bank of Ghana data. However, quantified and subsequently subjected to triangulation analysis by descriptive and inferential statistics in terms of correlation and regression analysis.

#### *3.6.5.1 Descriptive Statistical Analysis*

The analysis of data done was by qualitative and quantitative methods through the application of deductive, explanatory and descriptive statistical analysis (Vetter, 2017). Hale (2018) said a descriptive research design involves describing systematically and accurately facts and characteristics of a given phenomenon of an area of interest to discover the relationships among selected variables, by answering questions relating to a present situation of who, what, where and how much.

The descriptive statistics used were to describe the numerical characteristics of the study population and with central tendency used in describing the levels of dispersion or dissemination. The descriptive statistics used for the analysis of the data include the percentages, mean, standard deviations, variances, frequency distribution tables and graphs. (Saunders et al., 2007). The focus was to analyse the research problem and come out with an empirical inquiry that describes situations relevant to the contemporary phenomenon and the study research questions with real-life context (Saunders et al., 2009).

The descriptive statistical analysis of the study data outcome was computed in determining the establishment of the existence or non-existence of the statistical relationship between the financial performance of the bank (dependent variables) and the fiscal and monetary policies, the macroeconomic variables and the bank's internal control variables (the independent variables) based on the study research questions and the hypotheses.

The descriptive statistics of the study show that there is a direct and both significant and strong correlation between fiscal and monetary policy tools of government spending, taxation,

central bank rates, cash reserve ratio and open market operations and the bank's profitability of return on assets and equity. This is in terms of the company's profit made of net income before and after taxes respectively. The profits also directly correlated to and influence significantly macroeconomic factors of GDP growth, inflationary booms and rates and interest rates and the CAMELS variables in the economy (Vetter, 2017).

The measurement of independent variables is based on the primary fiscal policy tools of tax revenue and government spending; and monetary policy tools such as open market operation, cash reserve ratio and discount rate, using money supply as a proxy. They strongly and directly affect the bank's profits; the intermediation macroeconomic variables relating to inflation rates, interest rates and GDP growth that directly and indirectly affect the bank's profits; and the criteria internal variables through the CAMELS system of rating which somehow directly and indirectly affects the bank's profits (O'Leary, 2004).

#### *3.6.5.2 Regression Analysis*

The regression analysis involves the measurement by the test of significance on the ability of the regression model in fitting into the data. This was to ascertain the degree of responsiveness of the relationships between the dependent and independent variables. This is to determine the relationship between the independent variables, that is, the fiscal and monetary policies and the dependent variables, that is, the bank's profitability of return on assets and equity as per the findings of the study, based on the hypothesis testing of either accepting or rejecting the null hypothesis. Thus evaluating whether any of the independent variables predict a given dependent variable (O'Leary, 2004).

In determining the relationship between the effect of fiscal and monetary policy tools and the financial performance of the bank and its economic effects, the study employed regression

analysis. The study developed a model using the multiple regression analysis as presented and analysed in the operational definition of the variables. The application of the multiple regression model in measuring and explaining the outcome of the dependent variables involves the use of more independent variables (Saunders et al., 2009).

The measurement done was by using the test of significance on the ability of the regression model in fitting into the data. This resulted in the computation of the coefficient of determination (R-square), ANOVA and the P-value and F-statistic and of the statistics of the residual in testing the significant relationship between the fiscal and monetary policy instruments, macroeconomic variables and the bank internal control factors and the profitability of the bank (Saunders et al. 2009). The ANOVA which is used in testing the significant difference among study variables by testing of means and making comparisons by differentiating the variability among the means was employed in measuring the variations within the groups. The ANOVA was used in discussing the significance of the model which is a statistical procedure used in analysing data from designs in differences involving all conditions.

In determining the influential factor of the independent variable on the dependent variable, the researcher used various tests of significance for each of the independent variables over the dependent variables. The data was explained and assessed through the significance of the model in which the qualitative analytic reasoning process was used for the interpretation and structuring of the meanings resulting from the data (Saunders et al., 2009). The quantitative and qualitative data collected using the data collection tools were thematically packaged into various categories and entries and were analysed with the application of the statistical package for social scientists (SPSS) software package version 22. Since it is a versatile software package allowing for diversification of analyses, data transformations and precision in output, serving as the most commonly employed package (Arkkelin, 2014).

### *3.6.5.3 Correlation Analysis*

The study adopted correlation analysis relating to the provision of a direction and magnitude of relationship by the Pearson correlation coefficients indicating the existence of the relationship between the explanatory variables and the profitability variables either positively or negatively without the demonstration of any cause and effect. The Pearson product correlation coefficient used was to test the strength of the relationship between the variables at a 95% confidence interval, using the two-tailed test at a 5% level of significance.

The numbers of the Pearson correlation coefficients range from -1 to 1, with the sign of the coefficient showing the direction, whereas the absolute amount of the coefficient shows the magnitude of the significance of the relationship. The positive correlation explains the situation where the study variables move in the same direction with a correlation up to 1 or where the correlation is up to -1 explaining the negative correlation as the variables move in an opposite direction (Torres-Reyna, 2007).

The scale reveals values between -1 to 1, showing that there is a weak, moderate and very strong correlation between the variables. Indicating the degree of a statistical linear relationship between the variables measured at the interval level $-1 \leq r \leq 1$. Based on this, the sign of the correlation coefficient may be positively or negatively correlated, direct or inverse relationship between the dependent and the independent variables (O'Leary, 2004). An r-value approximately equal to one shows a strong correlation between the variables and an r-value equal to one shows that the variables are fully dependent, whereas an r-value equating to zero means the variables are independent and that an r-value close to zero shows that there is a weak relationship between the two variables (Arkkelin, 2014).

The correlation analysis which measures the extent of interdependency between variables in determining whether they are linearly related or not was used to establish the statistically significant

relationship between the fiscal and monetary policy tools and macroeconomic tools and the financial performance of Ecobank Gh. Also the statistically significant relationship between CAMELS and that of the financial performance of Ecobank Gh. where H1: $\mu > 100$ was established. Positive and negative correlation shows that a change in one variable is accompanied by a proportionate change in the other variable.

The conclusion was that the value of significance (p) representing the percentage value or the probability results was because of chance. The convention employed was on the results being equal to or less than 5% to chance. The p-value determined by the independent variables is predicted through the logistic regression model. The p-value in terms of the hypothesis testing if less than 0.05 is where Ho is rejected (Zach, 2019).

In determining the hypothesis testing in terms of the independent variable influencing the dependent variable, the study used the P-value and F-statistic. The researcher used the deductive scientific research approach by explaining the causal relationships, contradictions and the effects among the study variables of fiscal and monetary policies and the financial performance of Ecobank Ghana. Ltd. and the economy. This done was through quantitative and qualitative measurement and statistical analysis by the generalization of the research findings. This done was in terms of the convergent parallel mixed methods of theory and hypotheses development and the design of a research strategy for testing the hypotheses (Saunders et al., 2009).

## 3.7 Summary

The chapter discusses the methodology and data collection of the study with the essence of dealing with the research questions and hypotheses by identifying the monetary and fiscal policy tools employed and their effect in terms of the correlation and significance on the profitability of Ecobank through returns on assets and equity and on the macroeconomic variables in the economy.

It also includes the monetary and fiscal policy tools and macroeconomic variables impact and of the internal factors by CAMELS analysis employed by Ecobank in determining its correlation and significance to the financial performance of the bank. Finally, ascertain the stakeholders' concern about the impact on the financial performance and the profitability of Ecobank and the macroeconomic variables in the era of fiscal and monetary policy implementations in Ghana's economy. It involves the application of a pragmatic approach to a mixed method of quantitative and qualitative data.

The study looks at the research design, which involves the examination of the overall strategic framework of methods and techniques. They include the research approach, methods of collecting data, instruments employed and utilization, sample size, sampling techniques, measurement and analysis of data, leading to a reasonable and logical conclusion efficiently solving the research problem in terms of generating valid and reliable research outcomes (Bhat, 2018). The chapter analysed the population and sample size of the study in terms of the target population of the study, the sampling frame, the purposive sampling technique which were discussed in selecting the company and the geographical frame of Ecobank Gh Ltd in the Kumasi Metropolis, where 5 Ecobank branches were selected out of which the sample size was chosen.

In terms of the research tools, the study considered both primary and secondary data sources through multiple types of data collection tools consisting of a case study, questionnaire, interview guide and extant document analysis leading to acceptable validity and reliability of the study data collected (Golafshani, 2003). The credibility of the research tools studied was through pilot testing, and the reliability and validity of the research study instruments and analysed by employing a cross-sectional study (Saunders et al., 2009).

The study examined was through the application of the regression technique and linear regression model. Thus, based on the dependent variables such as the bank return on assets and the

return on equity. It was also depended on the independent variables such as the primary external determinants which consisted of the primary government fiscal and the central bank monetary policy tools, the intermediation macroeconomic variables and the internal determinants consisting of the CAMELS' analysis of capital adequacy, asset quality, management quality, earnings, liquidity, and sensitivity to market risk (Tuffour et al., 2018).

The study further looks at the exact procedures in collecting the study data with the application of a purposive sampling technique, in terms of addressing how, when, where, and from the participants whom the data was collected. The research added ethical principles in compliance with ethical standards for conducting the study, including individual autonomy, anonymity and confidentiality, beneficence, non-maleficence, respect for privacy and justice, data handling and reporting and mistakes (David and Resnik, 2015). The research study concluded by assessing the collection of data procedures, primary and secondary data sources, data processing and the analysis of data through descriptive and inferential statistics of regression and correlation analysis (AECT, 2001).

# CHAPTER FOUR

# DISCUSSION OF THE RESEARCH FINDINGS

## 4.0 Introduction

The purpose of this concurrent transformative mixed-method survey study is to assess the impact of fiscal and monetary policies on the financial performance of universal banks in Ghana and their effect on the economy, using Ecobank Ghana Ltd, as a case study. The chapter adopted a deductive, pragmatic, and case study strategy by utilising both quantitative and qualitative data analysis based on a cross-sectional study. The chapter analysed and presents the case study sampled results and findings from the data collected in answering the research questions. This depended on the monetary and fiscal policy tools used and why and how they affect the financial performance of Ecobank. In addition, the monetary and fiscal policy tools impact the macroeconomic variables and the economy as a whole; and the internal control factors (CAMELS) used by Ecobank in determining its financial performance and profitability and the stakeholder's concern about the financial performance and the profitability of the bank.

The data collected was through the primary sources of the questionnaire and interview guides and secondary sources of the institutions' documents. The explanations and the findings presented are consistent with the research questions. The methodology of the study in analysing the data is discussed in the methodology chapter. The responses received numbered 66 made up of 61 questionnaires and 5 interviews out of an expected 88 potential respondents, which amounted to a 75% response rate for the survey. Out of the 66 respondents, 81.7% of the respondents were able to answer all the related questions, whereas the rest of the 18.3% of the respondents ended halfway, with some just completing the demographic aspect of the questionnaires and the interviews checklist. The responses obtained from the questionnaires, the interviews and the secondary documents are statistically analysed with the application of the SPSS software version 22 program.

The chapter describes in detail the trustworthiness of the data, its reliability and validity. Looking at the demographical background of the respondents.

The data outcome is further discussed and analysed in terms of incorporating graphical illustrations, general and cross-tabulation analysis specifically on the study's major questions which relates to fiscal and monetary policy tools, intermediation macroeconomic variables and the criterion internal control variables. It involves the presentation of the data results in a meaningful manner in facilitating the subsequent discussion in Chapter 5. It finally looked at the evaluation of the findings and the summary of the chapter.

## 4.1 Trustworthiness of Data

### Data collection

In achieving the study objectives, the data collection done was with the application of the highest methodological standards. The data collection and analysis depended on the primary and secondary data sources using concurrent transformative mixed methods and statistical analysis. The primary data, which falls in conformity with the pilot study, which is used in testing the accuracy and the validity of the survey questionnaire, is collected simultaneously based on the research questionnaire and interview checklist with the 8 selected Ecobank branch staff in the Kumasi Metropolis. It served as the primary source of the research data for the qualitative analysis revealing its internal validity. The 8 selected purposive sampled branches of Ecobank in the Kumasi Metropolis from which the sample size is drawn were visited for data collection. The questionnaires were distributed and administered across the selected branches, with the semi-structured interview guide also given to the branch managers.

The extended period in the field made it possible to build trust with some participants who were open and honest with the researcher. Some of the respondents' later declined to participate

and some failed to complete the questionnaire and particularly the interview checklist with the understanding that the questions are too technical and beyond their technical expertise. The technical wording in formulating the request for an answer can be said to have affected response options and how some of the respondents reacted to the questions and hence the measurement quality of the responses to the study questions. The questionnaire and the interview guide were collected within the scheduled period from 66 respondents out of the 88 selected sample sizes of Ecobank Gh. Ltd. in the Kumasi Metropolis.

The researcher employed a document analysis checklist for the secondary data collection. The secondary data source collected was through the various institution's documents. The secondary data covers both qualitative and quantitative data, obtained through the websites of the various institutions concerned originating from their published annual financial statements and statistical reports. The secondary data collected relates to the annual reports and financial statements of Ecobank Gh. Ltd. from 2006 to 2021. The data obtained is from the Bank of Ghana statistical bulletins, the Ghana Statistical Service statistical reports, Ministry of Finance annual report inter alia in the period under review, 2006-2021.

Certain methods used were for sourcing the secondary data as bases for the secondary analysis to enhance credibility, internal and external validity, reality and existing knowledge. The researcher collected the secondary data through a personal visit to the Ecobank Gh. Ltd website, official publications, and other institutions concerned websites for publication reports. These relate to the external determinants of macroeconomic data incorporated into the descriptive statistics and the inferential model analysis. It was in the form of annual financial reports of the various institution's concerns and the annual financial reports relating to Ecobank Gh. Ltd.'s balance sheet and financial statements.

The primary and secondary data generated was used to estimate the statistical results of the primary variables of fiscal policy tools, made up of taxation and government spending, and monetary policy tools such as discount rates, bank's reserve requirements and open market operations with money supply serving as a proxy. The intermediation macroeconomic variables of GDP growth, inflation rates and interest rates. There were also the bank's internal control variables comprising capital adequacy, assets quality, management efficiency, earnings, liquidity and sensitivity to market risk and the bank's profitability relating to return on assets and equity.

The extracted data processed was by utilizing both macroeconomic tools and the CAMELS system of rating approach as criteria for analysing and predicting the profit margins of Ecobank. The study also employed key financial ratios in assessing the profitability and the efficient financial performance of Ecobank. The researcher thoroughly read and evaluated the collected secondary information based on its applied methodology (Homework1.com, 2014). The dependent variables data collected relates to the bank's profitability performance of return on assets and equity. This gave the researcher a good quality and comparability of its measurement tools and accurate and dependable results, conforming to internal and external validity and reliability.

The research documents comprising both the collected primary research data and the secondary data through questionnaires and interview guides and from Ecobank's data records and other institutions' data records such as the Bank of Ghana data were appropriately stored, imported, and incorporated into the Data Analysing Software (SPSS). The data were processed, quantified and subsequently subjected to triangulation analysis through descriptive and inferential statistics, which revealed both convergence and divergence results and findings. The triangulation of the methods of data collection through the questionnaire, the interview checklist and the document analysis checklist provided an in-depth description and analysis of the data. Providing a quality

assessment of the survey and a chain of evidence for external assessment and opportunities in assessing the level of the agreement relating to the accuracy of the data.

The description was carefully planned through theory-driven codes based on the research questions and the hypotheses. The presentation, interpretation and analysis of the findings were undertaken to produce the needed results of the data in correlation to the independent and the dependent variables. This resulted in the use of qualitative and quantitative analytical reasoning processes in structuring and interpreting the results based on the primary fiscal and the monetary policy tools, intermediation macroeconomic variables and the criterion bank's internal control variables and the dependent variables of the return on assets and equity. The employment of the concurrent transformative mixed methodology produced sizeable volumes of data, which was overwhelming to the research activities of which the data generated required careful organization and analysis, thereby answering the research questions in chronological order and solving the research problem.

**The Analysis of Data**

The analysis of the data done was in terms of the convergent parallel mixed methods of theory and hypotheses development and the design of a research strategy in testing the hypotheses. The study used the deductive and explanatory scientific research approach by explaining the causal relationships, contradictions and the effects among the study variables of fiscal and monetary policies, the macroeconomic variables and the bank internal control factors and the financial performance of Ecobank Gh. Ltd. Both descriptive and inferential statistics were deployed in analysing the independent variables of fiscal and monetary policy tools such as taxation and government spending, discount rates, banks reserve requirement and open market operations; macroeconomic variables relating to inflation rates, interest rates and GDP growth. There were also the bank's internal control factors through CAMELS analysis of capital adequacy ratio, asset

quality ratio, management efficiency ratio, earnings ability ratio, liquidity and sensitivity to risk management ratios and the dependent variables of the bank's profitability performance of return on assets and equity.

The descriptive statistical analysis used was to describe the demographical and numerical characteristics of the sample population relating to age, gender, position and years of experience and level of education. It was also used to describe the responses of the respondents on the independent variables of fiscal and monetary policy tools, the macroeconomic variables, the bank's internal control factors and the dependent variables of the bank's profitability performance of return on assets and equity. This is done with the application of frequencies and percentage values. Again, descriptive statistics with the help of central tendencies and variability are used to describe the levels of dispersion or dissemination. The descriptive statistics used for the analysis of the data include the mean, standard deviation, variances, and minimum and maximum values through the employment of frequency distribution tables and graphs. Given its credibility to external validity and reliability.

The inferential statistics employed were through regression and correlation analysis. The inferential statistical analysis of the study data outcome was computed with the use of SPSS. To determine the establishment of the existence or non-existence of the statistically significant and the relationship between the bank’s profitability of return on assets and equity (dependent variables) and fiscal and monetary policies, macroeconomic variables and the internal control variables (the independent variables) based on the study research questions and hypotheses.

The regression analysis involved the measurement of statistical values and ascertaining the degree of responsiveness of the linear relationship between variables. It involves estimating the unknown effect of changes in the predictor variables over the outcome variables by using statistical language and notations. The regression analysis of ANOVA, Regression goodness of fit and

regression coefficients are employed in measuring the variations within the groups and describing the significance of the model.

It also resulted in the computation of R, R-square, adjusted R-square, the P-value and F-statistic and the statistics of the residual. These were used in testing the significant relationship between the fiscal and monetary policy instruments, macroeconomic variables and the bank's internal control factors and the profitability of the bank. The regression analysis used was to determine the relationship between the independent variables and the dependent variables as per the results of the study based on the hypothesis testing of either supporting and/or rejecting the null hypothesis. It enables the generalization of the research findings.

The correlation analysis used was to show the direction and magnitude of the relationship, the extent of interdependency and the statistically significant relationship among the variables in determining whether they are positively related. This was done through the Pearson correlation coefficients by indicating the existence of the relationship between the explanatory variables of the fiscal and monetary policy tools, macroeconomic tools and the internal control variables and the profitability variables of return on assets and equity either positively or negatively. The Pearson product correlation coefficient was used in testing the strength of the relationship between the variables at a 95% confidence interval, using the two-tailed test at a 5% level of significance.

The convention employed is based on the results being equal to or less than 5% to chance. The p-value for the hypothesis testing must be less than 0.050, where Ho is rejected. Thus based on the usage of external benchmark parameters in assessing the output quality of the study results come out with an empirical inquiry that describes situations relevant to the contemporary phenomenon and the study questions with real-life context.

## 4.2 The Reliability and Validity of Data

The validity of the research relates to the application of a triangulation method. This made the researcher use a questionnaire and interview guide schedules as the data collection tools. This done was through a test's ability to represent every aspect of the content of the study construct and face validity, looking at the degree to which the test appears on the face value measures what it was intended for. Thus making the tests wherein the intended purpose clear to the participants by asking their rating of the validity of the test as it appears to them. The validity verified was by checking the responses of the intended measure against the research aims and objectives. There was also the testing of the internal consistency and validity of the research questionnaire and interview guide by the use of Cronbach's Alpha with a 70% level of acceptance (Nunnally, 1978).

With the concern for the accuracy of the secondary data through a document checklist, the researcher exercised the validity of the data in terms of soliciting audited published annual financial statements of the banks and other reports concerning fiscal and monetary policies, macroeconomic variables and the activities of the banks from competent management body's data and websites. The researcher employed a document analysis checklist and document review for the collection of secondary data which were data collected for purposes not different from the purposes of the researcher's current study and which have passed through certain statistical analyses based on the study's aims and objectives.

Documents that refer to all kinds of written and recorded data were an important component of the research comprising both external and internal written records, which include government macroeconomic policies documents, Bank of Ghana policies and plans, statistics, demographic trends records, and the universal bank's financial records and statements. The reason is that the various institutions possess unadulterated important data that exists up-to-date on their websites and offices, which required limited effort in accessing them. Just as Bernard (1988) stated: "I see

no reason to collect new data in the field if there are documentary resources already available that address some of your research questions".

Some of the data related to monetary and fiscal policy tools employed in the economy and their effect on banks' financial performance and profitability and the macroeconomic variables in the economy (Key, 1997). Specifically, the various publications in journals by the Bank of Ghana and other institutions and the annual reports of Ecobank were seen to conform and not at variance with each other and therefore produced reliable data for the study. The required data was already available, inexpensive and easily accessible in obtaining very quick and relatively cheap information by providing a wide range of varieties of options and findings and allowing for examination of trends by the researcher over the past to the present and predictions into the future (Chaleunvong, 2009). It involves time-saving and cost-efficient through the internet and journal publications.

The secondary data covers both qualitative data, which obtained were through newspapers, journals, dailies and the websites of the institutions concerned and quantitative data originating from financial statements and statistics. The document review makes the record review a very economical, efficient, effective and very useful data collection tool for the research study. It increased the validity and reliability of the generated data for the research analysis, which the questionnaire and interview guide, were incapable of providing. It again saves the researcher from the training of interviewers, and the associated cost of sending interviewers (Abellado, 2017).

The researcher ensures the reliability of the research with a degree of consistency in the measure of the data collection technique and analysis procedure, which was free from participant error and bias measurement through the application of similar items, by testing the diverse sample of the individuals using uniform testing procedures. The reliability was consistent over time by test-retest, which measures the extent to which the study construct was highly expected to be

consistent in terms of comparing initial test results with repeated measures reflecting replicability across time (Saunders et al., 2009).

There were items of internal consistency, which relates to multiple-item in the study instrument, which measures a single construct in the people's responses across items revealing highly correlated outcomes and reflecting the homogeneity of the items. The study uses the split-half design to test the reliability of the research instrument by looking at a split-half correlation model, which relates to the splitting of items into two parts of first and second halves with responses assigned randomly. The model design thus needs single testing thereby eliminating chance error resulting from differing conditions (Price et al., 2010).

The researcher conducted a pilot test relating to the research tools of the questionnaire and the interview checklist outside the respondents and ahead of the main study. This was to identify any ambiguity for necessary correction and ensure the validity and reliability of the tools. The purpose was to prevent respondents from any challenges in answering the questions and the easiness in recoding the collected data and finally estimating the time required for the study. The pilot testing was improving the quality of the questionnaire and interview checklist to correspond accurately to the research information needed.

The researcher took the pilot test by giving out the questionnaires and the interview guides to 10 respondents at the Juaben Rural Bank made up of 8 staff and 2 managers to ensure the construct and face validity and the reliability of the instruments. To ascertain the efficiency and effectiveness of the instruments, the researcher distributed the pre-test questionnaires randomly among the selected participants. The respondents selected for the pilot study were without the application of any statistical conditions to allow for the pre-testing of the research instruments.

The questionnaire and the interview checklist were administered personally. The outcome of the pilot test indicates that the questions in the instruments were reliable, suitable and capable of

serving the purpose of the study. This was because of undertaking a critical evaluation of each questionnaire and interview guide completed within the period, easiness, clarity and the ambiguity of the questions of which the interviewees showed no indication of having challenges in answering questions (Saunders et al., 2009).

The time horizon is based on a cross-sectional study as an observational study in which data was collected from the bank representatives at the same time with similarities in certain characteristics but differs in key factors such as age, positions, skills, income, and geographic location. Thus used to analyse the collected data from the sample population. The study used cross-sectional multiple linear regression in explaining and predicting the financial performance of the bank and the macroeconomic indicators in the economy instead of time series analysis.

The explained dependent variables are the outcome effect studied and the explanatory variables represent the inputs of causative factors of the potential rationale for variation. This enabled the researcher to identify and analyse the extent of causes and effects of the independent variables in terms of fiscal and monetary policy tools and macroeconomic indicators and internal control variables upon the profitability of Ecobank as a dependent variable. Thus, a single cross-sectional design survey strategy was used where the researcher drew one sample of respondents.

## 4.3 Results of Findings

The researcher described the study results according to the study questionnaire and the research questions, based on theoretical themes with the use of tables and graphics. It relates to the demographical features; the fiscal and monetary policy tools; macroeconomic variables and the internal control variables, described in detail using descriptive and inferential statistical analysis.

### 4.3.1 Descriptive Analysis of Demographics

The descriptive analysis of demographics relates to the participants' demographic characteristics. The demography of the respondents collected shows the respondent's relevant characteristics and contextual information to the study. Contextualised in terms of respondents' profile rate of response and gender, educational level and length of service and positions. The majority of the respondents portray that the EGL has been in operation for 31 years and a few indicated 30 yrs.

#### *4.3.1.1 Participants Profile Rate of Response and Gender Status*

The distribution frequencies and percentages of the respondents' responses and gender are shown in Table 4.1. The total responses to the administered questionnaire amounted to 66 out of the total sample size of 88 respondents. Made up of answered 61 questionnaires and 5 semi-interview checklists, which represented a 75% response rate. The yielded response rate of 75% falls within the recommended acceptable range of 30% to 50% with descriptive research (Saunders et al., 2009). The demographic information for the gender status of the respondents consists of 25 (37.9%) male respondents and 41 (62.1%) female respondents.

**Table 4.1**

*Questionnaire and Interview Responses and Gender*

| Primary Source | Issued | Responses Received | Response Rare | Male | Female |
|---|---|---|---|---|---|
| | F | F | % | F | F |
| Questionnaire | 83 | 61 | 69.3 | 23 | 38 |
| Interview | 05 | 05 | 5.7 | 02 | 03 |
| **Total** | 88 | 66 | | **25** | **41** |
| **Percentage (%)** | - | - | **(75%)** | **37.9%** | **62.1%** |

Source: Research Findings, 2022

### *4.3.1.2 The Level of Education of the Bank Respondents'*

**Table 4.2**

*The Level of Education of the Bank Respondents'*

| | Education Qualification | | | | |
|---|---|---|---|---|---|
| | Diploma | Bachelor | Masters | PhD | Total |
| Frequency | 3 | 28 | 34 | 1 | 66 |
| Percentage (%) | 4.6% | 42.4% | 51,5% | 1.5% | 100% |

Source: Research Findings, 2022

In Table 4.2, the outcome of the level of education shows that all the participants are tertiary certificate holders. The highest recorded level of education was in terms of Master's Degree holders of 34 (51.5%) respondents. Bachelor's degree holders of 28 (42.4%) respondents followed by diploma holders of 3 (4.6%) respondents and PhD degree holders of 1 (1.5%).

### *4.3.1.3 Length of Service and Position of the Bank Respondents'*

**Table 4.3**

*Years of Service and Positions of the Bank Respondents'*

| Length of | **Position/Occupation** | | | **Frequency** | |
|---|---|---|---|---|---|
| Service | Junior Staff | Senior Staff | Management Member | No. | % |
| 1 to 5 | 3 | 1 | 0 | 4 | 6.0 |
| 6 to 10 | 7 | 6 | 1 | 14 | 21.2 |

| | | | | | |
|---|---|---|---|---|---|
| 11 to 15 | 11 | 10 | 3 | 24 | 36.4 |
| 16 to 20 | 6 | 10 | 3 | 19 | 28.8 |
| 21 to 30 | 1 | 3 | 1 | 5 | 7.6 |
| **Total** | **28** | **30** | **8** | **66** | |
| **Percentage (%)** | **42.4%** | **45.5%** | **12.1%** | **-** | **100** |

Source: Research Findings, 2022

The length of service of the respondents, as depicted in Table 4.3, thus classified into five groups from 1 year to 30 years. The outcome shows that the majority of 24 (36.4%) of the respondents' length of service falls within 11 to 15 years. Followed by 19 (28/8%) of the respondents whose length of service falls within 16 to 20 years and 14 (21.2%) of the respondents whose length of service falls within 6 to 10 years. Last but not least were 5 (7.6%) of respondents whose length of service falls within 21 to 30 years, while the rest of the respondents 4 (6.0%) whose length of service falls within 1 to 5 years were the least.

This implies that the majority of the bank's respondents have worked with Ecobank for several years with good experiences and excellent knowledge in the banking sector. The current position/occupation of the respondents at the bank through multiple responses indicate that the majority of the respondents, 30 (45.5%), were senior staff members. Followed by the junior staff of 28 (42.4%) respondents and finally management members of 8 (12.1%) respondents.

### 4.3.2 The Analysis of Fiscal and Monetary Policy Tools

The analysis of fiscal and monetary policy tools was done based on the research question of what are the monetary and fiscal policy tools used and why and how do these affect the financial performance of Ecobank? The study used descriptive and inferential statistical analysis to analyse the results.

### *4.3.2.1 Descriptive Statistical Analysis of the Variables*

The purpose of the descriptive statistical analysis of the fiscal and monetary policy tools used was to describe the salient features of the study data results. This done was through distribution and graphical analysis, measurement of central tendency and variability.

#### 4.3.2.1.1 Distribution Analysis of the Fiscal Policy Tools

The government fiscal policy tools affecting the financial performance of Ecobank in Ghana are captured in the regression model presented in the descriptive statistics in Table 4.4 (Appendix A). Out of 53 respondents, (37) 69.8% of the respondents indicated taxation as the most salient tool affecting the financial performance of Ecobank, and (12) 22.6% of the respondents indicated government spending as another important tool, with subsidy being marginalised as another tool factor with only (4) 7.5% of the respondents. From Table 4.5, 60 respondents in connection to government fiscal policy and their effect on the bank's financial performance. (23) 38.3% and (26) 43.3% of the respondents strongly agreed and agreed that government fiscal policy to a very great extent affects the financial performance of Ecobank in Ghana by the ratings of 5 and 4, with (11) 18.3% of the respondents being neutral by the rating of 3.

In terms of the fiscal policy tool of taxation and its effect on the lending behaviour of Ecobank in Ghana, out of 60 respondents, (27) 45% and (18) 30% of the respondents agreed and strongly agreed that an increase in the taxation rate to a very great extent affect the lending behaviour of Ecobank. The rest, (15) 25.0% of the respondents, remained neutral with a rating of 3. There was a further indication by 60 respondents that the general trend of government taxation rate in the last 13 years in Ghana is increasing, with (24) 45% and (21) 35% of respondents agreeing and strongly agreeing with the rating of 4 and 5. The rest of the respondents, (15) 25%, remained neutral about the increase in the taxation rate. Throughout the years under review in terms of the year’s examples, the study respondents from 69.8% to 80.2% of the respondents indicated that it

was increasing, while 21.2% to 19.8% of the respondents indicated that it was fluctuating, with none indicating a decreasing trend.

The study, further looked at issues on government spending from 60 respondents, of which (25) 41.7% and (23) 38.3% of the respondents strongly agreed and agreed that an increase in government spending to a very great extent affects the lending behaviour of Ecobank in Ghana. The rest, (12) 20.0% of the respondents, remained neutral. With the general trend in government spending in the last 13 years in Ghana, out of the responses from 60 respondents, (27) 45.0% and (23) 38.3% of the respondents strongly agreed and agreed that it was increasing greatly, with the rating of 5 and 4 respectively. With, (10) 16.7% of respondents, being neutral at the rating of 3.

The responses on the fiscal policy interventions implemented by the Government of Ghana in the last 13 years in Ghana by 61 respondents majority of the respondents, (58) 95.1%, agreed on the implementation of Expansionary Fiscal Policy (EFO) as against (3) 4.9% agreeing on the implementation of Contractionary Fiscal Policy (CFP). The result is an indication of the full implementation of an expansionary fiscal policy, as shown in Table 4.4.

In Table 4.5, out of 54 respondents, (28) 51.9% and (13) 27.8% respondents agreed and strongly agreed with the ratings 4 and 5 that expansionary fiscal policy by the government of Ghana increased money supply through instruments such as an increase in government expenditure, subsidies and a decrease in taxation. With that, (13) 24.1% of the respondents remained neutral. While out of 54 respondents on the issue of expansionary fiscal policy, (21) 38.9% and (20) 27% respondents agreed and strongly agreed through the ratings of 4 and 5. The expansionary fiscal policy raises the money supply by increasing discretionary spending and transfer payments while decreasing taxes such as income tax, capital gains and dividend taxes, small business taxes, payroll and corporate taxes. However, (13) 24.1% remained neutral. Serves as a budgetary tool partly

through bullish earnings performance by providing individuals and businesses with plenty of money to boost the economy.

Again, the responses of 54 respondents envisaged that contractionary fiscal policy by the government of Ghana in effect decreased money supply through instruments such as a decrease in expenditure and subsidies and an increase in taxation. As of the rating scales of 4 and 5, (19), 35.2% and (26) 48.1% of respondents agreed and strongly agreed, respectively, with (7) 13% remaining neutral. However, (2) 3.7% of the respondents disagreed with that effect. Also, out of 56 respondents, (28) 51.9% and (15) 27.8% of the respondents agreed and strongly agreed with the rating of 4 and 5. The government's contractionary fiscal policy, which involves cutting spending, subsidies, transfer payments, and/or raising taxes to take money out of the system, thereby decreasing money supply and aggregate demand and contracting purchasing power, reduces the amount of money in circulation for individuals and businesses to spend. In terms of a healthy economic level, it slows growth to eliminate inflation. However, (11) 20.4% of the respondents, remained neutral to that effect.

#### 4.3.2.1.2 Distribution Analysis of Monetary Policy Tools

The distribution of monetary policy tools thus captured in the regression model and presented in the descriptive statistics in Table 4.4 (Appendix A). In the responses received from a total of 60 survey respondents, in terms of the central bank monetary policy affecting the financial performance of Ecobank in Ghana, (34) 56.6% of the respondents, rated bank reserve requirement as the most prominent tool. (11) 18.3% of the respondents rated bank discount rates as the next, followed by open market operations rated by (12) 20% of the respondents, as (2) 3.4% of the respondents also rated interbank interest rates and finally, (1) 1.7% of the respondents, rated interest on reserves.

In rating, the significant effect of the monetary policy tools affecting the financial performance of Ecobank, 46 of the respondents rated the effect of reserve requirements as paramount. Out of which (18) 39.1% of the respondents rated it as very significant at a rating of 5, (26) 56.5% rated it as significant at a rating of 4 and (2) 4.3% of respondents saw the effect as moderately significant.

Concerning the discount rate by 39 of the respondents, (17) 61.1% of the respondents rated the outcome as very significant, (20) 33.3% rated it as significant and the rest, and (2) 5.6% of the respondents, rated it as moderately significant. Again, 27 respondents rated the open market operation, of which, (5) 18.5% of the respondents, rated it as very significant, followed by (13) 48.1% of the respondents, rating it as significant and another (9) 33.3% of the respondents, rating it as moderately significant. Interest in reserves was rated by 3 respondents, out of which (2) 66.7% and (1) 33.3% of the respondents rated it as significant and moderately significant.

In responding to the effect of reserve requirements by 60 respondents, as shown in Table 4.5, (11) 18.3% and (40) 66.7% of the respondents, strongly agreed and agreed that reserve requirement changes to a very great extent affect the lending behaviour of Ecobank in Ghana, while (9) 15% of the respondents, remained neutral. Again, out of 59 respondents, (27) 45.8% and (20) 33.9% of the respondents strongly agreed and agreed that the general trend of the reserve requirement changes in the last 13 years in Ghana is increasing. (12) 14.5% of the respondents remained neutral with a rating of 3.

For the issue of an increase in reserve requirements affecting the financial performance of Ecobank Ghana, out of the 59 respondents, (46) 78% of the respondents, agreed those reserve requirements negatively affect the financial performance. Whereas (12) 20.3% of the respondents, agreed that it positively affected them, while (1) 1.7% of the respondents concluded that there was neither a positive nor negative effect (Table 4.4). There was an increasing trend, with the trend

examples within the years ranging from 28.2% to 85.9%. While from 30.9% to 74.1% of the respondents indicated an intermittent fluctuation in the reserve requirements.

Table 4.5 shows that the central bank discount rate is the second of the three most critical monetary policy tools affecting the bank's profitability in Ghana. Out of the total 61 respondents, (32) 52.5% and (25) 41% of the respondents, with ratings of 4 and 5, agreed and strongly agreed respectively that, central bank rate changes affect the lending behaviour of Ecobank to a very great extent in Ghana. While (4) 6.6% of the respondents, remained neutral to that effect.

Again, 60 respondents responded to the general trend of the discount rate changes, as (23) 37.7% and (18) 29.5% of the respondents, agreed and strongly agreed that the general trend of discount rate changes in the last 13 years in Ghana is increasing, with (20) 32.8% of the respondents remaining neutral. It is quite obvious from the study data analysis of the survey outcome that, out of 59 respondents, (29) 49.2% and (28) 47.5% of respondents indicated that an increase in the bank discount rate negatively and positively affects the financial performance of Ecobank Ghana, respectively. Only (2) 3.4% of the respondents, declared virtually no effect (Table 4.4). Within the years, the trend example ranges between 45.9% for fluctuation and 35.6% to 53.7% for an increase in the central bank discount rate.

In Table 4.5, concerning open market operations as a central bank's monetary policy tool, 60 of the respondents indicated that they affect the financial performance of Ecobank in Ghana. As (31) 51.7% and (3) 5.0% of survey respondents agreed and strongly agreed with the ratings of 4 and 5, that open market operation changes have a significant impact on Ecobank's lending behaviour in Ghana. Whereas, (26) 43.3% of the survey respondents remained neutral.

According to 57 respondents, regarding the increasing trend of open market operations in the last 13 years in Ghana, (9) 15.8% and (9) 15.8% of the respondents, agreed and strongly agreed that open market operations are increasing. However, (39) 68.4% of the respondents remained

neutral with a rating of 3. Again, out of 58 respondents, (37) 63.8% and (10) 17.2% of the survey respondents, show that the purchase of an open market operation affects the financial performance of Ecobank in Ghana, both positively and negatively, respectively. While (11) 19% of those polled said there was no effect, There was also a trend characteristic of fluctuation within the years under review, from 73.9% to 77.1% of the respondents, the rest of the respondents going for an increase.

From Table 4.5, in terms of policy interventions implemented by the Bank of Ghana in the past 13 years in Ghana, out of 47 respondents, (27) 57.4% and (14) 29.8% of the respondents, agreed and strongly agreed with the implementation of Contractionary Monetary Policy (CMP), with (9) 10.6% being neutral and (1) 2.1% strongly disagreed. Out of 44 respondents, (19) 43.3% and (15) 34% the respondents, agreed and strongly agreed with the implementation of Expansionary Monetary Policy (EMO). Nevertheless, (10) 22.7% of respondents, remained neutral with a rating of 3.

In explaining the contractionary monetary policy implementation by the Central Bank of Ghana, 54 respondents. Out of the 54, (24) 44.4% and (12) 22.2% of the respondents, agreed and strongly agreed by the ratings of 4 and 5, that, contractionary monetary policy in effect decreased money supply through instruments such as selling of government bills and bonds, increasing reserve requirements, increasing the bank discount rate and increasing the interest rate in Ghana. However, (16) 29.6% of the respondents, remained neutral, whereas, (2) 3.7% of the respondents disagreed with the rating of 2.

From the analysis of the results by 54 respondents, (22) 40.7% and (17) 13.0% of the respondents, agreed and strongly agreed, through the ratings of 4 and 5, that, contractionary monetary policy significantly affects and causes interest rates to rise and directly restricts the amount of money in circulation and therefore the universal banks' credit lending in the economy.

The effect ends up minimizing inflation and thereby promoting economic growth in the country. However, with a rating of 3, (25) 46.3% of respondents remained neutral to this effect.

In analysing the expansionary monetary policy by 50 respondents, (21) 42.0% and (17) 34.0% of the respondents, agreed and strongly agreed by the ratings of 4 and 5, that, the expansionary monetary policy by the central bank of Ghana raises money supply in the system. Thus, policy instruments such as the purchase of government bills and bonds, the reserve requirement, and the discount rate are used. The rest, (12) 24.0% of the respondents, remained neutral on the issue.

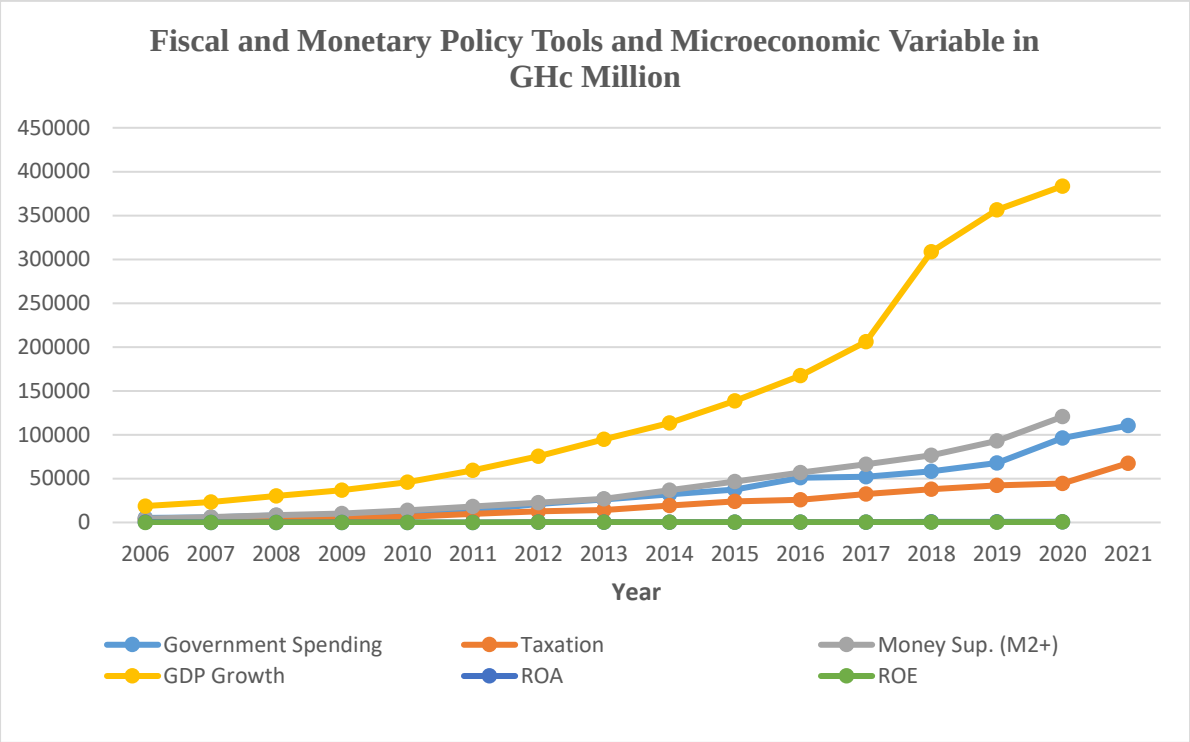
Moreover, out of 57 respondents, (22) 38.6% and (8) 14.0% of the respondents, agreed and strongly agreed, through the ratings of 4 and 5, that expansionary monetary policy significantly affects and causes interest rates to fall, which in effect decreased the universal banks' lending interest rates. Expansionary monetary policy directly increases the amount of money supply in circulation and the amount of universal banks' credit in the economy. As a result, aggregate demand is stimulated, economic growth is promoted, and Ghana's GDP growth is expanded. However, (27) 47.4% of respondents remained neutral (see Table 4.5).

#### 4.3.2.1.3 Graphical Analysis of Fiscal and Monetary Policy Tools

The graphical analysis of the descriptive statistics presented in Figure 4.1 describes the quantum of money values and the relationship between the independent variables of fiscal and monetary policies, consisting of government spending, taxation and money supply as a proxy and the dependent variables, based on profits before tax (ROA) and profits after tax (ROE). The fiscal and monetary policy tools trend in quantum of money values and percentage trends, as illustrated in Figure 4.1 below.

**Figure 4.1**

*The Fiscal and Monetary Policy Tools and GDP Growth in GHc Million*




Source: Research Findings, 2022

The fiscal and monetary policy tools' trend in the quantum of money values analysed was within the period under review, from 2006 to 2020. As shown in Figure 4.1 and Table 4.7, the data collected in terms of the independent and dependent variables shows an upward trend of positive correlation between the fiscal and monetary policy tools and profits before tax and after tax and the various variability within and among the variables.

To achieve fiscal sustainability and macroeconomic stability, the fiscal policy tools of government spending and taxation show an upward adjustment over the entire period under investigation. As shown in Figure 4.1, it is clear from the graph that there has been a significant increase in the quantum of money in terms of government spending, from GHc4, 519.50m in 2006 to GHc110, 414.47m in 2021. Government spending shows approximately a significant constant growth in nominal value terms from 2006 to 2015, with an average amount of GHc6, 000.00m, except in 2011, where it dropped a little below the average growth. It increased very significantly

in 2016, but grew insignificantly in 2017 and grew moderately to GHc58, 196.9m in 2018 and GHc67, 670.90m in 2019, but grew insignificantly to GHc96, 400.43m in 2020 and moderately to GHc110, 414.47m in 2021, as in Figure 4.1 and Table 4.7 (Appendix A).

Taxation also shows a consistent upward growth almost parallel with government spending, from GHc3, 196.0m in 2006 to GHc67.590.39m in 2021. The value growth was very slow from 2006 to 2009 and increased only moderately in 2013, significantly in 2015, dropped a little in 2016, and thereafter increased again in 2018, except for 2016, where the increase was very marginal. Taxation thereafter increased significantly to GHc 32,227.58m in 2017 and continued to increase and then to GHc 67.590.39m in 2021, but moderately in 2020 to GHc 44,452.26m from GHc42,355.49m in 2019, as shown in Table 4.7 (Appendix B).

Both government spending and taxation rise at a rapid and consistent rate after 2011, then fall back to earth after 2015, remain nearly constant after 2016, and then rise again in 2018 through 2021. However, the government's expenditure curve rises over the tax revenue curve after 2011. It shows that the economy was probably growing to allow the expenditure to grow at a parallel effect with the bank's profits, explaining why the variables were on an upward trend.

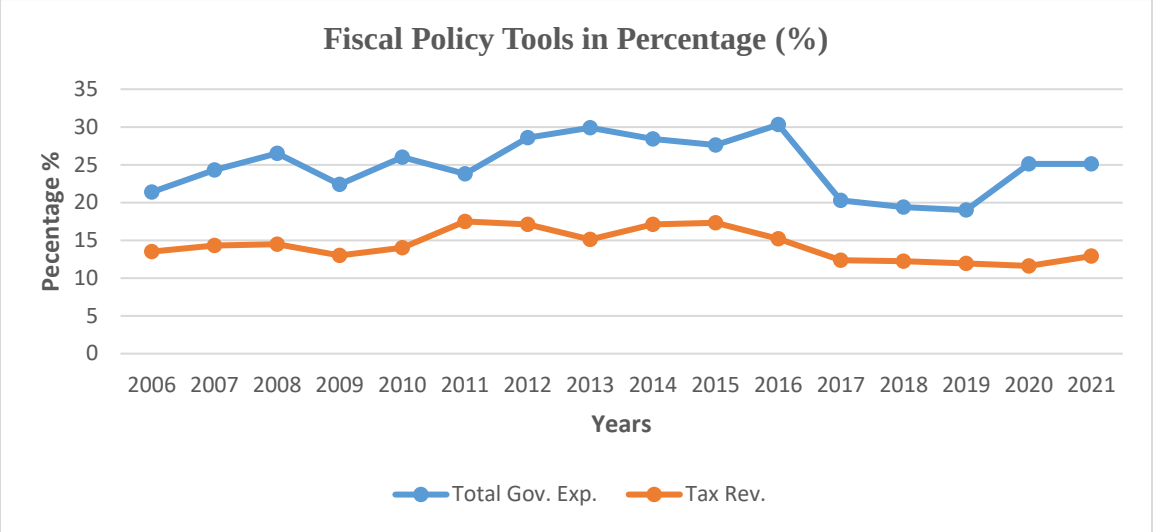
Monetary policy tools such as bank rates, open market operations, and reserve requirements, as a proxy for the total value of money supply (M2+), increased significantly in nominal terms. Thus, from GHc4, 351.6m in 2006 to GHc120, 521.82m in 2020. There was a low and steady year-to-year rise in the money supply from 2006 to 2009, after which it rose moderately, almost at a constant amount, up to 2013. The money supply increased after 2013, increasing at a higher constant value of GHc10, 000.00m in nominal value throughout the year 2018. It, however, experienced very significant growth thereafter up to 2020, recording GHc92, 975.47m in 2019 and GHc120, 521.82m in 2020. See Figure 4.1 and Table 4.7 (Appendix A).

As depicted in Figure 4.2 and Table 4.8, the fiscal and monetary policy tools trend in percentages shows that government expenditure fluctuated between 19.0% the lowest growth rate recorded in 2019, and 30.3% as the highest growth rate recorded in 2016, with 2006 recording 21.4% and 2021 recording a 25.1% growth rate of GDP (GH110.4b). The tax revenue also fluctuated between 11.61% the lowest growth rate in 2020 and 17.5% in 2011 the highest growth rate. The tax revenue recorded a growth rate of 13.5% in 2006 and 12.90% in 2021 (Bank of Ghana, 2010 & 2021).

Over the years, consolidation efforts by the various governments to reduce expenditure have been to no avail, as there has been a consistent percentage increase in total government expenditure and tax revenue compared to GDP from 2006 to 2021. This shows the implementation of both expansionary and contractionary fiscal policies. The reason is that government spending in the economy depended largely on pre-finance by borrowing and taxation. However, the government's borrowing, spending, and tax burden reduce the private sector's consumption and investment activities (Bank of Ghana, 2021). The trend of the yearly percentage increase in fiscal policy tools of government expenditure and taxation from 2006 to 2021 is as in Figure 4.2.

**Figure 4.2:**

*Government expenditure and Tax Revenue Trend in Ghana in percentage*



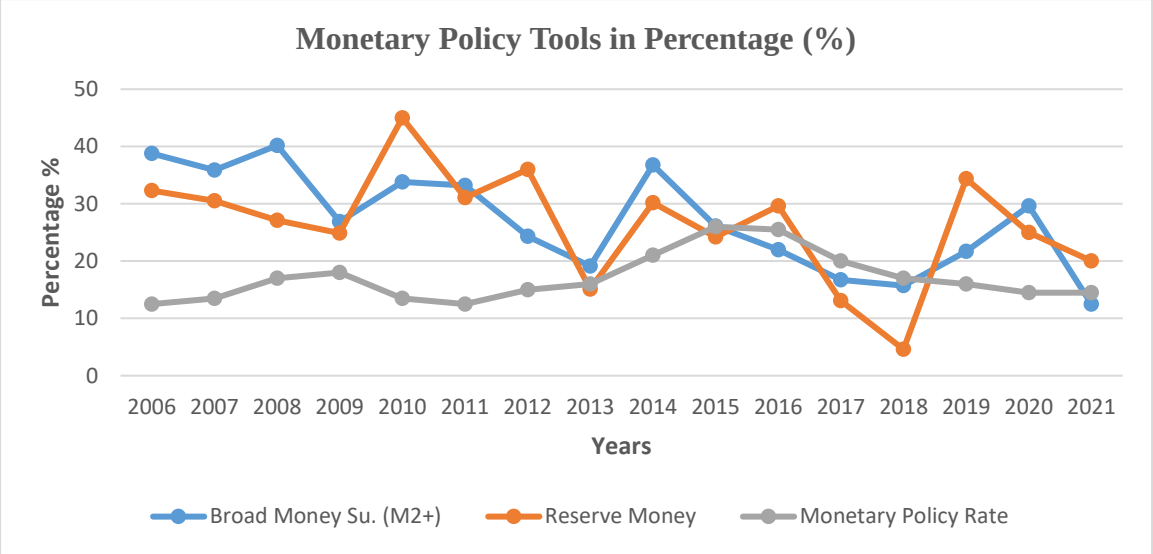

Source: Author's computation

The Bank of Ghana's monetary policy tools of reserve requirement and monetary policy rate, with broad money supply (M2+), used as a proxy to determine the monetary policy direction. Reserve requirements have the power to manage prudential and liquidity risks by sterilising commercial bank reserves and ensuring financial stability. It fluctuated between 4.6% in 2018 as the lowest recorded growth rate and 45.0% in 2010 as the highest recorded growth rate, with 32.3% recorded in 2006 and 20.0% recorded in 2021.

While the monetary policy rate also fluctuated between 12.5% the lowest recorded value in 2006 and 26.0% the highest recorded value in 2015, with 2021 recording a growth rate of 14.5%. Broad money supply (M2+) as a proxy also recorded a growth rate of 38.8% in 2006 and 12.5% in 2021, fluctuating within the years under review between 15.7% in 2018 as the lowest recorded growth rate and 40.2% in 2008 as the highest recorded growth rate. The operation goes with the intermittent application of both expansionary and contractionary monetary policy (Bank of Ghana 2021). This is illustrated in Figure 4.3 below.

**Figure 4.3:**

*Monetary policy Tools Trend in Ghana*




Source: Author's computation

With the fiscal and monetary policy implementation during the period under review, the inflation rate fluctuated between 7.9% in 2019 as the lowest growth rate and 18.1% in 2008 as the highest growth rate. However, 10.5% was recorded in 2006 and 12.6% in 2021, rising above the targeted rate due to rising demand and energy pressures and continuous and persistent supply chain disturbances. Real GDP growth recorded 6.2% in 2006 and 4.4% in 2021 recovering from the COVID-pandemic economic disruption and economic downturn. It fluctuated between 0.4% growth rates in 2020 the lowest growth rate due to the COVID-19 pandemic, as the decline in growth rate was very serious during the period and 14.4% in 2011 as the highest growth rate (Bank of Ghana, 2021). Thus illustrated in Figure 4.3.

#### 4.3.2.1.4 Measurement of Central Tendency and Variability

The study generated certain descriptive statistical values of central tendency and variability, given an overall average description of the fiscal policy tools of government expenditure and taxation and monetary policy tools of bank discount rate, reserve requirement and open market operation

with money supply as a proxy. The key summary of the descriptive statistical measurements captured in the model includes the mean, standard deviation, variance, standard error and minimum and maximum values. The statistical average indicators of the study variables calculated are shown in Table 4.8 (Appendix A).

#### *4.3.2.1.4.1 Fiscal Policy tools*

The analysis of the fiscal policy tools relates to government expenditure and taxation. From Table 4.8, it was apparent that government spending recorded an average mean value of 24.8667, with standard deviation and variance recording values of 3.75569 and 14.105 respectively. The minimum and maximum values recorded were 19.0 and 30.3. The mean value of 24.8 indicates the extent to which government spending relates to the average of the years under review. The recorded standard deviation measurement value of 3.75569, which was greater than one, shows that the values of the government spending data set were widely spread out over a large range of values and further from the mean value obtained. There was also a significant variation in the various years' government spending, due to the large value of variance, which significantly varied from the mean value of 24.8 for the years under review, with a wide range of figures. The standard error recorded a mean value of 0.96972, which was relatively small and serve as an indication that the sample mean was close to the true population mean (DataStar, 2020).

The taxation for the period under review from Table 4.8 recorded a mean value of 14.449, with minimum and maximum values of 11.61 and 17.50. The variance for the period recorded a value of 4.240 with a standard deviation value of 2.05905. The standard deviation of 2.05905 shows that the years' data set figures spread out widely apart and over a large range of values from the mean value. Resulting from the fact that the recorded standard deviation value was greater than one. The variance for the period recorded a value of 3.592, indicating that there was narrow significant variability in the distribution of values of the various years' tax and varied less

significantly from the mean value for the 13 years under investigation (Westfall, 2020). The standard error recorded a value of 0.5316, which was relatively small indicating that the sample mean value was relatively close to the true mean of the population (DataStar, 2020).

#### *4.3.2.1.4.2 Monetary Policy Tools*

The analysis of the monetary policy tools, from the secondary data generated, relates to the bank discount rate, reserve requirements and open market operations, with the money supply serving as a proxy. From Table 4.8, a mean value of 28.0533 was recorded. The minimum and maximum values recorded were 15.70 and 40.20. Money supply recorded a variance value of 65.780, with a standard deviation value of 8.11048. The mean value of the standard deviation was an indication that there was a significant variation and the dispersion of the dataset, relative to its mean, was far greater than 1 and varied significantly from the mean value of 28.0533. The variance also shows that there was significant variability in the various years' money supply values in terms of the mean (Westfall, 2020). The relatively large standard error mean value of 2.09412 recorded was an indication of the mean value being relatively far from the true mean value of the study population and thus making the sample mean less accurate (DataStar, 2020).

### 4.3.2.2 Inferential Statistical Analysis

The inferential statistical analysis was limited to regression and correlation analysis.

#### 4.3.2.2.1 Regression Analysis of the Results

The researcher in undertaking regression analysis employed several statistical tests in analysing the quantitative data results. It relates to the extent to which the independent variables of the fiscal and monetary policy tools influence, by causing variability and explaining the changes in the dependent variables of the bank's profitability (ROA). These include regression goodness of fit, analysis of variance and regression coefficients.

##### *4.3.2.2.1.1 Regression Goodness of Fit*

**Table 4.9**

*Model Summary of Fiscal Policy Tools and ROA and ROE*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.710[a] | 0.503 | 0.421 | 0.71313 |
| 2 | 0.686[a] | 0.471 | 0.383 | 6.02999 |

a. Dependent Variable: ROA and ROE b. Predictors: (Constant), TGE, and TAX

Source: Research Findings, 2022

The summary of the regression model, in Table 4.9, relates to the R coefficients and the standard error. The statistical outcome of fiscal policy tools and ROA and ROE demonstrate that the independent variables of fiscal policy with the estimation of the coefficient of determination (R-square) values of 0.503 and 0.471. This means that the fiscal policy tools, indicating the measures of the model goodness of fit, explained 50.3% and 47.1% of the variance in ROA and ROE. It shows the amount of variance, by explaining 50.3% and 47.1% of the variability in the bank's profitability (ROA and ROE), at a 95% confidence level, around the mean. However, the outcome shows that, the model failed to explain 49.7% and 52.9% of the variability and that other factors affecting the bank's profitability of ROA and ROE were responsible for 49.7% and 52.9% of the bank's profitability variability (Torres-Reyna, 2007).

The adjusted R-squared, demonstrating the proportion of variance, between the dependent variable of return on assets and equity and the independent variables of fiscal policy tools in the model, recorded values of 0.421 and 0.383. It shows that 42.1% and 38.3% of the variation in the

bank’s profitability (ROA and ROE) were predicted by the explanatory variable of the fiscal policy tools. It measured the entire strength of the relationship between the variables and the results were 42.1% and 38.3% significantly reliable. Indicating that other explanatory variables also affect the profit of the bank, which, however, not factored into the regression model, contributing to 57.9% and 61.7% of the bank's profitability (Torres-Reyna, 2007). The estimated standard error values of 0.70093 and 6.02999, which were far from zero, show the poor nature of the fitness level of the model, for the more standard error closeness to zero, the better the fitness.

***4.3.2.2.1.2 Analysis of Variance (ANOVA)***

**Table 4.10a:**

*ANOVA[a] - ROA and fiscal policy tools*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 6.187 | 2 | 3.093 | 6.083 | 0.015b |
| | Residual | 6.103 | 12 | 0.509 | | |
| | Total | 12.289 | 14 | | | |

a. Dependent Variable: ROA, b. Predictors: (Constant), GE and TAX

Source: Research Findings, 2022

**Table 4.10b:**

*ANOVA[a] - ROE and fiscal policy tools*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 388.071 | 2 | 194.035 | 5.336 | 0.022b |
| | Residual | 436.329 | 12 | 36.361 | | |
| | Total | 824.400 | 14 | | | |

a. Dependent Variable: ROE, b. Predictors: (Constant), GE and TAX
Source: Research Findings, 2022

The summary in Table 4.10 above presents the analysis of variance used in testing means and making comparisons, by differentiating the variability among the means to either reject or support the null hypothesis. Assessed with the help of the sum of squares, mean square, p-value and the F-tests, to test statistically, the equality of the study means by analysing the variability of the means and the relationship between the study variables.

The population parameters of the fiscal policy tools show p-values of 0.015 and 0.022, which falls below the critical value of 0.050, at a 5% level. It reveals that the statistical data was important in drawing a conclusion relating to the study sample, as it gives reasonable evidence of rejecting the null and hence accepting the alternative hypothesis (McLeod, 2019). It shows the fitness of the model and makes it statistically significant, as the independent variables of fiscal policy tools were able to predict the bank's profitability (ROA and ROE).

The calculated F values of 6.083 and 5.336, at a 5% level of significance, which was above the F critical value of 3.23, at a 5% level of significance, shows the significant nature of the overall model. The p-values of the F-test of the overall significance test are less than the level of significance, meaning that the null hypothesis is rejected and that the model provides a better fit. As a result, the R-squared value shows to be significantly different from zero, meaning there is a significant relationship between the fiscal policy tools and the profitability of the bank (ROA and ROE). This indicates the rejection of the null hypothesis, as the fiscal policy tools and ROA and ROE positively and significantly correlated. The results confirmed that there exists a statistical positive and significant relationship between the fiscal policy tools and the profitability of the bank (ROA and ROE) (Minitab.com, 2019}.

The estimated regression sum of squares values of 6.187 and 388.071, which was far from the total sum of squares, was an indication that the model does fit well with the data, resulting from less variation in the data. However, with a higher residual sum of squares values of 6.103 and

436.329 in terms of the measurement of the variation of the model errors, describes how the regression model was unable to explain the dependent variable (CFI, 2015 & Kohler et al., 2009).

#### *4.3.2.2.1.3 Regression Coefficients*

**Table 4.11a:**

*Regression Coefficients of Fiscal Policy Tools and ROA*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std Error | Beta | | |
| 1 | (Constant) | -0.864 | 1.434 | | -0.603 | 0.558 |
| | GS | 0.088 | 0.069 | 0.354 | 1.278 | 0.225 |
| | TAX | 0.191 | 0.126 | 0.420 | 1.518 | 0.155 |

a. Dependent Variable: ROA Profitability (million), b. Predictors: (Constant) GE & TAX.

Source: Research Findings, 2022

**Table 4.11b:**

*Regression Coefficients of Fiscal Policy Tools and ROE*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std Error | Beta | | |
| 2 | (Constant) | -6.183 | 12.124 | | -0.510 | 0.619 |
| | GS | 0.864 | 0.584 | 0.423 | 1.479 | 0.165 |
| | TAX | 1.212 | 1.065 | 0.325 | 1.138 | 0.277 |

a. Dependent Variable: ROE Profitability (million), b. Predictors: (Constant) GE & TAX.

In the regression model, the size of the coefficients for the fiscal policy tools of taxation and government spending gives the size of the effect on the dependent variables of ROA and ROE. With their signs of positive and negative given the direction of the effect, the coefficient of the independent variables determines how much the dependent variable is to change, either a decrease or an increase, when particular independent variable changes by one, holding other independent variables constant.

The regression coefficients model presented in Table 4.11 above is employed to analyse the relationship between the independent and dependent variables. Regarding the study model, restricting and limiting all the independent influential factors of fiscal policy tools to zero means that the profitability of the bank recorded constant values of -0.864 and -6.183 with standard errors of 1.434 and 12.124. For the years under review, the intercept coefficient values of -0.864 and -6.183 shows an inverse relationship between ROA and ROE. The study outcome, again, shows that limiting all the independent factors to zero, except government spending, which recorded unstandardized and standardized coefficients values of 0.088 and 0.354 and 0.864 and 0.423 with standard errors of 0.069 and 0.584, was an indication of a positive correlation. Shows that a unit rise in government spending leads to a 0.088 (8.8%) and 0.354 (35.4%), and 0.864 (86.4) and 0.423 (42.3%) rise in the bank's profitability of ROA and ROE respectively.

In the same analysis, taxation recorded unstandardized and standardized coefficient values of 0.191, 0.420, 1.212, and 0.325 with standard errors of 0.126 and 1.065. This shows an indication that a unit increase in taxation led to a 0.191 (19.1%) and 0.420 (42.0%), 1.212 (121.2%) and 0.325 (32.5%) increase in the bank’s profitability of ROA and ROE respectively.

The model's data of the p-values of 0.225 and 0.165, and 0.155 and 0.277 for government spending and taxation respectively were greater than 0.050. Shows the nonsignificant nature of the variables. In testing the hypothesis through the application of the t-values, the coefficients of the

variables were different from zero but less than the critical t-value of 1.96, at a 95% confidence level. However, the t-values at a 0.050 significant level show that taxation, with a t-value of 1.518, was the most important variable, followed by government expenditure of 1.278 in terms of ROA. However, in terms of ROE government expenditure t-value of 1.479 was the most important variable, followed by taxation of 1.138 (Torres-Reyna, 2007).

The data in Table 4.11, consisting of the coefficients of the regression, employed in the development of the study model of $Y = \beta0 + \beta1X1-\beta2X2$.

Where; β0 - Constant variable or Y- intercepts, β1 - coefficient of taxation, β2 - coefficient of government expenditure.

Thus, given the study model of; ROA = -0.864-0.191X1+0.088X2

Thus, given the study model of; ROE = -6.183-1.212X1+0.864X2

#### 4.3.2.3.2 Correlation Matrix Analysis

The fiscal and monetary policy tools and the bank's profitability of ROA and ROE outcomes, presented in Table 4.12 (Appendix A), reveal that there exist diverse correlations. From the correlation matrix, government spending (GE) recorded correlation coefficient values of 0.639 and 0.643, concerning return on assets and return on equity. Indicates the strong positive and statistically significant relationship between government spending and the return on assets and return on equity. An increase in government spending by a unit leads to a 63.9% and 64.3% proportionate increase in return on assets and equity, respectively. The p-value of 0.010 and 0.010 for ROA and ROE were found to be statistically significant at 1% and 5% levels of significance, below the critical value of 0.025, with a 2-tailed test, at a 95% degree of freedom.

Taxation (T), also recorded correlation coefficient values of 0.660 and 0.612 for return on assets and return on equity. This suggests that there was a strong positive relationship between

taxation and the return on assets and the return on equity. Where a unit rises in taxation results in a 66.0% and 61.2% rise in return on assets and equity, respectively. The levels of significance of 0.007 and 0.015 for ROA and ROE thus found to be statistically significant, at 1% and 5% significance levels below the critical value of 0.025, with a 2-tailed test, at a 95% confidence interval, respectively.

### 4.3.3 Analysis of Macroeconomic Variables

The analysis of macroeconomic variables was done based on the research question of, what effect does fiscal and monetary policy tools employed impact on the macroeconomic variables and their effects on the profitability of Ecobank Ghana Ltd? What are stakeholders' concerns about the financial performance and the profitability of Ecobank and the macroeconomic variables in the era of fiscal and monetary policy implementations in Ghana's economy and why? This analysis relates to descriptive and inferential statistical analysis.

#### 4.3.3.1 Descriptive Statistical Analysis

The descriptive analysis was limited to distribution and graphical analysis and the measurement of central tendency and variability.

##### *4.3.3.1.1 Distribution Analysis*

Table 4.5 (Appendix B), presents, the outcomes of the responses to the macroeconomic variables from the respondents. In terms of interest rate changes, 61 of the respondents, indicated that interest rate changes to a very great extent, affect the lending behaviour of Ecobank to its customers in Ghana, with (29) 49.2% and (26) 44.1% of the respondents, agreeing and strongly agreeing through the rating of 4 and 5. However, (2) 3.3% of the respondents remained neutral and (2) 3.3% of the respondents disagreed with a rating of 2. To the extent, to which interest rate changes, affect the borrowing behaviour of Ecobank customers in Ghana, by 59 respondents, (26) 44.1% and (21)

35.6% of the respondents, agreed and strongly agreed that it was a very great extent, with (7) 11.8% being neutral and (2) 3.3% disagreeing to that effect.

In terms of the explanation of the general trend of interest rate changes in the last 13 years in Ghana, 55 respondents, (22) 37.3% and (17) 28.8%, of the respondents who participated in the survey, agreed, and strongly agreed, by the ratings of 4 and 5, that interest rates were increasing, as (20) 33.9% of the respondents were neutral. In terms of the year's example trend analysis, 60.1% to 67.9% of the respondents show an increasing trend through the years. Nevertheless, in a fluctuating manner, as indicated by 36.1% of the respondents, only 3.9% to 8% agreed on increasing fast and 15.7% approved decreasing trends.

In the responses of 61 respondents, to the general trend of borrowing by Ecobank customers, in the last 13 years in Ghana, (23) 37.7% and (29) 47.5%, of the respondents, agreed and strongly agreed that it was increasing by the rating of 4 and 5, with (9) 14.8% of the respondents, being neutral. In addition, in terms of the trend example within the years, 69.1% to 88.6%, of the respondents, agreed, that it was increasing, with 16.5%, of the respondents, stating, that it was fluctuating and 4.0% to 11.9%, agreed its increasing fast. As to the future expectations by Ecobank customers, of interest rate charges in Ghana, by 60 respondents, about (57) 95.0%, of the respondents, stated that it will be on a downward trend to a very great extent, to ensure collaboration and a win-win situation, with only (3) 5.0% agreed on being stable.

There were diverse responses as to the causes of the general trend of borrowing by Ecobank customers, in the last 13 years in Ghana. The participants' responses range from construction to general investment, to feeding and building accommodation and the payment of fees and loans. Notwithstanding the trend of borrowing, out of 58 respondents, (53) 91.4% respondents, indicated that an increase in interest rate increasingly impacts Ecobank borrowing customers negatively in

Ghana, with just a marginal of (4) 6.9%, of the respondents, indicating, that it positively affects customers and (1) 1.7%, arguing that it does not affect.

#### *4.3.3.1.2 Graphical Analysis*

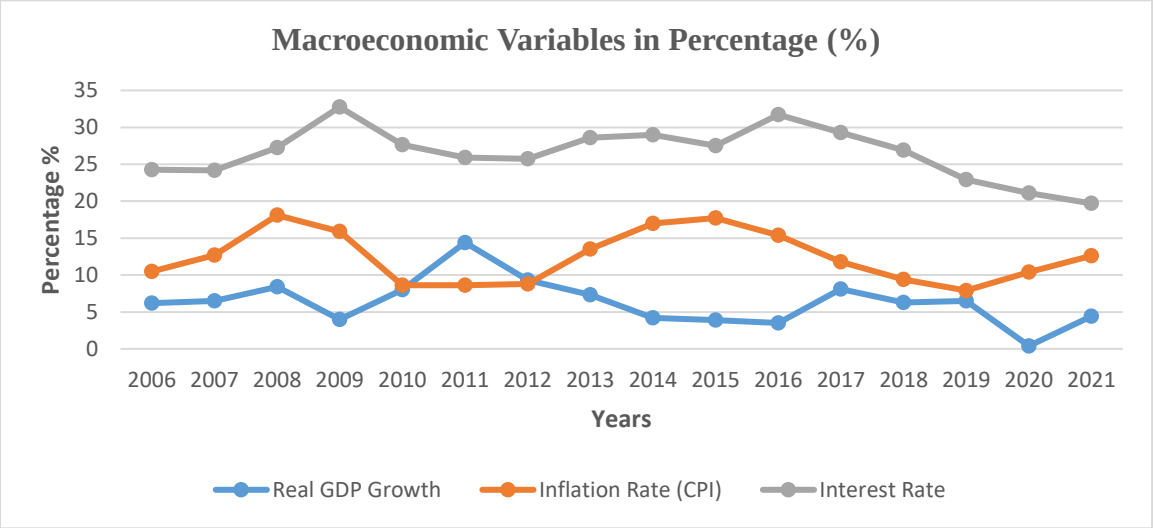
**Macroeconomic Variables Trend in quantum of money values**

The graphical analysis of the macroeconomic variables and the bank's profitability thus indicated in Figures 4.1 and 4.4. The total value of GDP growth, during the years under review, went up very significantly from GHc18, 705.1m in 2006 to GHc383, 486.00m in 2020, with a mean value of GHc20, 596.0m. It shows that the economy recorded a major consistent upward contribution to the growth in the GDP transaction. The upward trend was very consistent, increasing almost at a constant value, from 2006 to 2016 and thereafter, continue to increase faster, until 2017. It thereafter increased with a greater margin of almost 50% in 2018, recording an amount of GHc300, 596.0m. GDP transactions moderated in 2019 and 2020. Shows a positive and significant correlation between GDP growth and the bank's profitability as depicted in Figure 4.1

**Macroeconomic Variables Trend in Percentages**

**Figure 4.4:**

*Macroeconomic Variables Trend in Ghana*




Source: Author's computation 2022

The macroeconomic variables' trend in terms of GDP growth rates, interest rates and inflation rates has shown a proportionate variation year after year, as illustrated in Figure 4.4. GDP growth recorded a growth rate of 6.20% in 2006 and a growth rate of 0.40% in 2020 due to the sluggish nature of the economy resulting from the COVID-19 pandemic effects and revamping to 4.9% in 2021. It fluctuated between 0.40% in 2020 the lowest recorded growth rate and 14.40% in 2011 as the highest recorded growth rate. The inflation rate also recorded a growth rate of 10.5% in 2006 and 10.4% in 2020 and increased to 16% in 2021 despite the COVID-19 pandemic. The lowest recorded growth rate was 7.90% in 2019 and the highest recorded percentage increment was 18.1% in 2008. Interest rates continued to trend downward falling in line with the MPR after 2016 by recording 31.7% in 2016, 29.3% in 2017, 26.9% in 2018, 22.9% in 2019, 21.1% in 2020 and finally 19.7% in 2021. It fluctuated between 19.7% in 2021 the lowest recorded interest rate and 32.75% in 2009 as the highest recorded interest rate.

#### *4.3.3.1.3 Measurement of Central Tendency and Variability*

The analysis of the intermediate external variables, in Table 4.8 (Appendix A), relates to GDP growth, inflation rate and interest rate. The GDP growth (GDP), within the period under review, recorded an average mean value of 6.9308, with minimum and maximum values of 0.40 and 14.40. The mean value of 6.4667 shows that the average percentage value of the GDP growth was 6.93%.

The variance stands at 10.281 and the standard deviation value of the mean was 3.206. There were a significant measurement variation and variability from the mean, as the recorded variance and standard deviation values were greater than 1 and thus varied significantly from the mean value of 6.4667 (Westfall, 2020). The standard error of the mean of 0.82789 recorded was a signal that the mean value was very reliable, as a relatively small value shows that the sample mean is very accurate, in reflecting the actual population mean (DataStar, 2020).

The inflation rate (INFR) is a very critical concern for the management of the central bank of Ghana's monetary policy, through price stability and interest rates, which directly affect the state of the nation's economy. The calculated mean value of the inflation rate recorded was 12.4200, with minimum and maximum values of 7.90 and 18.10 respectively. The variance stands at 13.096, with low reliability and a standard deviation value of 3.61884. The standard deviation value of 3.61884 indicates that, there was a significant spread in the inflation rate measures and that they are far and widely scattered. It resulted from the fact that, the recorded standard deviation value of the mean of 3.62 was greater than 1 and varied significantly from the mean value of 12.4. The variance value of 13.096 also demonstrates that there was very significant variability among the dataset from the mean value of 12.4 (Westfall, 2020). The standard error of the mean recorded a value of 0.93438, which was relatively less than one, indicating the reliability of the sample mean, as a more accurate reflection of the actual population means (Minitab.com, 2019).

The interest rate, as a differential charged to the real lending rates, has been consistently positive. The average interest rate recorded a mean value of 22.0385, with the minimum and maximum recording 11.30 and 31.20. The recorded average lending interest rate of 22.0% was an indication of the rate per annum. The variance of the interest rate for the period recorded a value of 51.658, with a standard deviation of 7.18732. The average interest rate indicates that there was significant variability and wider spread variation in the various years' average interest rates. Resulting from the fact that, the recorded variance and the standard deviation measurement values of 51.658 and 7.18732, of the mean, were greater than 1 and also varied significantly from the mean value of 22.0385 (Westfall, 2020). The standard error of the mean, also recording a large mean value of 1.99340, shows an indication of the unreliability of the sample mean as a less accurate reflection of the actual population mean (DataStar, 2020).

#### 4.3.3.2 Inferential Statistics

The inferential statistical analysis was limited to regression and correlation analysis.

##### 4.3.3.2.1 Regression Analysis

The researcher employed several statistical tests in analysing the quantitative data results.

###### *4.3.3.2.1.1 Regression Goodness of Fit*

**Table 4.16:**

*Model Summary of ROE and macroeconomic Variables*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 2 | 0.743[a] | 0.553 | 0.478 | 0.54311 |

a. Predictors: (Constant), GDPG, INFR, b. Dependent Variable: Profitability ROE

Source: Research Findings 2022

The statistical outcomes are shown in Table 4.16. The coefficient of determination (R-square) with a value of 0.553, of the data, in terms of macroeconomic variables and ROE, demonstrate that the independent variables of macroeconomic variables, within the research study by holding other factors constant, explained 55.3% of the variability in the bank's profitability (ROE), at 95% confidence level. The outcome of the findings shows that there were other factors, which affect the bank's profitability and were responsible for 44.7% of the bank's profits variability.

The Adjusted R-square value of 0.478 shows the proportion of variance between the dependent variable of return on assets and the independent variable of macroeconomic variables in the model. The outcome was an indication that 47.8% of the variation in the bank's profitability, through return on the assets, was predicted by the explanatory macroeconomic variables. Thus, measuring the entire strength of the relationship between return on assets and the explanatory variables in the model. The results show that other explanatory variables, which also affect the profitability of the bank, were not factored into the regression model, contributing to 52.2% of the bank's financial performance (Torres-Reyna, 2007).

The estimated standard error of 0.54311, which was far from zero and half of one, shows that the model was not well fit. For a standard error, closeness to zero shows the better fitness of the model. However, model 1 ROA does not predict and failed to show any significant relationship to the independent variables.

#### *4.3.3.2.1.2 Analysis of Variance (ANOVA)*

**Table 4.17:**

*ANOVA of ROE and macroeconomic Variables*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 455.688 | 2 | 227.844 | 7.415 | 0.008[b] |
| | Residual | 368.712 | 12 | 30.726 | | |
| | Total | 824.400 | 14 | | | |

a. Dependent Variable: ROE, b. Predictors: (Constant), GDPG and INFR

Source: Research Findings 2022

The statistics in Table 4.17 relate to the population parameters of the macroeconomic variables. The significance level p-value of 0.008, which falls far below the critical value of 0.050 at the 5% level, reveals that the statistical data was significant enough in drawing a conclusion relating to the study sample. The P-value of the F-test of the overall significance test is less than the significance level, meaning that the null hypothesis is rejected and that the model provides a better fit. As a result, the R-squared value is shown to be significantly different from zero. Because it provides sufficient evidence to reject the null hypothesis and accept the alternative hypothesis. It reveals that the statistical data of the study model was statistically significant as the independent variables of macroeconomic variables such as GDP growth and inflation rate were able to predict the bank's profitability (ROE).

The calculated F value of 7.415, at a 5% level of significance, used in testing statistically the equality of means, rises above the F critical value of 3.23, showing the significant nature of the overall model. Thus, there was a significant relationship between the macroeconomic variables and

the profitability of the bank (ROE). This indicates the rejection of the null hypothesis, as there exists a statistically significant correlation between the macroeconomic variables and the profitability of the bank (ROE) (Minitab.com, 2019).

The estimated regression sum of squares value of 455.688, far from the total sum of squares value of 824.400, is an indication that the model does not fit well with the data. The residual sum of squares value of 368.712, in terms of the measurement of the variation of the model errors, also describes how unfit the model data is represented by the regression model. A higher regression total sum of squares was an indication of how the regression model was unable to fit the data well (CFI, 2015 & Kohler et al., 2009). However, ROA failed to show any significant relationship with the independent variables and the variables did not fit into the model. The P-value (0.274) of the F-test (1.446) of the overall significance test is greater than the significance level, meaning that the null hypothesis is supported and that the model provides no better fit.

#### *4.3.3.2.1.3 Regression Coefficients*

**Table 4.18:**

*Regression Coefficients of the Macroeconomic Variables*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std Error | Beta | | |
| 1 | (Constant) | 7.019 | 7.568 | | 0.927 | 0.372 |
| | GDPG | 0.697 | 0.502 | 0.291 | 1.387 | 0.191 |
| | INFR | 1.713 | 0.445 | 0.808 | 3.849 | 0.002 |

a. Dependent Variable: ROE, b. Predictors: (Constant), GDPG and INFR

Source: Research Findings 2022

The summary of the regression coefficients is shown in Table 4.18. In analysing the regression coefficients, restricting, and limiting all the independent macroeconomic variables to zero, the macroeconomic variables recorded a constant value of 7.019 and a standard error value of 7.568. The study intercept, recorded an unstandardized coefficient value of 7.019, for the years under review, showing the existence of a positive and significant relationship. Thus, a unit increase in the intercept leads to a 7.019 increase in the bank's profitability (ROE).

The study outcome again shows that limiting all the independent factors to zero, except the inflation rate, which recorded unstandardized and standardized coefficients values of 1.713 and 0.808, with a standard error of 0.445, shows that a unit rise in inflation rate leads to a 1.713 (171.3%) or 0.808 80.8%) rise in the profitability of the bank (ROE). Furthermore, GDP growth, which recorded unstandardized and standardized coefficient values of 0.697 and 0.291, with a standard error of 0.502, shows that a unit rise in GDP growth leads to a 0.697 (69.7%) or 0.291 (29.1%) increase in the profitability of the bank (ROE).

From the model, all the variables positively correlated with the bank's profitability. The p-value of an inflation rate of the p-value of 0.002 falls below 0.050, signifying the significant nature of the variable. However, the p-value of GDP growth of 0.191 was greater than 0.050, signifying the nonsignificant nature of the variable. In testing the hypothesis, through the application of the t-values, the coefficients of the variables were different from 0 but greater than and less than the critical t-value of 1.96, at a 95% confidence level (Torres-Reyna, 2007). The t-value of .05 significant level shows that the inflation rate (3.849) was the most important variable followed by GDP growth (1.387) (Torres-Reyna, 2007). However, ROA failed to show any significant relationship to the independent variables, thus variables do not fit into the model.

The data in Table 4.18, made up of the regression coefficients, are however employed in the development of the study model of; $Y = \beta 0 + \beta 1X1 + \beta 2X2$. Where;

β0 - constant variable or Y- intercepts,

β1 - coefficient of the inflation rate,

β2 - coefficient of GDP Growth.

Thus, given the study model of; ROE = 7.019+1.713X1+0.697X2

#### 4.3.3.2.2 Correlation Analysis

The macroeconomic intermediation variables, as indicated in Table 4.12, show some diverse outcomes. The GDP growth (GDPG), measuring the strength of the economy, recorded values of -0.334 and -0.232, in terms of return on assets and return on equity. Postulating that, GDP growth in the country negatively and significantly correlated to the bank's profitability of return on assets and equity. An increase in GDP growth leads to a decrease of 33.4% and 23.2% in return on assets and return on equity respectively. The level of significance of 0.265 and 0.445 was found to be statistically nonsignificant, at a 5% significance level, above the critical value of 0.025, with a 2-tailed test, at a 95% degree of freedom.

The inflation rate (INFR) on the other hand, also recorded values of 0.405 and 0.654, with return on assets and return on equity, showing that there was a strong positive and significant correlation between the inflation rate and return on assets and equity. Indicating that a percentage increase in the inflation rate leads to an increase in return on assets and return on equity by 40.5% and 65.4% respectively. The higher the inflation rate, the higher the profitability of the bank. The level of significance of 0.015 was found to be statistically significant, at a 5% significance level, below the critical value of 0.025 of return on equity as against return on assets of 0.170, with, a 2-tailed test, at a 95% confidence interval.

The bank lending interest rate (INTR) values of 0.497 and 0.500, concerning return on assets and return on equity, shows that the interest rate positively and significantly correlated to return on assets and return on equity. A rise in the bank interest rate leads to a rise in the return on assets and

return on equity, by 49.7% and 50.0% respectively. The level of significance of 0.084 and 0.082 was found to be statistically nonsignificant, at a 5% significance level, above the critical value of 0.025, with a 2-tailed test, at a 95% degree of freedom.

### 4.3.4 Analysis of the Internal Control Variables

The analysis of the internal control variables was done based on the research question, what are the internal control factors (CAMELS analysis) used by Ecobank in determining its financial performance and profitability and why? The analysis is limited to descriptive and inferential statistical analysis.

#### 4.3.4.1 Descriptive Statistical Analysis of the Variables

The descriptive analysis of internal control variables was limited to distribution analysis and the measurement of central tendency and variability.

##### *4.3.4.1.1 Distribution Analysis*

The distribution analysis of internal control variables was analysed with the application of the CAMELS Analysis in Table 4.6 (Appendix A).

**Capital Adequacy/Solvency Ratios**

The analysis of the study survey outcome on capital adequacy in Table 4.6, of 60 respondents, shows that (26) 63.3%, (40) 28.3% and (19) 8.3% of the respondents, emphasized debt-to-capital ratio, debt-to-asset ratio and debt-to-equity ratio respectively, as the best measurement ratios for the solvency of Ecobank. 29 respondents rated the debt to capital as the most used rate measurement ratio by Ecobank. As it is worth noting that (24) 82.8% of the respondents rated the debt-to-capital ratio as very significant at the rating of 5, with (4) 13.8% of the respondents rating it as significant at 4 and (1) 3.4% of the respondents rating it as highly insignificant. The debt-to-asset ratio was also rated by 36 respondents, of which (18) 50% and (11) 30.6% rated it as very significant and

significant, at the rating of 5 and 4 respectively, with (2) 5.6% of the respondents rating it as moderately significant at 3. However, (5) 14.9% of respondents rated it as highly insignificant.

The debt-to-equity ratio was rated by 17 respondents, of which (7) 41.2% and (5) 29.4% rated it as very significant and significant at 5 and 4, with (3) 17.6% of the respondents rating it as moderately significant at 3. The rest, (2) 11.2% of the respondents, rated it 4, as highly significant. Only a single (1) respondent rated the interest coverage ratio as very significant and significant. The analysis of the survey results by 41 respondents indicates that the general trend of the solvency performance of Ecobank in the last 13 years in Ghana is increasing. Where (22) 53.7% and (6) 14.6% of the respondents, agreed and strongly agreed with the ratings 4 and 5, with the rest, (13) 31.7% of the respondents rated it as neutral at 3. The trend example within the years shows an increasing trend by 66.2% to 78.1% of the respondents, while others indicated a fluctuation outcome in terms of 36.8% to 21.9% of the respondents.

**Asset/Credit Quality Performance**

According to the study outcome by 59 respondents, on asset quality measurement used, (45) 76.3% of the respondents, indicated that Ecobank used net non-performing assets to net loan and advance to measure its credit or asset quality performance in Ghana. While the rest, (14) 23.7% of the respondents, also show that, they employed a percentage of loan loss provision in measuring its asset quality. Based on the study survey from 45 respondents, (33) 73.5% of the respondents, rated net non-performing assets to net loan and advance as very significant, giving it a score of 5 and another (7) 15.5% of the respondents, rated it at 4 as significant. While still, another (5) 11.1% of the respondents, rated it as moderately significant with a rating of 3.

In terms of the rating of the percentage of loan loss provision by 16 respondents, (7) 43.8% of the respondents, indicated that it was very significant with a rating of 5 and (9) 56.3% of the respondents, also indicated that it was significant, with the rating of 4. It has become obvious from

the data analysis of the study survey outcome, from the 58 respondents that, the general trend of the credit or asset quality performance of the bank in the last 13 years in Ghana is increasing. As (30) 51.7% and (20) 34.5% of the respondents of the bank strongly agreed and agreed in terms of the rating of 5 and 4 respectively. No respondent rated it below the rating of 3 and an additional (8) 13.8% of the respondents rated it as neutral.

**Managements Operating Efficiency**

In determining which measure Ecobank mostly used to assess its management operating efficiency performance in Ghana, out of 61 respondents, (50) 82% of the respondents, rated expense to total income as the most operating efficiency measurement tool. While (7) 11.5% and (4) 6.5% of the respondents, rated net interest margin and overhead efficiency ratio as the nest used measurement. In terms of rating the operating efficiency performance measurement ratios used by Ecobank, the analysis of the survey outcome by 49 participants, (33) 67.3% and (11) 22.4% of the respondents, rated expense to total income as very significant and significant at the rating of 5 and 4. While (4) 8.2% and (1) 2% of the respondents rated it as moderately significant and highly insignificant at 2 and 1.

With regard to the net interest margin assessed by 8 respondents, (5) 62.5%, (1) 12.5% and (2) 25% of them concluded that it was very significant, significant, and moderately significant with the ratings of 5, 4 and 3 respectively. The overhead efficiency ratio was also made up of 10 respondents, indicated by (5) 50%, (2) 20% and (3) 30% of the respondents, who rated it as very significant, significant, and moderately significant, respectively.

The analysis of the survey responses shows that the general trend of the operating efficiency performance of Ecobank in the last 13 years, by 59 respondents in Ghana is increasing as (14) 23.7% and (20) 33.9% of respondents strongly agreed and agreed, with (21) 35.6% of the respondents been neutral, (1) 1.7% disagreed and (3) 5.1% strongly disagreed. The trend examples

within the years shown by 66.7% of the respondents indicate that the trend performance was increasing within the years.

### Earnings/Profitability Performance

The analysis of the study survey results, by 61 respondents on the measurement ratios of earnings/profitability performance employed by Ecobank, shows an indication that (55) 51.4% of the respondents placed much emphasis on return on equity. While (25) 23.4% and (20) 18.7% of the respondents, also emphasized net profit margin and return on the assets as the next best measurement ratios performance employed by Ecobank, in the last 13 years in Ghana. Equity multiplier, assets utilization and operating profit margin were rated by (3) 2.8%, (2) 1.8 %, and (2) 1.8 % of the respondents as the least measurement ratios respectively.

Furthermore, 44 respondents rated return on equity, of which (32) 73.0%, (11) 25.0%, and (1) 2.0% of the respondents rated it very significant at 5, significant at 4 and highly insignificant at 1, respectively. The return on the assets was also rated by 31 respondents, out of which (20) 65.0%, (10) 32.0% and (1) 3.0% of the respondents rated it as very significant, significant, and highly insignificant at 5, 4, and 1, respectively. The net profit margin was also rated as the next best, by 30 respondents with (24) 80.0% and (6)20.0% of the respondents, rated it as very significant at 5 and significant at 4. The strong ratings of return on equity, return on assets and net profit margin, were an indication that the bank views them as key factors for measuring its profitability performance in the banking industry.

The general trend of profitability performance assessment by 34 respondents of Ecobank in the last 13 years in Ghana shows an increasing trend, with (42) 72.0% and (12) 2.0% of the respondents, strongly agreeing and agreeing by scoring a rating of 5 and 4 respectively. While (4) 7.0% of the respondents remained neutral. The trend example within the years under review shows that 83.0% to 90.0% of the respondents indicate an increasing trend, with 12% to 8% of the

respondents indicating a fluctuation trend, with scores of 3 and 5 to 2 showing a fast-increasing trend.

**Liquidity Performance**

In identifying the most used liquidity ratio, by 61 respondents in measuring the performance of Ecobank in Ghana in the last 13 years, (32) 52.5% are of the view that Ecobank employed liquid assets to deposit to measure its liquidity performance. This was followed by the liquid asset to average total asset ratio, rated by (18) 29.5% of the respondents and finally, net loan to deposit and short-term borrowing ratio, by (11) 18.0% of the respondents.

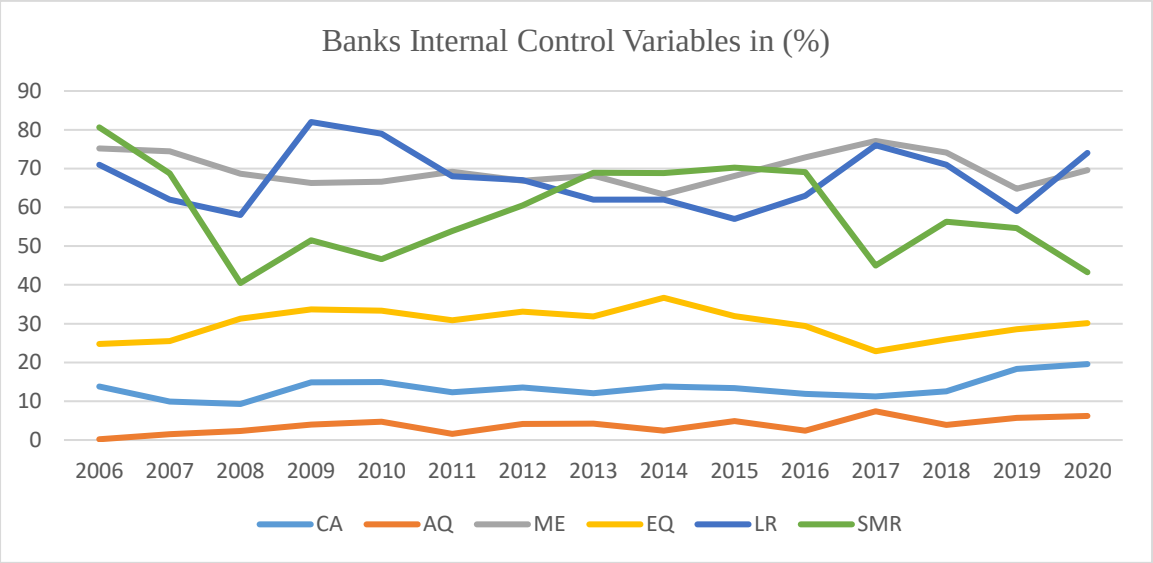
In terms of rating the liquidity ratios performance by respondents, 44 (72.1%) of the respondents, rated liquid asset to average total asset ratio as very paramount. Out of which (31) 70.5% of the respondents, rated it as very significant at 5, (11) 25.0% of the respondents, rated it as significant at 4, and (2) 4.5% of the respondents, rated it as highly insignificant. The liquid asset to deposit was also rated by 15 (27.7%) respondents, of which (13) 86.7%, (1) 6.7% and (1) 6.7% of the respondents rated it as very significant, significant, and moderately significant, respectively, with the ratings of 5, 4, and 3 respectively.

Again, the net loan to deposit and short-term borrowing ratio was also rated by 12 (16.4%) respondents, out of which (3) 25% of the respondents, rated it as very significant and significant by (5) 41.7%, while (4) 33.3% of respondents, rating it as moderately significant. Almost all the 59 respondents, appear to agree that the general trend of liquidity performance of Ecobank in the last 13 years in Ghana was increasing, with (25) 42.4%, (26) 44.1% of the respondents, agreeing and strongly agreeing and (8) 13.6% remaining neutral.

### *4.3.3.1.2 Graphical Analysis*

**Figure 4.5:**

*The bank's specific internal control variables The Trend in Percentage Values*




The bank's specific internal control variables are as indicated in Figures 4.5 above and Table 4.13 (Appendix A). The percentage values of the bank's internal control variables fluctuated within the period under review. The bank's internal control variables have shown a proportionate increase and decrease year after year. Capital adequacy recorded a growth rate of 13.76% in 2006 and a growth rate of 19.57% in 2020. It fluctuated between 9.28% in 2008 the lowest recorded growth rate and 19.57% in 2020 the highest recorded growth rate. Asset quality recorded a growth rate of 0.190% in 2006 and 6.20% in 2020, with the lowest recorded growth rate being 0.190% in 2006 and the highest recorded percentage increment being 7.40% in 2017.

Management operational efficiency recorded a growth rate of 75.21% in 2006 and a growth rate of 69.58% in 2020. It fluctuated between 63.32% in 2014 the lowest recorded growth rate and 77.11% in 2017 the highest recorded growth rate. Earning quality recorded a growth rate of 24.78% in 2006 and 30.09% in 2020, with the lowest recorded growth rate being 22.89% in 2017 and the highest recorded percentage increment being 36.67% in 2014. The liquidity ratio recorded a growth rate of 71.00% in 2006 and a growth rate of 74.00% in 2020. It fluctuated between 57.00% in 2015

the lowest recorded growth rate and 82.00% in 2009 the highest recorded growth rate. Sensitivity in market risk recorded a growth rate of 80.62% in 2006 and 43.26% in 2020, with the lowest recorded growth rate being 40.48% in 2008 and the highest recorded percentage increment being 80.62% in 2006.

There is a positive correlation between the bank's internal control factors and ROA and ROE. A percentage change in the bank's internal control variables leads to a similar directional proportionate change in the bank's profitability. The analysis is that the bank's internal control variables positively correlate with ROA and ROE.

#### *4.3.4.2.2 Measures of Central Tendency and Variability*

The average values of the bank-specific internal control variables measured from the Ecobank financial statements database within the years under review were analysed through the CAMELS model of analysis. This is as shown in Table 4.8 (Appendix A). The capital adequacy ratio (CAR) measured as a ratio of total capital to risk-weighted assets, recorded an average mean value of 13.4327, with minimum and maximum recording values of 9.28 and 19.57. The value of the variance stands at 7.645 and a standard deviation value of 2.76497. There was a significantly wider spread variation in the various year's ratios, resulting from the fact that, the recorded standard deviation value of 2.76497 was greater than 1 and varied significantly from the mean value of 13.4327. The value of variance was small, given a narrower range of figures in the data set (Westfall, 2020). The standard error of the mean, recorded a small mean value of 0.71391, thus, showing an indication of the reliability of the sample mean as a more accurate reflection of the actual population mean (DataStar, 2020).

Table 4.8 (Appendix A) summarises the empirical results of the asset quality (AQ), which measured loan portfolios of non-performing loans to total loans and recorded a mean value of 3.698. The minimum and maximum values recorded were 0.19 and 7.40. The variance for the

period recorded a value of 3.842, with a standard deviation of 1.96014. The mean value of 3.69, demonstrates asset quality in terms of non-performing loans. The mean value of 1.96014 of the standard deviation is an indication that there are a significant measurement variation and dispersion of the dataset relative to its mean. The result was from the fact that the recorded standard deviation value of the mean of 1.96014 was greater than 1 and varied significantly from the mean value of 3.698. The variance of 3.501 of the mean value was an indication that there was a narrow significant variation of the data points, from the mean (Westfall, 2020). The standard error of the mean recorded a small mean value of 0.50611. Thus, showing an indication of the reliability of the sample mean, as a more accurate reflection of the actual population mean (DataStar, 2020).

The management efficiency, as depicted in Table 4.8, is based on the operating expense ratio as a proxy, which involves the measurement of the firm operating expenses, in terms of cost incurred in operating an asset to its revenue generated. The Management efficiency recorded a mean value of 69.6867, with minimum and maximum values of 63.32 and 77.11 respectively. The variance recorded a value of 16.954, with a standard deviation value of 4.11754. There was a significant variation in the various years' management efficiency, resulting from the fact that the recorded standard deviation value of the mean of 4.11754 was greater than 1 and also varied significantly from the mean value of 69.6867, of the years under review, with a wider range of variance of the mean (Westfall, 2020). The mean value of 1.06314 for standard error, which was moderately small, equal to one, was an indication that the mean value was relatively close to the true mean of the study population (DataStar, 2020).

Based on Table 4.8, the earnings quality ratio (EQ), of return on equity recorded an average mean value of 29.9933 and minimum and maximum values of 22.89 and 36.67 respectively. The variance for the period recorded a value of 14.663, with a standard deviation of 3.829. The mean value of 29.9% shows the firm's all-embracing efficiency and performance, in terms of the firm's

level of expenditure on operations and earnings volatility. The mean values indicated that there were significant variations and a large spread out over a range of values in the earnings quality. This was because the recorded standard deviation value of the mean of 3.829 was greater than 1 and varied significantly from the mean value of 29.9933, with a wider range of variance variability to the mean (Westfall, 2020). The standard error of the mean value recorded was 0.98869, which implies that, the mean value was somehow relatively close to the true mean of the study population and that the sample mean was a little more accurate (DataStar, 2020).

From Table 4.8, liquidity management recorded a mean value of 67.4000, with a minimum value of 57.00 and a maximum value of 82.00. It again recorded a variance value of 61.829, with a standard deviation value of 7.86311. There was a significant variation in the various years' liquidity management because the recorded standard deviation value of 7.86311 was greater than 1 and also varied significantly from the mean value of 67.40, with a very wide range of variance variability to the mean in the group for the years under review (Westfall, 2020). The standard error mean value recorded is 2.03025, showing that the mean value was relatively wide and far from the true mean of the study population making its reliability unreliable (DataStar, 2020).

Table 4.8, depicting sensitivity to market risk, looking at the firm's loans and advances to deposits, recorded a mean value of 58.4480 and a minimum and a maximum value of 40.48 and 80.62 respectively. The variance value recorded was 143.46, with a standard deviation of 11.934. The variance value of 142.429 recorded, was an indication that there was significant variability in the various years 'sensitivity to market risk, as there was a wider range of figures within the group concern. The standard deviation value, which was greater than 1, measured a good spread and a higher deviation of the data distribution, as the points were further apart from the sample mean (Westfall, 2020). The standard error mean value recorded was 3.0814, showing that the mean value

was relatively wide and far from the true mean of the study population making its reliability unreliable (DataStar, 2020).

#### *4.3.4.2 Inferential Statistics*

The inferential statistical analysis was limited to regression and correlation analysis.

##### 4.3.4.2.1 Regression Analysis

The researcher employed several statistical tests in analysing the quantitative data results.

#### *4.3.4.2.1.1 Regression Goodness of Fit*

**Table 4.19:**

*Model Summary of the Internal Control Variables*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.962[a] | 0.926 | 0.870 | 0.3374 |
| 2 | 0.904[a] | 0.818 | 0.681 | 4.335 |

a. Predictors: (Constant), EQ, AQ, CA, ME, L, SMR

b. Dependent Variable: Profitability ROA (1) and ROE (2)

Source: Research Findings 2022

As depicted in Table 4.19, the statistical outcome of the coefficient of determination (R-square) of the bank internal control variables, of ROA and ROE by holding other factors constant, recorded values of 0.926 and 0.818 respectively. It demonstrates that the independent variables of the bank's internal control variables explained 92.6% and 81.8% variability in the bank's profitability of ROA and ROE, at a 95% confidence level. The outcome of the findings shows that other factors affecting the bank's profitability were responsible for only 7.4% and 19.2% of the bank's profits variability of ROA and ROE. The R-square value illustrates that the regression predictions perfectly fit the data and that the results were 92.6% and 81.8% significantly reliable.

The estimated result for the Adjusted R-squared as an appropriate tool for evaluating model fit which was the proportion of variance between the dependent variable of ROA and ROE and all the internal control variables in the model, recorded a value of 0.870 and 0.681 respectively (Torres-Reyna, 2007). The outcome was an indication that internal control variables predicted and accounted for 87.0% and 68.1% of the variation in the bank's profitability of ROA and ROE. Thus,

measuring the entire strength of the relationship between ROA and ROE and the explanatory internal control variables in the model. The results show that other explanatory variables also affect the profitability of the bank, not factored into the regression model, contributing to 13% and 21.9% of the bank's financial performance (Torres-Reyna, 2007). The estimated standard errors of 0.337 and 4.335, which was very close to zero in terms of ROA, show the goodness and the fitness level of the model.

#### *4.3.4.2.1.2 Analysis of Variance*

**Table 4.20a:**

*ANOVA of ROA and Internal Control Variables*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 11.379 | 6 | 1.896 | 16.662 | 0.000[b] |
| | Residual | 0.911 | 8 | 0.114 | | |
| | Total | 12.289 | 14 | | | |

a. Dependent Variable: ROA

b. Predictors: (Constant), EQ, AQ, CA, ME, L, SMR

Source: Research Findings 2022

**Table 4.20b:**

*ANOVA of ROE and Internal Control Variables*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 674.069 | 6 | 112.345 | 5.979 | 0.012[b] |
| | Residual | 150.331 | 8 | 18.791 | | |
| | Total | 824.400 | 14 | | | |

a. Dependent Variable: ROE

b. Predictors: (Constant), EQ, AQ, CA, ME, L, SMR

Source: Research Findings 2022

Tables 4.20a and b depict the ANOVA results relating to the population parameters of CA, AQ, ME, EQ, L and SMR show significance level p-values of 0.000 and 0.012, which fall below the critical value of 0.025, at a 5% level of significance. It means that the predictor variables were statistically significant at a 95% confidence level and meaningful to the model. The P-value of the F-test of the overall significance test is less than the significance level, meaning that the statistical data was important in concluding by rejecting the null hypothesis and accepting the alternative hypothesis and that the model provides a better fit. As a result, the R-squared value is shown to be significantly different from zero. It reveals that there was a statistically significant relationship between the variables, as the independent variables possess the ability to predict the bank's profitability (ROA and ROE).

The F values of 16.662 and 5.979 at a 5% level of significance, which was above the F critical value of 3.23, at a significance level of 0.05, show the significant nature of the overall model. In that, there was a significant relationship between the bank's internal control variables and the profitability of the bank (ROA and ROE). This means that the null hypothesis should be

rejected because there is strong evidence in the sample data that there is a statistically significant relationship between the internal control independent variables and the bank's profitability (ROA and ROE) (Minitab.com, 2019). The estimated regression sum of squares values of 11.379 and 674.069, which were very close to the total sum of squares, with a residual sum of squares values of 0.911 and 150.331, in terms of the measurement of the variation of the model errors, describes how the regression model represented the fitted model. A lower residual sum of squares was an indication of how the regression model better explained the data (CFI 2015 & Kohler et al., 2009).

#### *4.3.4.2.1.3 Regression Coefficients*

**Table 4.21:**

*Regression Coefficients of the Internal Control Variables*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std Error | Beta | | |
| 1 | (Constant) | -13.422 | 5.844 | | -2.297 | 0.051 |
| | CAR | 0.043 | 0.087 | 0.127 | 0.495 | 0.634 |
| | AQ | 0.188 | 0.064 | 0.393 | 2.954 | 0.018 |
| | ME | 0.098 | 0.064 | 0.539 | 1.531 | 0.164 |
| | EQ | 0.300 | 0.053 | 1.225 | 5.674 | 0.000 |
| | LR | -0.016 | 0.017 | -0.134 | -0.957 | 0.367 |
| | SMR | 0.027 | 0.013 | 0.339 | 2.088 | 0.050 |

a. Dependent Variable: ROA, b. Predictors: (Constant), EQ, AQ, CA, ME, LR, SMR

Source: Research Findings 2022

The summary of the regression coefficients is indicated in Table 4.21. The study model outcome shows that restricting and limiting all the independent internal control variables to zero means that the profitability of the bank (ROA) recorded a constant and an intercept coefficient value of -13.422 for the years under review, with a standard error of 5.844. The intercept coefficient value of -13.422 for the years under review shows an inverse relationship between the independent and dependent variables. The study outcome by holding all the other factors constant and to zero, except capital adequacy recorded unstandardized coefficients and standardized coefficients values of 0.043 and 0.127, with a standard error of 0.087. It shows that a unit rise in capital adequacy leads to a 0.043 (4.3%) or 0.127 (12.7%) rise in the bank's profitability (ROA).

The analysis again shows that asset quality recorded unstandardized and standardized coefficient values of 0.188 and 0.393, with a standard error of 0.064, which is an indication that a unit increase in asset quality leads to a 0.188 (18.8%) or 0.183 (39.3%) increase in the profitability of the bank (ROA), all other things being constant. The analysis further shows that management efficiency, which recorded unstandardized and standardized coefficient values of 0.098 and 0.539 with a standard error of 0.064, is an indication that a unit increase in management efficiency leads to a 0.098 (9.8%) or 0.539 (53.9%) increase in the bank's profitability (ROA).

In the same analysis, earning quality, which recorded unstandardized and standardized coefficient values of 0.300 and 1.225, with a standard error of 0.053, was an indication that a unit increase in earning quality led to a 0.300 (30%) or 1.225 (122.5%) rise in the bank's profitability (ROA). However, that of liquidity, which recorded unstandardized and standardized coefficient values of -0.016 and -0.134, with a standard error of 0.017, shows that a unit rise in liquidity leads to a -0.016 (1.6%) or -0.134 (13.4%) fall in the bank's profitability (ROA). Finally, sensitivity to market risk, which recorded unstandardized and standardized coefficient values of 0.027 and 0.339, with a standard error of 0.013, indicates that a unit increase in sensitivity to market risk leads to a

0.027 (2.7%) or 0.339 (33.9%) increase in the profitability of the bank (ROA), holding other factors constant.

From the model's data outcome, in Table 4.18, the p-values of AQ, EQ, and SMR were less than 0.050, showing the significant nature of all the variables. While CA, LR and ME were greater than 0.050, showing the nonsignificant nature of all the variables. All the variables positively correlated with the profitability of the bank (ROA), except the management efficiency and liquidity ratio. At a 95% confidence level, the t-values of the model coefficients were different from 0 but greater than the critical t-value of 1.96, except for the capital adequacy, management efficiency and liquidity ratio (Torres-Reyna, 2007). However, the P values of ROE are greater than the significance level with that of the null hypothesis supported, and the model provides no better fit.

Earnings quality and asset quality were the most important at a 0.050 significant level, with 5.67 and 2.95 coefficients, respectively. Followed by sensitivity to market risk and management efficiency, with values of-2.08 and 1.53, respectively. Liquidity ratio and capital adequacy were the least, recording values of-0.957 and 0.495, respectively (Torres-Reyna, 2007). The data in Table 4.21, consisting of the coefficients of regression is employed in the development of the study model of; $Y = \beta0 + \beta1X1+\beta2X2+\beta3X3+\beta4X4+\beta5X5+\beta6X6$. Where;

β0 - Constant variable or Y-intercept,

β1 - coefficient of capital adequacy,

β2 - coefficient of asset quality,

β3 - coefficient of management efficiency,

β4 - coefficient of earnings quality

β5 - coefficient of liquidity

β6 - coefficient of sensitivity to market risk

Y – Return on asserts

Thus, given the study model of ROA = -13.442+0.043X1+0.188X2+0.098X3+0.300X4-0.016X5 +0.027X6.

#### *4.3.4.2.2 Correlation Matrix Analysis of the Results*

The firm's specific internal control variables in terms of CAMELS analysis, as depicted in Table 4.8 (Appendix A), generated mixed results, as in the case of return on assets and equity. The capital adequacy ratio (CAR), which measures the return on assets and return on equity by using total expenses of the risk-weighted asset as a proxy, recorded values of 0.084 and -0.306, respectively. It shows that capital adequacy has a very weak and weak, significant positive and negative correlation with return on assets and equity. The result shows that a percentage increase in capital adequacy leads to an 8.4% and a 30.6% rise in return on assets and a fall in return on equity respectively. The levels of significance of 0.767 and 0.267 were found to be statistically nonsignificant at a 5% significance level, above the critical value of 0.025, with a 2-tailed test at a 95% degree of freedom.

Assets quality (AQ), which is the ratio of non-performing loans to loans and advances as a proxy, recorded correlation coefficient values of 0.020 and -0.136 to return on assets and equity. The statistical outcome was an indication that there is a very weak positive and negative significant correlation between asset quality and return on assets and equity. An increase in asset quality leads to a 2.0% and 13.6% increase and decrease in return on assets and equity respectively. The levels of significance of 0.944 and 0.629 were found to be statistically nonsignificant at a 5% significance level, above the critical value of 0.025, with a 2-tailed test, at a 95% confidence interval.

In terms of management efficiency (ME), with total expense-to-total income ratio as a proxy, recorded values of -0.719 and -0.558 for return on assets and equity respectively. The result of the study shows that management efficiency correlated highly negatively and significantly with the

return on assets and equity. A percentage change in management efficiency leads to a 79.1% and 55.8% change in return on assets and equity respectively. The levels of significance of 0.003 and 0.030 were statistically significant at a 1% and 5% significance level, below the critical value of 0.025, with a 2-tailed test, at a 95% degree of freedom.

Earnings quality (EQ), in terms of net profit margins, which measures net profit after tax to total income as a proxy, recorded values of 0.844 and 0.729. Showing that there was a strong, positive and significant relationship between earnings and return on assets and return on equity. A unit increase in earning quality led to an 84.4% and 72.9% increase in return on assets and equity respectively. The levels of significance of 0.000 and 0.002 were found to be statistically significant at 1% significance levels below the value of 0.025, with a 2-tailed test, of 95% degree of freedom.

Liquidity measurement (LM), which relates to the measurement of total cash to total deposit as a proxy, on return on assets and equity recorded values of -0.245 and -0.339. Showing that liquidity measurement and return on assets and return on equity correlated negatively and significantly. A unit increase in the bank's liquidity results in a decrease in both return on asset and equity by 24.5% and 33.9% respectively. The level of significance of 0.389 and 0.141 was found to be statistically nonsignificant at a 5% significance level, above the critical value of 0.025, with a 2-tailed test, at a 95% degree of freedom.

Sensitivity to market risk with total loans and advances to total deposits as a proxy, recorded values of 0.252 and 0.040. It shows that sensitivity to market risk and the return on assets and equity are weakly positively and significantly correlated. The level of significance of 0.365 and 0.888 was found to be statistically nonsignificant at a 5% significance level, above the critical value of 0.025, with a 2-tailed test, at a 95% degree of freedom.

### 4.3.5 Analysis of the Bank's Profitability of ROA and ROE

### 4.3.5.1 Descriptive Statistical Analysis of the variables

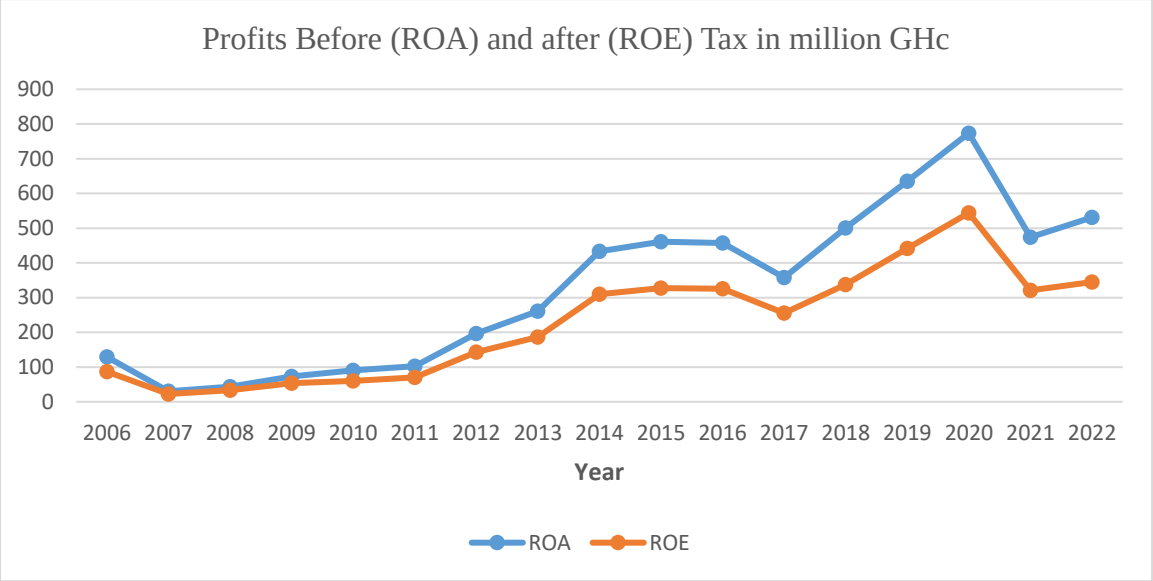
The descriptive statistical analysis of the bank's profitability describes the salient features of the study results, through graphical analysis, measurement of central tendency and variability.

#### 4.3.5.1.1 Graphical Analysis of the bank's profitability (ROA and ROE)

##### *4.3.5.1.1 The ROA and ROE trend in quantum of money values*

**Figure 4.6:**

*The bank's profitability (ROA and ROE) in GHc Million*




Source: Research Findings, 2022

In analysing the profitability performance of the bank, as indicated in Figures 4.1 and 4.6, the dependent variables of profit before tax (ROA) and profit after tax (ROE), trended upwards, consequently in the same positive direction as the predictors, except in 2017. The upward trend occurred after profit before tax (ROA) and profit after tax (ROE) dropped from GHc129.30m and GHc86.36m in 2006 to GHc30.18m and GHc22.35m in 2007, respectively. Following that, profit before tax (ROA) and profit after tax (ROE) increased significantly to GHc773.74m and

GHc543.88m, respectively, in 2020. Profit before tax and profit after tax increased moderately from 2007 to 2011 and, thereafter, increased significantly in 2013.

There was a sharp increase in ROA and ROE in 2014 and moderated in 2015 and became almost constant, in 2016 and thereafter, and decreased significantly in 2017. As shown by the line graph in Figure 4.2 below, profit before tax (ROA) and profit after tax (ROE) increased significantly, almost at a constant rate, from GHc357.76m and GHc255.38m in 2017 to GHc500.97m and GHc337.59m in 2018, again to GHc635.03m and GHc441.95m in 2019. It finally increased to GHc773.74m and GHc543.88m in 2020, and GHc474, 929 and GHc320, 455 in 2021 and GHc530, 708m GHc344, 960 in 2022 respectively. As shown in Figure 4.6.

The performance resulted from strong growth in corporate and investment banking, digital and SWIFT transactions, cash management, increased trade business, loans and liquidity products, and net trading income. Consumer banking, with key drivers of current accounts and savings accounts, consumer loans, and payment products, recorded a growth rate of 26% in 2020, with total revenue of GHc570m. The bank's customer deposits recorded a growth rate of 42% in 2020 of GHc5b compared to GHc3.5b in 2019 despite COVID-19 pandemic restrictions. Again, customer loans recorded a growth rate of 10.6%, made up of GHc913m in 2020, with loan revenue growing by 53% to GHc132.7m in 2020 from GHc86.6m in 2019 (Ecobank Ghana, 2020) as depicted in Table 4.4 and Figures 4.1 and 4.6.

In analysing the graphical relationship between the predictor variables and the outcome variables, it is evident from Figures 4.1 and 4.2 that there was a positive correlation. The analysis shows that there exists a significant and strong positive correlation between government expenditure, tax revenue, money supply (M2+) and GDP growth and the profitability of EBGL, in terms of profit before tax (ROA) and after-tax (ROE). Affirming that, there was a very strong positive influence on the response variables, resulting from the explanatory factors. Within the

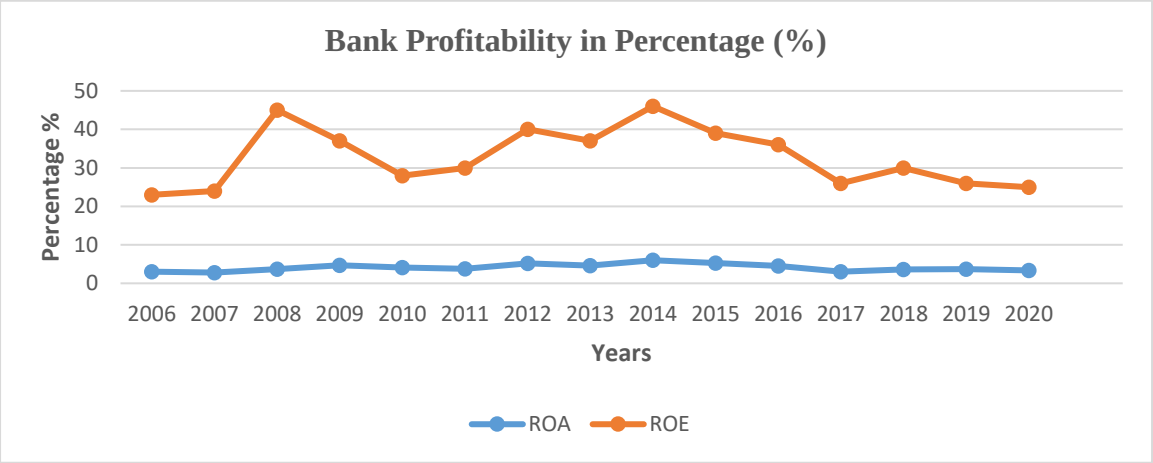
years under review, an increase in the predictor variables, in effect, causes the profitability (ROA and ROE) of EBGL to increase, in the same direction. Implying that, the higher the rise in the value of the predictor variables, the greater the increase in the values of the bank's profitability.

Except in 2006 and 2017, where an increase in the predictor variables had an inverse relationship with the outcome variables. The independent variables increased marginally from 2006 to 2007 and from 2016 to 2017. While the dependent variables decreased significantly in response, the bank's profits before tax and after tax decreased significantly, from GHc 129.30m to GHc 86.36m and from GHc 30.18m in 2006 to GHc 22.35m in 2007, and from GHc 457.18m to GHc 357.76m and from GHc 325.59m to GHc 255.38m in 2016 to 2017.

### *4.3.5.2 The ROA and ROE trend in percentage (%)*

**Figure 4.7:**

*Ecobank Ghana Profitability Trend in Percentages*




Source: Author's computation 2022

The profitability performance of the bank is as indicated in Figures 4.1 and 4.7. The percentage values of the dependent variables of profit before tax (ROA) and profit after tax (ROE) fluctuated within the period under review. The bank's profitability in terms of ROA and ROE has also shown a proportionate increase year after year. ROA recorded a growth rate of 3.00% in 2006 and a growth rate of 3.40% in 2020. It fluctuated between 2.80% in 2008 the lowest recorded growth rate and 6.00% in 2014 the highest recorded growth rate. ROE also recorded a growth rate of 23.00% in 2006 and 25.00% in 2020, with the lowest recorded growth rate being 23.00% in 2006 and the highest recorded percentage increment being 46.00% in 2014.

In summarising the data outcomes, ROE recorded 44.15% in 2008 and inflation recorded 18.90% in 2008, with the money supply also recording its highest of 40.00% in 2008, demonstrating a positive and significant correlation. However, the total government spending growth rate was 20.3% of GDP in 2017, amounting to GHc52.0 billion, down from 30.3% in 2016.

With recurrent expenditure recording 87.8% of total payments, consisting of 29.7% of interest payments and 70.3% of non-interest expenditure. The government's budget operations recorded a deficit of 5.9% of GDP financed from domestic sources.

That same year, total government receipts recorded 20.2% of GDP of GHc41.5b with tax revenue of 77.7%, amounting to GHc32.2b. That same year, GDP growth increased significantly from 3.5% in 2016 to 8.1% in 20217, despite a decrease in broad money supply (M2+), reserve money, and policy rates. The bank's profitability was not exceptional, as ROA and ROE also dropped significantly from 4.50% to 3.00% and 36.00% to 26.00% in 2016 and 2017 respectively (Bank of Ghana, 2021).

#### 4.3.5.1.2 Measures of Central Tendency and Variability

The study generated certain descriptive statistical values of central tendency and variability, giving an overall average description of the bank's profitability in ROA and ROE. The key summary of the descriptive statistical measurements captured in the model includes the mean, standard deviation, variance, standard error and minimum and maximum values. The statistical average indicators of the study variables calculated are shown in Table 4.8 (Appendix B).

##### *4.3.5.1.2.1 The Bank's Profitability of ROA and ROE*

The analysis of the bank's profitability relates to ROA and ROE. From Table 4.8, it was apparent that ROA recorded an average mean value of 4.0933, with standard deviation and variance recording values of 0.93691 and 3.380, respectively. The minimum and maximum values recorded were 2.80 and 6.00. The mean value of 4.0933 indicates the extent to which ROA relates to the average of the years under review. The recorded standard deviation measurement value of 0.93691, which was less than one, shows that the values of the ROA data set were lowly spread out over a large range of values and further from the mean value obtained. There was also a significant variation in the various years' ROA due to the large value of variance, which significantly varied

from the mean value of 25 for the years under review, with a wide range of figures. The standard error recorded a mean value of 0.24191, which was relatively small and served as an indication that the sample mean was close to the true population mean (DataStar, 2020).

The ROE for the period under review from Table 4.8 recorded a mean value of 32.8000 with minimum and maximum values of 23.00 and 46.00. The variance for the period recorded a value of 3.592, with a standard deviation value of 7.67370. The standard deviation of 1.89533 shows that the years' data set figures are spread out widely apart and over a large range of values from the mean value. Resulting from the fact that the recorded standard deviation value was greater than 1. The variance for the period recorded a value of 3.592, indicating that there was narrow significant variability in the distribution of values of the various years' ROE and varied less significantly from the mean value for the 13 years under investigation (Westfall, 2020). The standard error recorded a value of 1.98134, which was relatively large. It indicates that the sample mean value was relatively far from the true mean of the population (DataStar, 2020).

## 4.4 Evaluation of Results

Evaluation of the study results aims at exploring and interpreting whether and how the fiscal and monetary policy tools, the macroeconomic variables and the bank internal control variables affect the profitability of the bank within the banking industry. The evaluation of the results looks at the significant contribution of the variables to practice and literature. The study evaluation depended on each research question and centred on descriptive and inferential statistical analysis.

### 4.4.1 Evaluation of the Fiscal and Monetary Policy Tools

The evaluation of the results of the fiscal and monetary policy tools is analysed in terms of the research question. This evaluation highlighted the descriptive and inferential statistical results.

#### *4.4.1.1 Descriptive Statistics Analysis*

##### 4.4.1.1.1 The Evaluation of the Fiscal and Monetary Policy Tools

The result indicates that fiscal policy tools of government spending and taxation were the most salient tool affecting the financial performance of Ecobank. Government spending and taxation show an increasing trend in terms of an upward adjustment over the entire period under investigation. An increase in taxation to a very great extent affects the lending behaviour of Ecobank. The result builds on existing evidence of literature, suggesting that despite the fiscal consolidation efforts and the IMF intervention support programmes; there has been an unsustainable accelerated growth of the fiscal deficit with an average of 6.5% of GDP. Reveals the weaknesses in budgetary policy planning, implementation, monitoring and evaluation and the unfavourable financial management practices in the economy (IEA Ghana, 2015).

The findings again revealed that monetary policy tools of reserve requirement and the bank discount rate show an increasing trend and that to a very great extent negatively affects the lending behaviour of Ecobank in Ghana. While the open market operation fluctuated and to a very great extent positively affect the lending behaviour of Ecobank. The result supports the IEA Ghana (2015) statement that the monetary aggregation has been on the ascendency. The accelerated growth in money supply through the expansionary monetary policy implemented by the government is an indication that there have not been any important and proper control measures implemented and a failure on the part of the government to implement effectively its enumerated control measures, which exert a strong positive effect on inflation and interest rates. Monetary

policy deals with the control of the money supply in the economy to influence interest rates and inflation by lowering inflation and keeping it stable (Lioudis, 2019).

#### *4.4.1.1.2 The Evaluation of the Expansionary Fiscal and Monetary Policy Results*

The outcome revealed that the Government of Ghana was highly implementing an expansionary fiscal and monetary policy intervention as against contractionary fiscal and monetary policy intervention in the economy. Supporting the Keynesian theoretical proposition relating to the government policy interventions of stabilization of an economy, by increasing spending to prime the pump with a corresponding decrease in taxes. The essence is stimulating aggregate demand in the short run, rather than prices and interest rates and recovering the economy from economic recession to a successful state of economic growth (Chappelow, 2019).

The expansionary monetary policy intervention was undertaken through the decreasing of discount rates, reserve requirements and the purchases of bonds and treasury securities through open market operations. The essence is increasing the excess liquidity reserves to commercial banks for money creation and to cause the cost of loanable funds to fall thereby increasing investment, productivity and consumer durable spending (Pettinger, 2017). The implementation of the expansionary fiscal and monetary policies is to revamp the economy by influencing corporations to increase their borrowing at a cheaper rate toward risky assets due to the reduction in the cost of borrowing. It also affects microeconomics factors manifesting in businesses enjoying higher economies of scale by expanding businesses and employing more workers, thereby increasing the well-being and the standard of living in the economy (Segal, 2021).

#### *4.4.1.1.3 The Evaluation of the Contractionary Fiscal and Monetary Policy Results*

The impact result of the contractionary fiscal and monetary policy revealed that contractionary fiscal policy by the Government of Ghana in effect decreased money supply through instruments such as a decrease in expenditure and subsidies and an increase in taxation. The result supports

existing economic theory because contractionary fiscal policy reduces expenditure, transfers payments and/or raises the level of taxes to contract the economy by reducing the quantity of money in circulation from individuals and businesses to spend to curtail inflation (Amadeo, 2018).

The finding again revealed that contractionary monetary policy in effect decreased money supply through instruments such as selling government bills and bonds, increasing reserve requirements and increasing bank discount rates. It significantly affects and causes interest rates to rise and directly restricts the amount of money in circulation and the universal banks' credit lending in the economy. Confirming the primary macroeconomic objective of contractionary monetary policy to increase interest rates, reduce investment in business cycle expansion, aggregate demand, and the overall growth of GDP of a nation's output and reduce the ever-rising inflationary gap and liquidity (Amadeo, 2019).

The result further revealed that the effect ends up minimizing inflation and promoting economic growth in the country. This outcome is in line with economic theory as contractionary monetary policy in effect; reduces economic growth and inflationary pressures and decreases the quantity of money supply. It significantly causes interest rates to rise and directly restricts the amount of money in circulation and the banks' credit lending in the economy (Amadeo, 2019).

#### 4.4.1.2 Inferential Statistics Results

The evaluation of the results is based on the inferential statistical analysis tools of regression and correlation analysis, in terms of the overall implication of the fiscal and monetary policy tools and the individual tools of government spending, taxation and money supply.

##### *4.4.1.2.1 The Overall Evaluation of the Fiscal Policy Tools Results*

The overall significant result of the fiscal policy tools suggested that the adjusted R-squared values of 0.421 and 0.383 shows that the explanatory variables of fiscal policy tools predicted 42.1% and 38.3% of the variation in the bank's profit of return on assets and equity respectively and its

significant liableness. In addition, the estimated standard errors of 0.71313 and 6.02999, which was far from zero, certify that the goodness and the fitness level of the model were poor. The P values of 0.015 and 0.022, and the F-test values of 6.083 and 5.336 of the overall significance tests of ROA and ROE, respectively, are less than the significance level, meaning that the null hypothesis is rejected and that the model provides a better fit. As a result, showing that the variables as a group were jointly significant (Torres-Reyna, 2007).

The p-values of 0.024 and 0.022 show the goodness of fit of the regression model that the F value and the adjusted R-squared value are statistically significantly different from 0. Provides enough evidence in concluding that the model was statistically significant as the fiscal policy tools predicted and explained the bank's profit of ROA and ROE. The result confirmed that there exists a positive and statistically significant relationship between the fiscal policy tools and the bank's profitability of ROA and ROE. This indicates the rejection of the null hypothesis and the acceptance of the alternative hypothesis (Ogee et. al., 2015).

#### *4.4.1.2.2 The Evaluation of Government Spending and Taxation Results*

The study outcome of government spending and taxation through the standardized coefficient shows a diverse relationship between individual policy tools and ROA. The result of government spending standardized coefficient of 0.354 and 0.423 with standard errors of 0.069 and 0.584, was an indication of a moderate positive relationship between government spending, and ROA and ROE respectively. In that, a unit rise in government spending leads to a 35.4% and 42.3% rise in the profitability of the bank (ROA and ROE). However, the t-values of 1.278 and 1.479, and p-values of 0.225 and 0.165 shows that government spending was less different from zero and statistically nonsignificant to explain the variation in ROA and ROE (Torres-Reyna, 2007).

The correlation findings of government spending values of 0.639 and 0.643 for return on assets and return on equity reveal that there exists a strong positive correlation between government

spending and the bank's profitability of ROA and ROE. An increase in government spending by a unit leads to a 63.9% and 64.3% rise in return on assets and equity respectively. The level of significance of 0.010 and 0.010 was found to be statistically significant at a 5% significance level.

Given enough evidence that the correlation coefficient of government spending is significantly different from zero, confirming the existence of a significant linear relationship between government spending and return on assets and return on equity. The outcome is contrary to the hypothesized relationship of the null hypothesis but in support and acceptance of the alternative hypothesis, of the existence of a strong positive and statistically significant relationship between government spending and return on assets and return on equity.

The outcome further indicates that taxation recorded standardized coefficient values of 0.420 and 0.325 with standard errors of 0.126 and 1.065, showing the goodness of fit and an indication of a moderate positive relationship between taxation, and ROA and ROE respectively. A unit increase in taxation leads to a 42.0% and 32.5% increase in the profitability of the bank (ROA and ROE). The t-values of 1.518 and 1.138, and p-value of 0.155 and 0.277 reveal that the coefficient of taxation is significantly not different from 0 and statistically nonsignificant in explaining the variation in ROA and ROE.

The correlation result of taxation, recording values of 0.660 and 0.612 for return on assets and return on equity, revealed that there exists a strong correlation between taxation and the bank's profitability of ROA and ROE. The level of significance of 0.007 and 0.015 for ROA and ROE were found to be statistically significant at a 5% significance level. The outcome demonstrates that an increase in taxation by a unit leads to a 66.0% and 61.2% rise in return on assets and equity respectively.

Giving evidence that the correlation coefficient of taxation is significantly different from zero. Concluding on the rejection of the null hypothesis and certifying the existence of a strong

positive and statistically significant relationship between taxation and return on assets and hence the acceptance of the alternative hypothesis. Except for return on equity, which was statistically nonsignificant at 5%.

Government spending and taxation coefficients recording a strong positive and statistically significant relationship reveal the expected patterns and relationships among the variables. The positive association of government spending with the bank's profitability of ROA and ROE is expected, as it builds on existing theoretical evidence. The tax finding was an unexpected result, as taxation is a mechanism employed in generating a quantum of revenue from co-operating entities as a direct or indirect liability for economic growth and development. Expected to have a negative or an inverse relationship with the profitability of the bank.

### 4.4.2 Evaluation of Macroeconomic Variables Results

The evaluation of the macroeconomic variables results was analysed in terms of the research question. This evaluation highlighted the descriptive and inferential statistical results.

#### *4.4.2.1 Descriptive Statistical Results*

The result indicated that interest rate changes to a very great extent affect the lending behaviour of Ecobank to its customers and the borrowing behaviour of the bank customers in Ghana. Changes in interest rates influence effective demand through investment, consumption, and money demand via investment portfolio, credit, exchange rates, and expectations, supporting asset pricing theory. An investment portfolio is dependent on investment opportunity cost, assets' expected returns, and cost of carrying (Terra and Arestis, 2017). The interest rate effect is a result of it being the price of money borrowed and purely determined by monetary factors as a monetary phenomenon. Making monetary policy very crucial in influencing economic activities such as the rate of interest, output and income and the aggregate demand (Muley, 2019).

The graphical result of the macroeconomic variables indicates that the total value of GDP growth went up very significantly. Affirming theoretical principles that the yearly percentage growth rate of real GDP is very crucial for every economy as it indicates the performance of the nation's economy. Serves as an indicator in measuring the country's standard of living (Banton, 2019). It builds on existing evidence that the impacts of macroeconomic variables such as GDP, inflation rates, interest rates, and exchange rates through fiscal and monetary policy influence the profitability of the banks. Conforming to the study result which indicates profit before tax (ROA) and the profit after tax (ROE) trending upwards consequently in the same positive direction as the predictors. The determinants of commercial banks' profits, specifically economic growth, statistically and significantly influence and affect the bank's profitability (Adeusi et al., 2014).

#### *4.4.2.2 Inferential Statistical Analysis Results*

The researcher in evaluating the macroeconomic variables through the inferential statistical analysis employed regression statistical tests and correlation analysis. The evaluation relates to the overall result of the macroeconomic variables and the individual macroeconomic variables of GDP growth, interest rate and inflation rate.

##### 4.4.2.2.1 The Evaluation of the Overall Macroeconomic Variables Results

The overall significant result of the adjusted R-squared value of 0.478 indicates that the macroeconomic variables of GDP growth and inflation rate predicted 47.8% of the variation in the bank's profitability (ROE), showing that the result was 47.8% significantly reliable. The result confirmed that there exists a strong positive relationship between the macroeconomic variables and the bank's profitability (ROE). The estimated standard error of 5.5431, which was far from zero, signifies that the goodness of fit of the model was poor. The F value of 7.415, which was greater than 1 however, rises above the F critical value of 3.23 at a 5% level of significance, showing that

the variables as a group were different from zero and jointly significant for the overall model (Torres-Reyna, 2007).

The p-value of 0.008 at a 99% confidence level reveals that there is a statistically significant relationship between the macroeconomic variables and the bank's profitability (ROE) and that the macroeconomic variables are able to predict the bank's profitability. The p-value of 0.008 and the F-test value of 7.415 of the overall significance tests are less than the significance level, which means that the null hypothesis is rejected and that the model provides a better fit. As a result, showing that the variables as a group were jointly significant. The result was able to meet the expectation of the study by showing that there was a positive and statistically significant relationship between the macroeconomic variables of GDP growth and inflation and the bank's profitability (ROE). They do fit with economic theory, as the overall macroeconomic variables were able to influence the bank's profitability (ROE) positively and significantly.

#### *4.4.2.2.2 Evaluation of GDP Growth Results*

The GDP growth, which recorded a standardized coefficient value of 0.291, with a standard error of 0.502 indicating the goodness of fit in the regression analysis, shows that there was a weak positive relationship between GDP growth and return on assets. Signifying that a unit rise in GDP growth leads to a 29.1% increase in the profitability of the bank (ROA). The t-value of 1.387 and p-value of 0.191, reveal that the coefficient of GDP growth was less different from zero and statistically nonsignificant in explaining the variation in ROA (Torres-Reyna, 2007).

The correlation analysis of GDP growth measuring the strength of the economy recorded values of -0.164 and -0.026 in terms of return on assets and return on equity. It signifies that GDP growth was weakly negatively correlated to the bank's profitability of return on assets and equity. A unit increase in GDP growth leads to a decrease of 16.4% and 2.6% in return on assets and return on equity respectively.

The significance level of 0.559 and 0.926 for the p-value was statistically nonsignificant, as the correlation coefficient was significantly not different from zero. It supported the hypothesized relationship of the null hypothesis. Reveals insufficient evidence in concluding that there exists a significant linear relationship between GDP growth and the bank's profitability of ROA and ROE. Suggesting GDP growth was not substantial enough in affecting the bank's profitability. The result is very surprising as principles of economic theory show that GDP growth and revenue positively correlated, thus unable to build on the existing economic theory.

#### *4.4.2.2.3 The Evaluation of the Inflation Rate Results*

The outcome of the inflation rate, which recorded a standardized coefficient value of 0.808, with a standard error of 0.445, was close to zero showing the goodness of fit. It indicates that there exists a positive relationship between the inflation rate and ROE. This signifies that a unit rise in the inflation rate leads to an 80.8% rise in the bank's profitability (ROE). The t-value of 3.849 and p-value of 0.002 demonstrates that the coefficient is different from zero and statistically significant in explaining the variation in ROE (Torres-Reyna, 2007).

The correlation analysis result of the inflation rate recorded values of 0.405 and 0.654 with return on assets and return on equity. Indicating that there is a moderate and strong positive and significant correlation between the inflation rate and return on assets and equity. This shows that a percentage increase in the inflation rate leads to an increase in return on assets and return on equity by 40.5% and 65.4% respectively.

The p-value of 0.004 for ROE was found to be statistically significant at a 1% significance level except for the p-value of 0.100 for ROA, which was statistically nonsignificant. Give enough evidence that the inflation rate coefficient was significantly different from zero and thus conclude the existence of a statistically significant linear relationship between inflation rate and return on equity.

While the p-value of 0.100 for ROA was statistically insignificant, portraying that the outcome does not reveal compelling evidence of a strong positive and statistically significant correlation between the inflation rate and return on equity. Suggesting that the inflation rate is substantial enough in affecting the bank's profitability. The result of the inflation rate is very consistent with economic principles and theory, showing that the inflation rate and revenue correlated positively. The results, therefore, build on existing economic theory.

### 4.4.3 Evaluation of the Internal Control Variables Results

The evaluation of the internal control variables results was analysed in terms of the research question. This evaluation highlighted the descriptive and inferential statistical results.

#### *4.4.3.1 Descriptive Statistical Results*

The distribution analysis of internal control variables is done with the application of the CAMELS analysis. Debt to capital ratio is rated as the most used rate measurement ratio of capital adequacy ratios by Ecobank, serving as a proxy for the measurement of capital adequacy. Debt-to-equity ratio relates to the value measurement of the Debt capital such as the company's current and long-term liabilities including accounts payable, accrued expenses, mortgages, and long-term leases a company employs in comparison to the value of equity capital employed by the company such as shareholders' equity and companies retained earnings (Ferrouhi, 2014).

In terms of asset quality performance, Ecobank indicated the net non-performing asset to net loan and advance as the best measure in assessing its credit quality performance in Ghana. It is loan loss provisions to total loss serving as a proxy for the measurement of asset quality. The assessment is based on several factors such as portfolio diversification, credit risks regulations and efficient utilization operations (Ferrouhi, 2014),

In determining which measure Ecobank mostly used to assess its management operating efficiency performance in Ghana, the expense to total income was rated as the most operating efficiency measurement tool. Return on equity is rated as the best measurement ratio of profitability performance employed by Ecobank. Identifying the most used liquidity ratio in measuring the performance of Ecobank in Ghana envisaged that Ecobank employed liquid assets to deposit to measure its liquidity performance.

### *4.4.3.2 Inferential statistical analysis Results*

The researcher in evaluating and analysing the results of the internal control variables through the inferential statistical analysis used the regression statistical tests and the correlation analysis. The evaluation of the results is based on the overall regression model of the internal control variables and the individual variables. The results of the individuals' specific internal control variables of the CAMELS analysis generated mixed results.

#### 4.4.3.2.1 The Evaluation of the Overall Internal Control Variables Results

The study result indicated that the firm's specific internal control variables recorded adjusted R-squared values of 0.870 and 0.681, an indication that 87.0% and 68.1% of the variation in the bank's profitability of ROA and ROE are predicted and accounted for by the explanatory internal control variables. The estimated standard error of 0.3374 of ROA (ROE 4.335) was very close to zero, showing the goodness and the fitness level of the model (Torres-Reyna, 2007).

The F-values of 16.662 and 5.979 at a 5% level of significance were greater than 1 and the p-values of 0.000 and 0.012 at a 95% confidence level show that the variables as a group are jointly statistically significant and different from zero indicating the significant nature of the overall model (Ogee et. al., 2015). Provides enough evidence in concluding that the study model is statistically significant as the independent variables of the firm's specific internal control variables predicted and explained the bank's profitability (ROA and ROE).

The results confirmed that there exists a positive and statistically significant relationship between the firm's specific variables and the bank's profitability (ROA and ROE). The P-value of the F-test of the overall significance test is less than the significance level, meaning that the null hypothesis is rejected and that the model provides a better fit. As a result, the R-squared value is shown to be significantly different from zero. This indicates the acceptance of the alternative hypothesis, as there is a positive and statistically significant correlation between the firm's specific internal control variables and ROA and ROE (Torres-Reyna, 2007).

#### *4.4.3.2.2 The Evaluation of the Capital Adequacy Ratio Result*

In analysing the relationship of the individual-specific variables of the control variables, the capital adequacy (CAR) outcome with a standardized coefficient value of 0.127 and a standard error value of 0.087, which was very close to zero, shows the goodness of fit, and an indication of a weak positive and significant relationship between capital adequacy and ROA. It signifies that a unit rise in capital adequacy leads to a 12.7% rise in the profitability of the bank (ROA). The t-value of 0.495 and p-value of 0.634 demonstrates that the coefficient of capital adequacy is less different from zero and statistically nonsignificant in explaining the variation in ROA (Torres-Reyna, 2007).

The correlation analysis result of the capital adequacy values of 0.084 and -0.306 to return on assets and equity indicates that there was a weak positive and negative correlation between capital adequacy ratio and return on assets and return on equity respectively. The result signifies that a percentage increase in capital adequacy ratio leads to an 8.4% and 30.6% increase and decrease in return on assets and equity. The p–values of 0.767 and 0.267 were found to be statistically nonsignificant at a 5% significance level. Given less evidence that the capital adequacy ratio correlation coefficient value is significantly different from zero and unable to conclude that there exists a significant linear relationship between capital adequacy and return on assets and equity.

The level of significance of the p–values of the data does not show any compelling evidence of the existence of a statistically significant correlation between capital adequacy and return on assets and return on equity. The capital adequacy data is unable to exhibit the chance-only explanation as shown by the overall model of a statistically significant relationship. However, the positive correlation of the result thus builds on existing evidence of theory, which shows that capital adequacy positively correlates to the bank's profitability. It demonstrates the good facility for significant improvement with the capacity of withstanding internal and external shocks, thus satisfying the Basel II Pillar 1 objective. Serves as an important indicator of the recapitalisation exercise concerning the core Tier 1 Capital measured as a going-concern capital of the banks.

#### *4.4.3.2.3 The Evaluation of the Asset Quality Results*

The result of the regression coefficient of asset quality (AQ) which recorded a standardized coefficient value of 0.393 with an estimated standard error of 0.064, which was very close to zero showing the goodness of fit, is an indication of a weak positive relationship between asset quality and return on assets. A unit increase in asset quality leads to a 39.3% increase in the profitability of the bank (ROA). The t-value of 2.954 and p-value of 0.018 reveal that the coefficient of asset quality was different from 0 at a 5% significance level and statistically significant in explaining the variation in ROA (Torres-Reyna, 2007).

The correlation result of assets quality values of 0.020 and -0.136 to return on assets and return on equity shows that there was a very weak positive and negative correlation between assets quality and return on assets and return on equity. The result indicates that a percentage increase in asset quality leads to a 2.0% and a 13.6% increase and decrease in return on assets and equity, respectively. The p-values of 0.944 and 0.629 were found to be statistically nonsignificant at a 5% significance level. Thus, giving less evidence that the correlation coefficient is significantly

different from zero, and unable to conclude the existence of a statistically significant linear relationship between asset quality and return on assets and return on equity (Ogee et al., 2015).

The level of significance of the p-value of 0.018 for the regression data does show compelling evidence of the existence of a positive and statistically significant correlation between asset quality and return on assets. It exhibited the chance-only explanation as shown by the overall model of the statistically significant relationship. However, the p-value of 0.944 and 0.629 for the correlation analysis which was far greater than the 5% significance level, do not show any compelling evidence of the existence of a statistically significant correlation between asset quality and return on assets and return on equity. Suggesting that asset quality is not substantial enough in affecting the bank's profitability.

The positive and the negative correlation of the results does not and does build on existing evidence of theory to ROA and ROE respectively, which shows that asset quality negatively correlates to the bank's profitability. Non-performing loans have a negative correlation with the bank's profitability and serve as an indicator of bank liquidation and bankruptcy (Abata, 2014).

#### *4.4.3.2.4 The Evaluation of the Management Operational Efficiency Results*

The finding of the management operational efficiency, which recorded a standardized coefficient value of 0.913, with a standard error of 0.064, which was very close to zero showing the goodness of fit, indicates that there is a strong positive relationship between management operational efficiency and return on assets. A unit increase in management operational efficiency leads to a 91.3% increase in the profitability of the bank (ROA). The t-value of 1.531 and p-value of 0.164 demonstrates that the coefficient of operational efficiency is not different from zero and statistically not significant in explaining the variation in ROA (Torres-Reyna, 2007).

The result of the correlation analysis on operational efficiency indicated that the recorded values of -0.719 and -0.558 to return on assets and equity was highly negatively and significantly

correlated with return on assets and equity. A percentage rise in operational efficiency through an increase in operational cost leads to a 71.9% and 55.8% decrease in return on assets and equity respectively. The level of significance of 0.000 and 0.030 was found to be statistically significant at a 5% significance level. Giving enough evidence that the correlation coefficient is significantly different from zero and thus concludes the existence of a statistically significant relationship between management operational efficiency and return on assets and equity.

The level of significance of the p–values of the correlation data contrary to the regression analysis p-value does show compelling evidence of the existence of a highly negatively and statistically significant correlation between operational efficiency and return on assets and return on equity. It exhibited the chance-only explanation as shown by the overall model of the existence of a statistically significant relationship. Incompetence emanating from the severity of management ineffectiveness in restoring safe banking operations causes operational efficiency to rise and profitability to fall (Odame-Gyenti, 2019).

#### *4.4.3.2.5 The Evaluation of the Earning Quality Result*

The regression analysis result of earning quality (EQ) recorded a standardized coefficient value of 1.225 with a standard error of 0.053 which was very close to zero showing the goodness of fit is an indication that there is a very high positive and significant relationship between earning quality and return on assets. A unit increase in earning quality leads to a 122.5% increase in the profitability of the bank (ROA). The t-value of 5.674 and p-value of 0.000 shows that earning quality coefficient is different from zero and is statistically significant in explaining the variation in ROA (Torres-Reyna, 2007).

The result of earnings quality of the correlation analysis recording values of 0.844 and 0.729 to return on assets and return on equity, shows that there was a strong positive and significant correlation between earnings quality and return on assets and return on equity. The result signifies

that a percentage increase in earnings quality led to an 84.4% and 72.9% increase in return on assets and equity respectively. The level of significance of 0.000 and 0.002 was found to be statistically significant at a 5% significance level. Giving enough evidence that the correlation coefficient of earnings quality is significantly different from zero and concludes the existence of a significant linear relationship between earnings quality and return on assets and return on equity. This outcome gives an impetus for further investigation as none of the researchers has made any assessment on this in their research (Ogee et. al., 2015).

The strong positive and statistically significant correlation between earnings quality and return on assets and return on equity build on existing theoretical evidence, in that the bank earnings quality positively correlated to return on assets and equity. The higher the return on assets the higher the efficiency of management and the bank's resources. A good percentage of earnings is an indication that the company is better off and doing a good job in utilizing its assets to generate revenue, therefore, measuring the efficient utilization of assets (Schönfeld, 2018).

#### *4.4.3.2.6 The Evaluation of the Liquidity Measurement Result*

The data on liquidity measurement recorded standardized coefficient values of -0.134 with a standard error of 0.017 was very close to zero showing the goodness of fit. Suggesting that there is a weak negative and significant relationship between liquidity measurement and return on assets. A unit rise in liquidity leads to a 13.4% fall in the profitability of the bank (ROA). The t-value of-0.957 and p-value of 0.367 depicts that, the coefficient of liquidity measurement is not different from 0 and statistically nonsignificant in explaining the variation in ROA. Indicating a negative and statistically nonsignificant relationship between liquidity and the profitability of the bank (Torres-Reyna, 2007).

Similarly, the correlation analysis outcome of liquidity measurement recorded values of -0.240 and -0.339 signifying that liquidity measurement correlated moderately negatively and

significantly with return on assets and return on equity. An increase in the bank's liquidity results in a decrease in both return on assets and equity by 24.0% and 33.9% respectively. The levels of significance of 0.389 and 0.141 were found to be statistically nonsignificant at a 5% significance level, giving less evidence that the correlation coefficients of liquidity are significantly different from zero. Thus, unable to conclude the existence of a statistically significant linear relationship between liquidity and the return on assets and return on equity. The result is consistent with the null hypothesis (Ogee et al., 2015).

The level of significance of the p–values of both the regression and the correlation analysis of the data, which were far greater than the 5% significance level, do not show any compelling evidence of the existence of a statistically significant correlation between liquidity measurement and return on assets return on equity. Suggesting that liquidity measurement is not substantial enough in affecting the bank's level of profitability. The liquidity measurement data was thus unable to exhibit the chance-only explanation as shown by the overall model of a statistically significant relationship.

However, the negative correlation of the results thus builds on existing evidence of the theory. Measured as the percentage of total assets financed by a company’s debt. Higher leverage leads to financial risk, pinning down the company to a stricter debt agreement, thereby restricting the growth opportunities and ability of the firm in paying or raising dividends. A high value indicates that the company is employing a greater amount of financial leverage, which increases its financial risk in the form of fixed interest payments, thereby lowering the profitability of the banks (Lan, 2018).

#### *4.4.3.2.7 The Evaluation of the Sensitivity to Market Risk*

The regression analysis outcome on sensitivity to market risk recorded a standardized coefficient value of 0.339 with a standard error of 0.013, which was very close to zero showing the goodness

of fit. It indicates that there is a very weak positive and significant relationship between sensitivity to market risk and the return on assets. A unit increase in sensitivity to market risk leads to a 33.9% increase in the profitability of the bank (ROA). The t-value of 2.088 and p-value of 0.050 reveal that the coefficient of sensitivity to market risk is different from zero and statistically significant in explaining the variation in ROA (Torres-Reyna, 2007).

Sensitivity to market risk in terms of correlation analysis recorded values of 0.252 and 0.040 to return on assets and equity, showing that sensitivity to market and return on assets and equity were weakly positively correlated. Shows that a percentage increase in sensitivity to market risk leads to a 25.2% and 4.0% increase in return on assets and return to equity. The levels of significance of 0.365 and 0.888 were found to be statistically nonsignificant at a 5% significance level. Given less evidence that the correlation coefficients of sensitivity to market risk are less significantly different from zero and unable to conclude the existence of a statistically significant linear relationship between sensitivity to market risk and return on assets and return on equity. Suggesting that the insignificant coefficient of sensitivity to market risk is not substantial enough in affecting the bank's level of profitability (Ogee et. al., 2015).

The level of significance of the p-value of the data for regression and except the correlation analysis does show compelling evidence of the existence of a statistically significant correlation between sensitivity to market risk and return on assets and return on equity. The sensitivity to market risk data exhibits the chance-only explanation as shown by the overall model of a statistically significant relationship. It demonstrates a positive correlation between sensitivity to market risk and the return on assets and equity.

The statistically significant positive correlation of the results builds on existing theory. It relates to a situation of interest rates, foreign exchange rates, equity prices and commodity prices positively influence the earnings of the financial institutions. The impact on financial institutions'

earnings results from market changes and fluctuations in interest rates, products, equity prices, and foreign exchange rates with its concomitant effect on the bank's financial health and operations (Hardin, 2016). Weak market sensitivity demonstrates that management is inefficient in handling earnings, risks, and operations and that the bank is at a critical financial risk and weakness with the likelihood of failure if serious attention is not given to that (Kagan, 2018).

### 4.5 Summary of the Section

The Synopsis of the chapter relates to enormous statistical and related analysis. It described in detail the demographic background of the respondents in terms of participants' profile rate of response and gender status, the level of education and length of service and position of the participants. The study results are described per the study questions, with the application of descriptive statistical analysis based on distribution and graphical analysis and measures of central tendency and variability and inferential statistics. Thus, in terms of regression analysis relating to regression goodness of fit, analysis of variance, regression coefficients and correlation analysis in terms of strength and directions and the significant nature among the variables.

The results are based on answering the research questions in terms of what are monetary and fiscal policy tools used and why and how do these affect the financial performance of Ecobank Gh. Ltd? What effect do the monetary and fiscal policy tools have on the macroeconomic variables and their impact on the financial performance of Ecobank Gh. Ltd.? What are the internal control factors used by Ecobank to determine its financial performance and profitability and why?

The outcome revealed some specific statistical test validations, controversies, and critical information. The outcome revealed that the fiscal policy tools through the p-values of 0.015 and 0.022 at a 95% confidence level there is a positive correlation between the fiscal policy tools and ROA and ROE with an adjusted R-squared value of 0.421 and 0.383. As the fiscal policy tools,

predicted 42.1% and 38.3% of the bank's profitability of ROA and ROE. Shows the existence of a positive and significant relationship between the fiscal policy tools and the profitability of the bank. The p-value of 0.015 and 0.022 at a 95% confidence level revealed that the study model provides a better fit, leading to the acceptance of the alternative hypothesis.

The correlation result revealed that there exists a strong positive correlation between government spending and the bank's profitability of ROA and ROE, reporting high correlation values of 0.639 and 0.643 at p-values of 0.010 and 0.010, which were less than 0.050 level of significance, were statistically significant at 95% confidence interval. It shows that a unit increase in government spending leads to a 0.639 and 0.643 rise in return on assets and equity. An increase in government spending by a unit leads to a 63.9% and 64.3% increase in return on assets and equity.

The correlation result of taxation revealed that there exists a strong positive correlation between taxation and the bank's profitability of ROA and ROE, recording high correlation values of 0.660 and 0.612. The level of significance of the p-values of 0.007 and 0.015 less than the significance level of 0.050 was found to be statistically significant at a 95% confidence level. The outcome demonstrates that a unit increase in taxation leads to a 0.660 and 0.612 increase in return on assets and equity respectively. Implying that an increase in tax leads to a proportional increase in banks' profitability of return on assets and equity by 66.0% and 61.2% respectively.

The overall macroeconomic variables with an adjusted R-squared value of 0.478 reveals that there was a positive relationship between the macroeconomic variables of GDP growth and inflation rate as it predicted (0.478) 47.8% of the variation in the bank's profitability (ROE), showing that the result was 47.8% significantly reliable. However, the p-value of 0.008 at a 95% confidence level reveals that there was a statistically significant relationship between the macroeconomic variables and the profitability of the bank leading to the rejection of the null

hypothesis. The result was that the model provides a better fit. Therefore, able to meet the expectation of the study by showing that there was a positive and statistical important relationship between the macroeconomic variables and the bank's profitability (ROE).

The correlation matrix indicates a diverse relationship between the individual independent variables and the dependent variables. The GDP growth outcome signifies that GDP growth correlated inversely to the bank's profitability of return on assets and equity recording coefficient values of -0.164 and -0.026. This shows that an increase in GDP growth leads to a decrease of 16.4% and 2.6% in return on assets and return on equity respectively. Thus, a unit increase in GDP growth leads to a decrease of (-0.164) 16.4% and (-0.026) 2.6% in return on assets and equity. However, the level of significance of 0.559 and 0.926 are statistically not significant.

Inflation rate (INFR) values of 0.441 and 0.694 concerning return on assets and return on equity indicates a strong positive correlation between the inflation rate and return on assets and equity. This shows that a unit increase in the inflation rate leads to an increase in return on assets and return on equity by 0.441 and 0.694 respectively. A rise in the inflation rate leads to a rise in the return on assets and return on equity by 44.1% and 69.4%. Proving that increasing inflation rates causes return on assets and return on equity to increase and falling inflation rates decrease universal banks' profitability. The p-values of 0.100 and 0.004 were statistically not significant and significant at a 95% confidence level respectively.

The internal control variables with an adjusted R-squared value of 0.870 and 0.681 were an indication that 87.0% and 68.1% of the variance in the bank's profitability of return on the assets and equity predicted and accounted for by the explanatory internal control variables. The result confirmed that there exists a positive and statistically significant relationship between the internal control variables and the bank's profitability (ROA and ROE). This led to the acceptance of the

alternative hypothesis, as there were positive and statistically significant correlations and statistical importance between the variables.

The outcome recorded significance level p-values of 0.000 and 0.012, which fall below the critical value of 0.025 at a 5% significance level, showing that the predictor variables were statistically significant at a 95% confidence level and meaningful to the model. There was a statistical and significant relationship between the internal control variables and the bank's profitability of ROA and ROE. As the independent variables possess the capability to predict the bank's profitability and the model provides a better fit.

The correlation results for the individual internal control variables show a diverse outcome. The capital adequacy result of 0.084 and -0.306 indicates the existence of a positive and negative correlation between capital adequacy and return on assets and equity. A unit increase in capital adequacy ratio leads to 0.498 and -0.306 increases and decreases in return on assets and equity. The p-values of 0.767 and 0.267 recorded are statistically nonsignificant correlations at a 5% significance level, leading to the support of the null hypothesis.

The correlation result of assets quality recording coefficient values of 0.020 and -0.136 shows that there was a positive and negative correlation between asset quality and return on assets and equity. Demonstrating that a unit increase in asset quality leads to a 0.020 and -0.136 increase and decrease in return on assets and equity. An indication that efficient mobilization of banks asserts improves asset quality, which leads to an increase and decrease in return on assets and equity and the bank's profitability of ROA and ROE. The p-values of 0.944 and 0.629 are statistically nonsignificant at a 95% confidence level, thus supporting the null hypothesis.

The correlation outcome of the operational efficiency recorded values of -0.719 and -0.558 to return on assets and equity indicating that operational efficiency and return on assets and equity negatively correlated. A unit rise in operational efficiency through a decrease in operational cost

leads to a -0.719 and -0.558 fall in return on assets and equity respectively. The outcome reveals that in periods of an increase in the expenditure patterns of the bank's resulting in bad operational efficiency the bank's profit falls. The p-values of 0.003 and 0.030 were found to be statistically significant at a 5% significance level, thus accepting the alternative hypothesis.

The correlation result of the earnings quality recorded values of 0.844 and 0.729 to return on assets and return on equity, the outcome indicated that there was a strong positive correlation between earnings quality and return on assets and return on equity. Signifying that a unit increase in earnings quality leads to a 0.844 and 0.729 increase in return on assets and equity. The higher the earnings quality the higher the bank's profitability. The level of significance of the p-values of 0.000 and 0.002 was found to have a statistical and significant correlation at a 95% confidence level, affirming the acceptance of the alternative hypothesis.

The liquidity measurement outcome recorded values of -0.240 and -0.339, which signifies that liquidity measurement and return on asset and return on equity negatively correlated. A unit increase in the bank's liquidity leads to a decrease in return on assets and equity by -0.240 and -0.339 respectively. Thus, an increase in liquidity level affects negatively on return on assets resulting in an inverse correlation between the bank's liquidity and profitability. At the level of significance of 0.389 and 0.141, there is no significant correlation at a 5% significance level, leading to the support of the null hypothesis.

The sensitivity to market risk recorded correlation results of 0.252 and 0.040 to return on assets and equity, showing that sensitivity to market risk and return on assets and equity positively and negatively correlates. A unit increase in sensitivity to market risk leads to a 0.252 and 0.040 increase in return on assets and equity, respectively. The significance levels of 0.365 and 0.888 were nonsignificant at a 95% confidence level, thus supporting the null hypothesis.

### 4.5.1 The Regression and Correlation Coefficients Impact on ROA and ROE

Table 4.22 gives a summarization of the various independent variables of the regression and correlation coefficients evaluation of results for the determination of their significant effect on the bank's profitability of ROA and ROE.

**Table 4.22:**

*Summary of the Regression and Correlation Coefficients Impact on ROA and ROE*

| Independent Variables | F & Standardized Coefficient Values of | | Probability Value of Statistics of | | Independent Variables Effects on | |
|---|---|---|---|---|---|---|
| | ROA | ROE | ROA | ROE | ROA | ROE |
| **Regression Analysis** | | | | | | |
| Fiscal Policy Tools | 6.083 | 5.336 | 0.015 | 0.022 | Yes / + | Yes / + |
| Government Spending | 0.354 | 0.423 | 0.225 | 0.165 | No/ + | No/ + |
| Taxation | 0.420 | 0.325 | 0.155 | 0.277 | No/ + | No/ + |
| Macroeconomic Variables | - | 7.415 | - | 0.008 | - | Yes / + |
| GDP Growth | - | 0.291 | - | 0.191 | - | No/ + |
| Inflation | - | 0.808 | - | 0.002 | - | Yes / + |
| Internal Control Variables | 16.662 | 5.979 | 0.000 | 0.012 | Yes / + | Yes / + |
| Capital Adequacy | 0.127 | - | 0.634 | - | No/ + | - |
| Asset Quality | 0.393 | - | 0.018 | - | Yes / + | - |
| Management Efficiency | 0.539 | - | 0.164 | - | No/ + | - |
| Earnings | 1.225 | - | 0.000 | - | Yes / + | - |
| Liquidity | -0.134 | - | 0.367 | - | No / - | - |
| Sensitivity to Market Risk | 0.339 | - | 0.050 | - | Yes / + | - |
| **Correlations Analysis** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Government Spending | 0.639 | 0.643 | 0.010 | 0.010 | Yes / + | Yes / + |
| Taxation | 0.660 | 0.612 | 0.007 | 0.015 | Yes / + | Yes / + |
| GDP growth | -0.164 | -0.026 | 0.559 | 0.926 | No / - | No / - |
| Inflation | 0.441 | 0.694 | 0.100 | 0.004 | No / + | Yes /+ |
| Capital Adequacy | 0.084 | -0.306 | 0.767 | 0.267 | No/ + | No / - |
| Asset Quality | 0.020 | -0.136 | 0.944 | 0.629 | No/ + | No / - |
| Management Efficiency | -0.719 | -0.558 | 0.003 | 0.030 | Yes / - | Yes / - |
| Earnings | 0.844 | 0.729 | 0.000 | 0.002 | Yes / + | Yes / + |
| Liquidity | -0.240 | -0.339 | 0.389 | 0.141 | No / - | No / - |
| Sensitivity to Market Risk | 0.252 | 0.040 | 0.365 | 0.888 | No / + | No/ + |

Source: Researcher 2022

# CHAPTER FIVE

# IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSION

## 5.0. Introduction

The triangulation of the concurrent transformative mixed-method survey study was to assess the impact of fiscal and monetary policies on the financial performance of universal banks in Ghana and their effect on the economy, using Ecobank Gh. Ltd. as a case study. The study was undertaken due to the limited studies on the impact of fiscal and monetary policy tools on government expenditure, taxation, and money supply, macroeconomic and internal variables that affects the profitability of universal banks in Ghana. A deductive and case study strategy thus adopted. The research has a critical concern for ethical principles to protect the dignity and well-being of the

respondents by promoting values of accountability, confidentiality, beneficence, non-maleficence, respect for privacy, data handling and reporting and mistakes and negligence.

The major challenge faced by the researcher is regarded as an outsider. The bank participants failed to give certain information classified as confidential to protect their dignity and position. Again, the authenticity of sources of data, reliability and validity of information collected from the net. There were also time constraints for the research work and insufficient financial resources. The chapter looked at the implications of the study results organized around each research questions, which relates to the fiscal and monetary policy tools, the macroeconomic variables, and the bank internal control factors and their effect on the financial performance of Ecobank and their logical conclusions. The presentation relates to descriptive and inferential statistical analysis. The chapter again discusses recommendations for application, recommendations for future research and finally the summary of the study in terms of the fiscal and monetary policy tools, macroeconomic variables, and the bank's internal control variables.

## 5.1 Implications of the Study Results

The discussion of the study results is organized around each research question and drawing logical conclusions. The discussion is based on the responses of the results to the study purpose and the problem concerning the conceptual framework in terms of the fiscal and monetary policy tools, the macroeconomic and the internal control variables and their significant contribution and implications to practice and literature. The analysis of the results is based on descriptive and inferential statistical analysis.

### 5.1.1 The Implications of the Fiscal and Monetary Policy Tools

The discussion of the results of the fiscal and monetary policy tools is done based on the research question. This is discussed based on descriptive and inferential statistical analysis.

#### *5.1.1.1 Descriptive Statistics*

#### *5.1.1.1.1 The Impact of the Fiscal and monetary policy tools*

The result indicates that fiscal policy tools of government spending and taxation were the most salient tool affecting the financial performance of Ecobank Ghana. Government spending and taxation show an increasing trend in terms of an upward adjustment over the entire period under investigation. An increase in taxation to a very great extent affects the lending behaviour of Ecobank. The result builds on existing evidence suggesting that despite the fiscal consolidation efforts and the IMF intervention support programmes; there has been an unsustainable accelerated growth of the fiscal deficit with an average of 6.5% of GDP (IEA Ghana (2015). Revealing the weaknesses in budgetary policy planning, implementation, monitoring and evaluation and the unfavourable financial management practices in the economy. Governments use fiscal policy tools such as taxation, government spending, and borrowing as direct control measures in achieving an economic policy goal of price stability through inflation control, GDP growth, and full employment by levelling aggregate demand in the economy.

The finding again revealed that monetary policy tools of reserve requirement, the bank discount rate shows an increasing trend, and that to a very great extent negatively affect the lending behaviour of Ecobank in Ghana. While the open market operation was, fluctuating to a very great extent positively affect the lending behaviour of Ecobank. The result supports the IEA Ghana (2015) statement that the monetary aggregation has been on the ascendency. The accelerated growth in the money supply is an indication that there have not been any important and proper control measures implemented and a failure on the part of the government to effectively implement its enumerated control measures, which exert a strong positive effect on inflation and interest rates. Monetary policy deals with the control of the money supply in the economy to influence interest rates and inflation by lowering inflation and keeping it stable (Lioudis, 2019).

It is the responsibility of the central bank in maintaining the stability of prices through their powers by controlling the amount of money supply in the economy and monitoring the real interest rates, which nullifies the effects of inflation against the nominal interest rates, manipulating reserve requirements and the application of open market operation tactics (Bajpai, 2019). To Terra and Arestis (2017), monetary policy tools such as open market operations, policy rate, and cash reserve requirement affect the profitability of banks, as monetary policy deals with the operationalization of central banks in influencing the nation's money creation and managing the liquidity supply for economic growth and development.

#### 5.1.1.1.2 The Impact of Expansionary Fiscal and Monetary Policy

The outcome revealed that the Government of Ghana was highly implementing an expansionary fiscal and monetary policy intervention as against contractionary fiscal and monetary policy intervention in the economy. Supports the Keynesian theoretical proposition relating to the stabilization of an economy by government policy interventions in terms of increasing spending to prime the pump with a corresponding decrease in taxes. The essence is stimulating aggregate demand in the short run rather than prices and interest rates and recovering the economy from economic recession and depression to a successful state of economic growth (Chappelow, 2019). According to Amadeo (2019), Keynes's theory of revamping economic downturns through the application of government fiscal policy spending is inappropriate and ineffective. For it is not a good path for economic stability in restoring growth during recessions as compared to the implementation of monetary policy and its effectiveness.

The objective of the expansionary fiscal policy is to increase consumer spending and investment decisions of institutions without any effect on prices and wages resulting in inflation and an increase in interest rates (Mulwa, 2015). The government is seen as the last resort to undertake deficit financing and infrastructure spending of injecting income. Starting a cascade of events leads to general spending in the economy, stimulating more productivity and investment, thereby generating a vibrant and prosperous economy. According to Keynes’s theory, the driving mechanism in an economy for achieving stability of prices is aggregate demand, through a countercyclical fiscal policy of government injecting money by investing in infrastructure and the reduction in taxation and interest rates (Mankiw, 2008).

In terms of expansionary monetary policy intervention, the authorities adopt a system of increasing the quantity of money supply to lower interest rates and easing financial institutions' credit restrictions to increase the facilitation of loans and advances. Undertaken through the

decreasing of discount rates, reserve requirements and the purchases of bonds and treasury securities through open market operations. The essence is increasing the excess liquidity reserves available to commercial banks for money creation (Pettinger, 2020). It affects the cost of loanable funds to fall, thereby increasing investment, productivity, and consumer durable spending. The effect is to revamp the economy by influencing corporations to increase their borrowing at a cheaper rate toward risky assets due to the reduction in the cost of borrowing. It also affects microeconomics factors manifesting in businesses enjoying higher economies of scale by expanding businesses and employing more workers, thereby increasing the well-being and the standard of living in the economy (Segal, 2021).

Economists and politicians in recent years have advocated in favour of the monetary policy, forming the basis of macroeconomic policymaking, even though with unwanted consequences, for the stabilization of output and inflation. It has rendered fiscal policy impotent, due partly to the continuous existence of budget deficits and inadequate capability on the part of the political system in making adequate tax and spending decisions on time in achieving desirable stabilization purposes (Mishkin, 1995).

#### 5.1.1.1.3 The Impact of Contractionary Fiscal and Monetary Policy

The impact of contractionary fiscal and monetary policy findings revealed that contractionary fiscal policy by the Government of Ghana in effect decreased money supply through instruments such as a decrease in expenditure and subsidies and an increase in taxation. The result support existing economic theory to the fact that contractionary fiscal policy reduces expenditure and transfers payments and/or raises the level of taxes to contract the economy by reducing the quantity of money in circulation from individuals and businesses to spend with the purpose to curtail inflation (Amadeo, 2018). It negatively affects the profits margin of businesses and hence investment expenditures and GDP growth to eliminate inflationary gaps and pressures. It implies that the

government introduces a budgetary surplus by retracting more money from circulation due to the rapid growth of inflation. A country economy like Ghana, which is facing inflationary pressures, low employment levels and deficit financing, see the application of the policy as an appropriate measure (Kramer, 2021).

The finding again revealed that contractionary monetary policy in effect decreased money supply through instruments such as selling government bills and bonds, increasing reserve requirements and increasing the bank discount rate. It significantly affects and causes interest rates to rise and directly restricts the amount of money in circulation and the universal banks' credit lending in the economy. According to Amadeo (2019), the primary macroeconomic objective of contractionary monetary policy is to increase interest rates, reduce investment in business cycle expansion, aggregate demand, and the overall growth of GDP of the nation's output and reduce the ever-rising inflationary gap and liquidity. The effect is to reduce economic growth and inflationary pressures. It reduces the amount of money in circulation, business borrowing and operations, aggregate demand, the general price level, and thus inflation.

The result further revealed that the effect ends up minimizing inflation and thereby promoting economic growth in the country. This outcome is in line with economic theory, as contractionary monetary policy in effect, decreases money supply through instruments such as the selling of government bills and bonds, increasing reserve requirements and increasing the bank discount rate. It significantly affects and causes interest rates to rise and directly restricts the amount of money in circulation and the universal banks' credit lending in the economy (Amadeo, 2019). According to Chen (2020), the effect is to reduce inflationary pressures in terms of reducing the quantity of money in circulation and other distortions in the economic systems brought about by various government interventions for economic and financial stability. It decreases the money reserves available to commercial banks for money creation thereby reducing returns on loans to

banks. It slows and cools down economic growth due to low spending and investment decisions and hence inflation.

#### *5.1.1.2 Inferential statistics*

The discussion is based on the inferential statistical analysis through regression statistical tests of adjusted R-squared, the F-test and the correlation analysis in terms of the overall implications of the fiscal policy tools of government spending and taxation.

##### 5.1.1.2.1 The overall implications of the fiscal policy tools

The overall result of the fiscal policy tools suggested the adjusted R-squared values of 0.421 and 0.383 shows that the explanatory variables of the fiscal policy tools predicted 42.1% and 38.3% of the variation in the bank's profitability of return on assets and equity, signifying that the result was 42.1% and 38.3% significantly reliable. However, the estimated standard errors of 0.71313 and 6.02999, which was far from zero, certify that the goodness and the fitness level of the model are poor. The F values of 6.083 and 5.336 at a 5% level of significance which is greater than 1 show that the variables as a group are jointly significant, indicating the significant nature of the overall model (Torres-Reyna, 2007).

The p-values of 0.015 and 0.022 at a 95% confidence level show the goodness of fit of the regression model that the F value and the adjusted R-squared value are statistically significantly different from 0. Provides enough evidence in concluding that the model is statistically significant as the independent variables of fiscal policy tools predicted and explained the bank's profitability (ROA and ROE). The result confirmed that there exists a positive and statistically significant correlation between the fiscal policy tools and the bank's profitability (ROA and ROE). This indicates the rejection of the null hypothesis and the acceptance of the alternative hypothesis, as there is a positive and statistically significant relationship between the fiscal and monetary policy tools, and ROA and ROE (Ogee et. al., 2015).

***5.1.1.2.2 The Implications of the Fiscal Policy Tools***

The study outcome of government spending and taxation through the standardized coefficient shows a diverse relationship between individual policy tools and ROA and ROE. The result of government spending standardized coefficient values of 0.354 and 0.423, with standard errors of 0.069.and 0.584, which was very close to zero showing the goodness of fit, is an indication of a moderate positive relationship between government spending and ROA and ROE. In that, a unit rise in government spending leads to a 35.4% and 42.3% rise in the profitability of the bank (ROA and ROE). However, the t-values of 1.278 and 1.479 and p-values of 0.225 and 0.165 demonstrates that the coefficient of government spending was less different from zero and statistically nonsignificant in explaining the variation in ROA (Torres-Reyna, 2007).

The correlation matrix analysis, finding revealed that there exists a strong correlation between government spending and the bank's profitability of ROA and ROE. Government spending recording values of 0.638 and 0.643 for return on assets and return on equity shows that an increase in government spending by a unit leads to a 63.8% and 64.3% rise in return on assets and equity respectively. The level of significance of 0.010 and 0.010 was found to be statistically significant at a 5% significance level. It shows the existence of a strong positive and statistically significant relationship between government spending and return on assets and return on equity. The outcome is contrary to the hypothesized relationship of the null hypothesis but in support of the alternative hypothesis. Giving enough evidence that the correlation coefficient of government spending is significantly different from zero and thus concludes the existence of a significant linear relationship between government spending and return on assets and equity.

The result further indicates that taxation, which recorded standardized coefficient values of 0.420 and 0.325, with standard errors of 0.126 and 1.065, which was very far from zero showing the goodness of fit, is an indication of a moderate positive relationship between taxation and ROA

and ROE. A unit increase in taxation leads to a 42.0% and 32.5% increase in the profitability of the bank (ROA and ROE). However, the t-values of 1.518 and 1.138 and p-value of 0.155 and 0.277 reveal that the coefficient of taxation is less significantly different from zero and statistically nonsignificant in explaining the variation in ROA.

The correlation result of taxation, recording values of 0.660 and 0.612 for return on assets and return on equity, revealed that there exists a strong correlation between taxation and the bank's profitability of ROA and ROE. The level of significance of 0.007 and 0.015 for ROA and ROE were found to be significant at a 5% significance level. The outcome demonstrates that an increase in taxation by a unit leads to a 66% and 61.2% rise in return on assets and equity respectively. Certifying the existence of a strong positive and statistically significant relationship between taxation and return on assets and return on equity. Giving enough evidence that the correlation coefficient of taxation is significantly different from zero. Concluding the existence of a significant linear relationship between taxation and return on assets hence the rejection of the null hypothesis. Except for return on equity, which is otherwise statistically nonsignificant.

Government spending and taxation coefficients recording a strong positive and statistically significant relationship reveal the expected patterns and relationships among the variables. The positive association between government spending and ROA is expected to build on existing theoretical evidence. Government spending as an important part of fiscal policy is the distribution of revenue from taxation to various sectors of the economy in boosting economic growth and the stabilization of macroeconomic activities through spending by individuals and companies, resulting in increasing disposable income and profits (Kramer, 2021). Freeing and keeping businesses running by hiring additional workers to create employment increases both supply and demand for economic growth and an increase in income (Amadeo, 2019).

The tax finding was an unexpected result, as taxation is a mechanism employed in generating a quantum of revenue from co-operating entities as a direct or indirect liability for economic growth and development. Expected to have an inverse relationship with the profitability of the bank. Resulting in lowered disposal income and serving as an increase in the cost of industries' productivity, leading to decreases in consumption, investment, productivity and GDP growth (Amadeo, 2019). However, the inferential statistical coefficients recorded a strong positive and statistically significant relationship between ROA and ROE. The result might suggest that the tax factor effect is very insignificant in affecting the bank's profitability or transferred to customers by the bank and incorporated into the bank leading interest rate which impacts positively and significantly on the bank's profitability and hence the positive relation between taxation and the profitability of the bank (ROA and ROE).

In contextualizing the study findings with previous research, the findings on government spending and taxation are in line with the findings of Kipkemoi et al. (2016), which show that the bank's profitability of return on assets and fiscal policy tools of government spending and taxation positively and significantly correlated. Indicating that there was a direct and strong positive relationship between government spending and taxation and the bank's profitability before tax, which affects positively and significantly the commercial bank performance. The outcome shows that an increase in government spending and taxation leads to a proportional increase in banks' profitability, growth, and economic growth.

The findings of Munteanua and Göndörb (2012) also confirmed the study result by showing that there was a positive relationship between fiscal policy and banking behaviour. Implying that increasing banking performance in the economy correlated directly to increasing aggregate demand brought about by restrictive fiscal policy implementation. The outcome of the study indicates that

there was a declining trend in the performance of the banks with a negative impact resulting from decreasing demand brought about by the restrictive fiscal policy.

### 5.1.2 The Implications of the Macroeconomic variables

The discussion of the analysis of the macroeconomic variables is done based on the research question. The discussion is based on descriptive and inferential statistical analysis.

#### *5.1.2.1 Descriptive Statistics*

The finding indicated that interest rate changes to a very great extent affect the lending behaviour of the bank to its customers and the borrowing behaviour of the bank customers in Ghana. Changes in interest rates influence effective demand through investment and consumption, as well as demand for money through investment portfolio, credit, exchange rate, and expectations, thereby supporting asset-pricing theory. An investment portfolio is dependent on investment opportunity cost, the asset's expected return, and the cost of carrying (Terra & Arestis, 2017).

The interest rate effect is a result of its being the price of money borrowed and purely determined by monetary factors as a monetary phenomenon. Making monetary policy extremely important in influencing economic activities such as interest rates, output and income, and aggregate demand. A decrease in money supply causes the interest rate to rise, thereby decreasing corporate and individual demand for money and hence investment, coupled with a decrease in effective demand, income, and output (Muley, 2019).

The graphical result of the macroeconomic variables indicates that the total value of GDP growth went up very significantly. According to Banton (2019), the yearly percentage growth rate of real GDP is very crucial for every economy as it indicates the performance of the nation’s economy in terms of growth and development and serves as an indicator in measuring the country’s standard of living.

The finding builds on existing evidence that the impacts of macroeconomic variables such as GDP growth, inflation rates, interest rates, and exchange rates through fiscal and monetary policy influence the profitability of the banks. Conforming to the study result, which indicates profit before tax (ROA) and the profit after tax (ROE) trend upwards consequently in the same positive direction as the predictors. The determinants of commercial banks' profitability, specifically economic growth, statistically and significantly influence and affect the profitability of commercial banks (Adeusi et al., 2014).

#### *5.1.2.1 Inferential statistical analysis*

The researcher in discussing and analysing the implications of the macroeconomic variables through the inferential statistical analysis employed regression statistical tests of adjusted R-squared, the F-test and correlation analysis. The discussion concentrated on the overall implications of the macroeconomic variables and the individual macroeconomic variables of GDP growth and inflation rate.

##### 5.1.2.1.1 The Overall Implications of the Macroeconomic variables

The result of the adjusted R-squared value of 0.478 indicates that the macroeconomic variables of GDP growth and inflation rates predicted 47.8% of the variation in the bank's profitability (ROE), showing that the result was 47.8% significantly reliable. The result confirmed that there exists a strong positive relationship between the macroeconomic variables and the bank's profitability (ROE). The estimated standard error of 5.54311, which was far from zero, signifies that the goodness of fit of the model is poor. The F value of 7.415, which was greater than 1 however, rises above the F critical value of 3.23 at a 5% level of significance, showing that the variables as a group are jointly significant for the overall model (Torres-Reyna, 2007).

The p-value of 0.008 at a 95% confidence level reveals there is a statistically significant relationship between the macroeconomic variables and the profitability of the bank (ROE). The P-

value of the F-test of the overall significance test is less than the significance level, meaning that the null hypothesis is rejected and that the model provides a better fit. As a result, the R-squared value is shown to be significantly different from zero. Reveals that the model is statistically significant as the independent variables of macroeconomic variables predicted the profitability of the bank. Indicates the rejection of the null hypothesis as there exists a statistically significant correlation between the macroeconomic variables and the bank's profitability (ROE).

The finding was therefore able to meet the expectation of the study by showing that there is a positive and statistically significant relationship between the macroeconomic variables of GDP growth and inflation rate and the bank's profitability (ROE). The result of the macroeconomic variables of GDP growth and an inflation rate of the regression model is statistically significant and fits with economic theory, as the macroeconomic variables were able to affect the bank's profits positively. Economic growth is seen as the percentage increase of real GDP that leads to an economic boom with great demand for bank credit leading to low credit risk as the debt servicing capability of bank borrowers is improved and hence a good banking performance. As the growth in GDP results in an increase in inflation which in turn causes the bank lending interest rate also to increase as it is very easy to charge additional interest rates which invariably causes the profitability of the banks to increase.

It signifies that rising GDP growth leads to rising inflation and rising interest rates, providing greater benefits to the universal banks to increase their profit margins, although the cost of funds is likely to rise and therefore reduce the banks' profits (Ogee et. al., 2015). A higher ratio of bank asset-to-GDP positively influences the economic development of the nation resulting from great demand for banking services leading to increases in revenue (Mulwa, 2015).

#### *5.1.2.1.2 The Implications of GDP growth*

The GDP growth, which recorded a standardized coefficient value of 0.291, with a standard error of 0.502 indicating the goodness of fit in the regression analysis, shows that there was a very weak positive relationship between GDP growth and return on equity. Signifying that a unit rise in GDP growth leads to a 29.1% increase in the profitability of the bank (ROE). The t-value of 1.387 and p-value of 0.191 reveal that the coefficient of GDP growth is less different from zero and statistically nonsignificant in explaining the variation in ROE (Torres-Reyna, 2007).

The correlation analysis of GDP growth measuring the strength of the economy recorded values of -0.164 and -0.026 in terms of return on assets and return on equity. It signifies that GDP growth was weakly negatively correlated to the bank's profitability of return on assets and equity. An increase in GDP growth leads to a decrease of 16.4% and 2.6% in return on assets and return on equity respectively.

The significance levels of 0.559 and 0.926 were found to be statistically nonsignificant at a 5% significance level, as the correlation coefficient was significantly not different from zero. It supported the hypothesized relationship of the null hypothesis. Reveals insufficient evidence in concluding that there exists a significant linear relationship between GDP growth and the bank's profitability of return on assets and equity. Suggesting that GDP growth is not substantial enough in affecting the bank's profitability.

The result is very surprising, as economic theory shows that there is a positive and significant correlation between GDP growth and revenue. The correlation results thus failed to build on the existing theory. However, the outcome was very interesting by signifying positive, negative and statistically nonsignificant outcomes in terms of both the regression and the correlation analysis.

However, the findings of Shamim et al. (2018) state that GDP growth is negatively and insignificantly correlated to the profitability of banks (ROA). In periods of high GDP growth, the bank's profitability decreases. Further findings by Adeusi et al. (2014) proved that GDP growth

was negatively correlated to the return on assets. Reveals that an increase in GDP growth leads to a reduction in return on assets and therefore profitability. Nkegbe and Ustarz (2015) findings again affirmed the result, which revealed that GDP growth was negatively but significantly related to return on assets and net interest margins models, causing the banks to not benefit from economic growth.

However, the findings of Kutsienyo (2011) revealed that there was a positive and significant relationship between GDP growth and banks' profitability (ROE). This finding was asserted by Bikker et al. (2002) and Athanasoglou et al. (2005), showing that economic growth positively and significantly correlated to banks' profits. The findings by Tuffour et al. (2018) again indicated a consistent assertion, showing that GDP growth correlated positively to banks' profitability regarding return on assets and return on equity. This implies that a higher GDP growth rate in an economy leads to higher growth in the bank's profitability.

#### *5.1.2.1.3 The Implications of the Inflation rate*

The study outcome of the inflation rate, which recorded a standardized coefficient value of 0.808, with a standard error of 0.445, which was very close to zero, showing the goodness of fit, is an indication that there exists a positive relationship between inflation rate and ROE. It means that a unit rise in the inflation rate leads to an 80.8% rise in the profitability of the bank (ROE). The t-value of 3.849 and p-value of 0.002 reveal that the coefficient is different from zero and statistically significant in explaining the variation in ROE (Torres-Reyna, 2007).

The correlation analysis result of the inflation rate recorded values of 0.441 and 0.694 with return on assets and return on equity. Indicating that there is a moderately positive and significant correlation between the inflation rate and the return on assets and equity. This shows that a percentage increase in the inflation rate leads to an increase in the return on assets and the return on equity by 44.1% and 69.4%, respectively. The p-value of 0.004 for ROE was statistically

significant at a 1% significance level except for the p-value of 0.100 for ROA, which was statistically nonsignificant.

Giving evidence that the inflation rate coefficient is significantly different from zero and thus concludes the existence of a statistically significant linear relationship between inflation rate and return on equity. While the p-value of 0.100 for ROA is statistically nonsignificant, it demonstrates that the outcome does not reveal compelling evidence of a positive and statistically significant correlation between the inflation rate and return on assets.

The study outcome falls in line with that of Mulwa (2015), with the assertion that there was a positive correlation between inflation rate, bank profitability and income. However, the inflationary effect on banks' performance was dependent on anticipated or unanticipated inflation. As anticipated, inflation results in a positive effect on banks' profitability. The findings of Kutsienyo (2011) further show that there was a positive and significant relationship between inflation and banks' profitability. Again, the finding was in line with Bourke (1989), Molyneux et al. (1992) and Athanasoglou et al. (2005), who concluded that inflation and banks' profitability are positively and significantly related.

However, this contradicts the claims of Adeusi et al. (2014), who stated that inflation negatively correlated to the return on assets. Signifying that an increase in inflation leads to a reduction in return on assets and bank profitability. The findings of Maigua and Mouni (2016) were also contrary to the study outcome, revealing that inflation rates have an inverse relationship and statistically significant effect on the performance of universal banks.

The assertion proves that the rising rate of inflation causes return on assets and equity and net interest margin to fall and falling inflation rates raise and increase commercial banks' profitability. Shamim et al., (2018) findings also proved that inflation rates negatively and insignificantly correlated to the profitability of banks. The higher the inflation rates the lower the

profitability of the banks. The findings of Nkegbe and Ustarz (2015), however, signify some diverse outcomes. In that, there was a positive and significant relationship between inflation and return on assets but negatively correlated to return on equity.

### 5.1.3 The Implications of the Internal Control Variables

The discussion of the analysis of the internal control variables was done based on the research question. The analysis thus based on descriptive and inferential statistical analysis.

#### *5.1.3.1 Descriptive Statistics*

The distribution analysis of internal control variables is done with the application of the CAMELS analysis. Ecobank's debt to capital ratio is rated as the most commonly used rate of measurement of capital adequacy by the bank, serving as a proxy for the measurement of capital adequacy. The debt-to-equity ratio relates to the measure of the value of debt capital, such as a company’s current and long-term liabilities, including accounts payable, accrued expenses, mortgages, and long-term leases, in comparison to the value of equity capital employed by the company, such as shareholders' equity and retained earnings (Ferrouhi, 2014).

In terms of asset quality performance, Ecobank indicates the net non-performing asset to net loan and advance ratio as the best measure in assessing its credit quality performance in Ghana. It is loan loss provisions to total loss that serves as a proxy for the measurement of asset quality. Several factors considered, includes portfolio diversification, credit risk regulations, and efficient utilization operations (Ferrouhi, 2014).

In determining which measure Ecobank mostly used to assess its management operating efficiency performance in Ghana, the expense to total income ratio was rated as the most operating efficiency measurement tool. Return on equity is rated as the best measurement ratio of profitability performance employed by Ecobank. The most commonly used liquidity ratio in measuring the

performance of Ecobank in Ghana, it envisages that Ecobank employs liquid assets to deposit to measure its liquidity performance.

#### *5.1.3.2 Inferential statistical analysis*

The researcher, in discussing and analysing the implications of the internal control variables through the inferential statistical analysis, employed regression statistical tests of adjusted R-squared, the F-test and correlation analysis. The discussion thus based on the overall implications of the internal control variables and the individual variables.

##### 5.1.3.2.1 The Overall Implications of the Internal Control Variables

The findings of the firm's specific internal control variables in terms of CAMELS analysis through regression and correlation analysis generated mixed results. The study result indicated that the firm's specific internal control variables recorded adjusted R-squared values of 0.874 and 0.681, which was an indication that 87.4% and 68.1% of the variation in the bank's profitability of return on assets and equity was predicted and accounted for by the explanatory internal control variables. The estimated standard error (ROA) of 0.34877, which was very close to zero, shows the goodness and the fitness level of the model (Torres-Reyna, 2007).

The F-values of 14.844 and 5.979 at a 5% level of significance, which was greater than 1, and p-values of 0.002 and 0.012 at a 95% confidence level, show that the variables as a group are jointly statistically significant, indicating the significance of the overall model. It shows the goodness of fit of the regression model that the F-value and the R-squared value are statistically significant and different from zero (Ogee et al., 2015). Provides enough evidence to conclude that the study model is statistically significant as the independent variables of the firm's specific internal control variables predicted and explained the bank's profitability.

The results confirmed that there exists a positive and statistically significant relationship between the firm's specific variables and the profitability of the bank. This indicates the acceptance

of the alternative hypothesis, as there is a positive and statistically significant correlation between the firm's specific internal control variables and the bank's profitability (Torres-Reyna, 2007).

#### *5.1.3.2.2 The Implications of the Capital Adequacy Ratio*

In analysing the relationship of the individual-specific variables to the control variables, the capital adequacy (CAR) outcome with a standardized coefficient value of 0.127 and a standard error value of 0.087, which was very close to zero, showing the goodness of fit, is an indication of a weak positive and significant relationship between capital adequacy and ROA. Signifying that a unit rise in capital adequacy leads to a 12.7% rise in the profitability of the bank (ROA). The t-value of 0.495 and p-value of 0.634 demonstrate that the coefficient of capital adequacy is less different from zero and statistically nonsignificant in explaining the variation in ROA (Torres-Reyna, 2007).

The correlation analysis result of the capital adequacy values of 0.084 and -0.306 to return on assets and return on equity indicates that there is a weak positive and negative correlation between capital adequacy ratio and return on assets and return on equity respectively. The result signifies that a percentage increase in capital adequacy ratio leads to an 8.4% and a 30.6% increase and decrease in return on assets and equity, respectively. At a 5% significance level, the p–values of 0.767 and 0.267 were found to be statistically insignificant. Less evidence that the capital adequacy ratio or coefficient is significantly different from zero and thus is unable to conclude that there exists a significant linear relationship between capital adequacy and return on assets and equity. This is to ensure that the bank can absorb a significant number of losses while remaining in compliance with the statutory capital requirements.

The level of significance of the p–values of the data does not show any compelling evidence of the existence of a statistically significant correlation between capital adequacy and return on assets and return on equity. The capital adequacy data was unable to exhibit the chance-only explanation as shown by the overall model of a statistically significant relationship. However, the

positive correlation of the result thus builds on existing evidence of theory, which shows that capital adequacy positively correlates to the bank's profitability. Thus, they suggested and concluded that the statistically nonsignificant correlation might be that the sample size was too small.

However, the submission of Shamim et al. (2018) and Tuffour et al. (2018) reveals that banks' capital adequacy is positive and statistically significantly correlated to returns on assets and equity. Demonstrating that high capital adequacy leads to higher returns on assets and returns on equity, which in effect leads to higher commercial banks' profitability.

#### *5.1.3.2.3 The Implications of Asset Quality*

The result of the regression coefficient of asset quality (AQ) recorded a standardized coefficient value of 0.393 with an estimated standard error of 0.064, which was very close to zero, showing the goodness of fit. This indicates that there is a weak positive relationship between asset quality and the return on assets. A unit increase in asset quality leads to a 39.3% increase in the profitability of the bank (ROA). The t-value of 2.954 and p-value of 0.018 show that the coefficient of asset quality is different from 0 at a 5% significance level and is statistically significant in explaining the variation in ROA (Torres-Reyna, 2007).

The correlation result of asset quality values of 0.020 and -0.136 to return on assets and return on equity shows that there is a very weak positive and negative correlation between asset quality and both return on assets and return on equity. The result indicates that a percentage increase in asset quality leads to a 2.0% and 13.6% increase and decrease in return on assets and equity, respectively. The levels of significance of 0.944 and 0.629 were found to be statistically nonsignificant at a 5% significance level. giving less evidence that the correlation coefficient is significantly different from zero, making the existence of a statistically significant linear relationship between asset quality and return on assets and return on equity impossible to conclude (Ogee et al., 2015).

The level of significance of the p-value of 0.018 for the regression data does show compelling evidence of the existence of a positive and statistically significant relationship between asset quality and return on assets. It exhibited the chance-only explanation as shown by the overall model of the statistically significant relationship. However, the p-values of 0.944 and 0.629 for the correlation analysis, which was far greater than the 5% significance level, showed no compelling evidence of the existence of a statistically significant correlation between asset quality and return on assets. Suggesting that asset quality is not substantial enough to affect the bank's profitability.

The positive correlation (ROA) and the regression results statistically significantly thus build on existing evidence of theory, which shows that asset quality positively correlated to return on assets and return on equity, as it involves the ratio of impairment allowance to gross loans and advances in terms of non-performing loans. Loans of good quality generate better returns as compared to poor quality loans, including junk bonds and corporate credits, which generate low returns with the probability of turning into non-performing loans.

It serves as a crucial element in influencing the bank's profitability and evaluating the bank's operating performance. Evaluation of an institution's assets to its credit risk is attached to assessing the loan quality in terms of the provisions of earnings, and the ability to identify and manage the credit risk (Abata, 2014). The studies of Tuffour et al. (2018) revealed and showed that asset quality positively and insignificantly correlated to the banks' profitability. Demonstrating that efficient mobilization of banks' assets improves asset quality, which leads to higher bank profitability.

However, Shamim et al. (2018) asserted a contrary view, in that there was a negative and significant relationship between the bank's credit risk in terms of non-performing loans and the bank's profitability. Reveals that non-performing loans negatively correlate to and, in effect, negatively affect the bank's profitability. Thus, the lower the bank's credit risk, the higher the bank's

profitability; and the higher the bank's credit risk, the lower the bank's profitability (Abdullah et al. (2014), Ahmed et al. (2011), Karim et al. (2010), and Chowdhury (2015)).

Nkegbe and Ustarz (2015) findings further stated that non-performing loans, return on assets, and return on equity correlated negatively and significantly. Shows that poor bank performance is inversely correlated to high non-performing loans, resulting from the fact that loans form the greatest share of assets generating revenue for the banks through investment.

#### *5.1.3.2.4 The Implications of Management Operational Efficiency*

Management operational efficiency, recorded a standardized coefficient value of 0.539 with a standard error of 0.064, which was very close to zero. It shows the goodness of fit indicates that there is a strong positive relationship between management operational efficiency and return on assets. A unit increase in management operational efficiency leads to a 53.9% increase in the profitability of the bank (ROA). The t-value of 1.531 and p-value of 0.164 reveal that the coefficient of management efficiency is not different from zero and is statistically nonsignificant in explaining the variation in ROA (Torres-Reyna, 2007).

The result of the correlation analysis on operational efficiency indicated that the recorded values of -0.719 and -0.558 for return on assets and equity are highly negatively and significantly correlated with the return on assets and equity. A percentage rise in operational efficiency through an increase in operational costs leads to an 81.9% and 55.8% decrease in return on assets and equity, respectively. The levels of significance of 0.003 and 0.030 were found to be statistically significant at a 5% significance level. Giving enough evidence that the correlation coefficient is significantly different from zero and, therefore, concludes the existence of a statistically significant linear relationship between operational efficiency and return on assets and equity.

The level of significance of the p–values of the correlation data contrary to the regression analysis p-values does show compelling evidence of the existence of a highly negative and

statistically significant correlation between operational efficiency and return on assets and return on equity. It exhibited the chance-only explanation, as shown by the overall model, of the existence of a statistically significant relationship between the variables. The result thus builds on existing evidence of theory, which shows that operational efficiency correlated inversely to return on assets and return on equity. The essence of the entity is to yield higher returns by diversifying the associated risk across different entities, resulting from full diversification. This is to lower the risk associated with the bank's investments, resulting in a cost-effective level in terms of investing in different securities, achieving diversification benefits and income stability, showing the pro-activeness, the effectiveness, and the dynamism of management in the changing market environment, administrative compliance, and competence (Segal, 2019).

The study outcome falls in line with that of Shamim et al. (2018), who reiterated that operational efficiency negatively and statistically significantly correlated to the profitability of the banks, showing that in periods of an increase in the expenditure patterns of the banks, leading to poor operational efficiency, the profitability of the banks falls. Tuffour et al. (2018) also affirmed through their findings that bank operating efficiency and return on equity were negatively and statistically significant. Showing that efficient profit-making banks were operating at a lower cost, for the lower the operating cost, the higher the banks' profitability.

Conversely to the correlation result and in conformity with the regression result, Nkegbe and Ustarz's (2015) findings show that management operational efficiency positively and statistically significantly affects the banks' performance indicators such as return on assets, return on equity, and hence that of the bank's profit. This implies that an increase in the internal variables is positive and significant, increasing the banks' performance indicators and profitability.

#### *5.1.3.2.5 The Implications of the Earning quality*

The regression analysis result of earning quality (EQ) recorded a standardized coefficient value of 1.225 with a standard error of 0.053, which was very close to zero, showing the goodness of fit is an indication that there is a very high positive and significant relationship between earning quality and return on assets. A unit increase in earnings quality leads to a 122.5% increase in the profitability of the bank (ROA). The t-value of 5.674 and p-value of 0.000 show that the earning quality coefficient is different from zero and is statistically significant in explaining the variation in ROA (Torres-Reyna, 2007).

The earnings quality correlation result recording values of 0.844 and 0.729 for return on assets and return on equity shows that there is a very strong positive and significant correlation between earnings quality and return on assets and return on equity. The result signifies that a percentage increase in earnings quality leads to an 84.4% and 72.9% increase in return on assets and equity, respectively. The levels of significance of 0.000 and 0.002 were found to be statistically significant at a 1% significance level. Giving enough evidence that the correlation coefficient of earnings quality is statistically significantly different from zero, thus concluding the existence of a significant linear relationship between earnings quality and return on assets and return on equity. This outcome gives an impetus for further investigation as none of the researchers has made any assessment on this in their research (Ogee et. al., 2015)

The strong positive and statistically significant correlation between earnings quality and return on assets and return on equity build on existing theoretical evidence in that the bank's earnings quality positively correlated to return on assets and equity. Theoretically, a positive change in earnings quality leads to a proportional change in bank profitability. The higher the earnings quality, the greater the bank's profitability.

The statistically significant nature may result from the reliability of the finding, which positively affects the finding, leading to the rejection of the null hypothesis and the acceptance of

the alternative hypothesis that the model provides a better fit. The p-values of the regression and the correlation analysis, which fall below a 1% significance level, indicate that the data show compelling evidence of the existence of a statistically significant correlation between earnings quality and return on assets and equity.

#### *5.1.3.2.6 The Implications of the Liquidity measurement*

The data on liquidity measurement (LM), which recorded standardized coefficient values of -0.134 with a standard error of 0.017, which was very close to zero, showing the goodness of fit, suggests that there is a weak negative and significant relationship between liquidity measurement and return on assets. A unit rise in liquidity leads to a 13.4% fall in the profitability of the bank (ROA). The t-value of -.957 and p-value of 0.367 demonstrate that the coefficient of liquidity measurement was not different from 0 and statistically nonsignificant in explaining the variation in ROA. Indicating a negative and statistically nonsignificant relationship between liquidity measurement and the profitability of the bank (Torres-Reyna, 2007).

Similarly, the correlation analysis outcome of liquidity measurement recorded values of --0.240 and -0.339, signifying that liquidity measurement and return on assets and return on equity correlated moderately negatively and significantly. An increase in the bank's liquidity results in a decrease in both the return on assets and equity by 24.0% and 33.9%, respectively. The level of significance of 0.389 and 0.141 were found to be statistically nonsignificant at a 5% significance level. Giving less evidence that the correlation coefficient of liquidity measurement is significantly different from zero, thus unable to conclude the existence of a statistically significant linear relationship between liquidity measurement and return on assets and return on equity. The result is consistent with and in support of the null hypothesis (Ogee et al., 2015).

The level of significance of the p–values of both the regression and the correlation analysis of the data, which are far greater than the 5% significance level, shows no compelling evidence of

the existence of a statistically significant correlation between liquidity measurement and return on assets or return on equity. Thus, liquidity measurement is not substantial enough in affecting the banks' level of profitability. The liquidity measurement data was unable to exhibit the chance-only explanation shown by the overall model of a statistically significant relationship.

However, the negative correlation of the results thus builds on existing evidence of theory, which shows that a high value of liquidity performance indicates that the company is employing a greater amount of financial leverage which increases its financial risk in the form of fixed interest payments. Higher leverage leads to financial risk, pinning the company to a stricter debt agreement, thereby restricting the growth opportunities and ability of the firm to make a profit and hence pay or raise dividends (Auerbach, 2019). However, to conclude that the statistically nonsignificant correlation might be that the sample size was too small, as the study data published by the institutions was very authentic.

Notwithstanding the statistically nonsignificant correlation, the findings of Tuffour et al. (2018), demonstrated that commercial banks' profitability of return on assets and return on equity and the bank's liquidity correlated highly negatively and significantly. Showing that an increase in banks' liquidity leads to a decrease in banks' profitability.

Shamim et al. (2018) also reiterated that an increase in the liquidity of the banks results in a decrease in the profit margins of the commercial banks, showing that liquidity level and return on assets correlated negatively and significantly. Thus, there is an inverse correlation between the banks' liquidity and the profitability of the universal banks, and an increase in liquidity level impacts negatively on return on assets and profits. The results of Kostikov et al. (2019), however, posit a contrary view in that bank's profitability in terms of return on equity thus positively correlated to and influenced by liquidity. Implying that an increase in liquidity directly increases the banks' profit and return on equity.

#### *5.1.3.2.7 The Implications of the Sensitivity to market risk*

The regression analysis outcome on sensitivity to market risk, which recorded a standardized coefficient value of 0.339 with a standard error of 0.013, which was very close to zero, showing the goodness of fit, indicates that there is a weak positive and significant relationship between sensitivity to market risk and the return on assets. A unit increase in sensitivity to market risk leads to a 33.9%) increase in the profitability of the bank (ROA). However, the t-value of 2.088 and p-value of 0.050 reveal that the coefficient of sensitivity to market risk is different from zero and statistically significant in explaining the variation in ROA (Torres-Reyna, 2007).

The correlation analysis of sensitivity to market risk, which recorded values of 0.252 and 0.040 to return on assets and equity, shows that sensitivity to market and return on assets and equity are weakly positively correlated. The result shows that a percentage increase in sensitivity to market risk leads to a 22.5% and a 4.0% increase in return on assets and return to equity, respectively. The levels of significance of 0.365 and 0.888 are statistically nonsignificant at a 5% significance level. Thus, giving less evidence that the correlation coefficient of sensitivity to market risk is less significantly different from zero and unable to conclude the existence of a statistically significant linear relationship between sensitivity to market risk and return on assets and return on equity. Suggesting that the insignificant coefficient of sensitivity to market risk is not substantial enough to affect the banks' level of profitability (Ogee et. al., 2015).

The level of significance of the p–values of the data for regression shows compelling evidence of the existence of a statistically significant correlation between sensitivity to market risk and return on assets and equity. The sensitivity to market risk data was able to exhibit the chance-only explanation shown by the overall model of a statistically significant relationship. The correlation analysis demonstrates a positive correlation between sensitivity to market risk and the return on assets and equity but statistically not significant.

The positive correlation of the result builds on existing evidence of the theory. Showing that sensitivity to market risk assesses the institution's sensitivity to exposure to market risk effects on its financial earnings and its operations, emanating from unfavourable fluctuations in interest rates, derivatives, and foreign exchange rates, which are also influenced by trading and non-trading positions, foreign operations, prices of equities, commodities prices, and derivatives. Sensitivity to market risk looks at the banks' market fluctuations with loans and advances to total deposits serving as a proxy. It further assesses the banks' protective cover from the banks' earnings and capital (Stackhouse, 2019).

## 5.2 Recommendations for application

The study results show that government spending, taxation, inflation rate and earnings quality were found to be positive and statistically significantly correlated with the bank's profitability. While management operational efficiency was found to be negatively and significantly correlated with ROA. However, the other variables show some diverse correlations but insignificant impact. The following are the recommendations for application to the stakeholders.

### *5.2.1 Fiscal and Monetary Policy and Macroeconomic Variables*

The overall fiscal and monetary policy outcome reveals that there was a positive and statistically significant correlation between the fiscal and monetary policy tools and the profitability of the bank. Indicates that fiscal and monetary policy promotes growth sustainability using government spending, taxation, and money supply aggregation; thus, revamping or restraining aggregate demand when the economy is in a recessionary or booming state by closing a deflationary or inflationary gap. Stakeholders, particularly the government, should be very concerned about changing the levels of tax collection, government spending, and money supply in influencing

aggregate demand to stimulate and stabilize the universal banks' profitability and the nation's economy and economic activities.

This is achieved through sustainable economic growth to achieve macroeconomic objectives and eliminate the levels of fluctuations in the banking industry and the business cycles. For it possesses the potency to alter the real national output through the optimum allocation of resources, by combating inflation, interest rates, and GDP growth in terms of price stabilization, which also stimulates economic growth, equitable distribution of income and wealth, and universal banks' profitability.

The study outcomes of the positive correlation between government spending and taxation and the ROA led to the recommendation of a more viable and comprehensive policy for bank managers. This is to enhance its competitiveness in the banking sector to achieve a higher degree of financial intermediation and to provide a solution to the challenges facing its performance through changes in fiscal and monetary policies. This will assist regulatory authorities in providing insight into the effects of fiscal and monetary policies on commercial bank performance and in formulating future policies to improve banking sector profitability through price, interest rate, and exchange rate stability, as well as to boost economic growth.

The result revealed that there exists a strong positive and significant correlation between government spending and the bank's profitability. It shows that government spending possesses the power to influence real GDP growth and the level of economic output and hence revenue. Professionals, businesspersons, and shareholders alike should encourage the government to invest in productive ventures such as investment in projects, infrastructure, agriculture, and industry to increase disposable income, which will ultimately affect the bank's profitability. The government should therefore spend more by giving the various businesses and the general public more money

to spend, thereby increasing both supply and demand for economic growth, and the growth in the universal banks' financial performance, not to mention inflationary spiral effects.

The results of taxation revealed that there exists a positive and statistically significant correlation between taxation and the bank's profitability of ROA and ROE. The fact that they are positively related does not mean the government should increase its tax levels for revenue generation. For there are several categories of taxation revenue such as income tax, capital gains tax, property tax, payroll tax and sales tax which affect all calibre of people. The economic theory reveals that taxation affects consumers' income and industry's profitability as taxes on profits, affect savings, consumption, and investment negatively and hence real GDP growth and national income. Stakeholders, therefore, should be mindful of this fact before the implementation of tax increment (e-levy) for the betterment of a nation's economy through fiscal coordination between plan and annual budget in terms of requisite cost benefit analysis and its impact on the universal banks' profitability.

The study outcomes of the positive and the statistically significant correlation between GDP growth and inflation rate and the bank's profitability of ROE are very beneficial to the various banks' customers and potential customers. They are interested in knowing the reasons behind the changes in the cost of borrowing and lending of money by commercial banks in the recent past. Again, their understanding of the various effects of the macroeconomic variables in terms of the government and the central bank's policy changes on the interest rates and the inflation rates would broaden their knowledge of the customer services available in the industry. The outcomes should motivate them to utilize them in forecasting their portfolios and their benefits and making borrowing and lending decisions concerning interest and inflation rates.

The negative and positive correlation of GDP growth and inflation rate to the bank's profitability indicates that stakeholders should be much more concerned about ensuring the bank's

profitability stabilization, which is highly influenced by the money supply. This shows that controlling the quantity of money supply means directly controlling the inflation and interest rates and hence the bank's profitability. The state should ensure this implementation to attain certain policy objectives of economic modernization, growth and development through technology.

The Bank of Ghana, in consultation with the government, should come up with certain strategic measures to be able to control inflation and interest rates to ensure the stability of the macroeconomic factors to avoid government economic mismanagement and hence the banks' profitability. It equally serves as a recommendation and a source of very important information to universal bank officers and shareholders in increasing the profitability of their banks and their financial performance. The control of money supply through discount rates directly affects the charges on loans or lending facilities to the public and universal banks in the fulfilment of shortfalls in funding for the avoidance of liquidation and bank failure.

### *5.2.2 The Banks' Internal Control Factors*

The overall outcome of the firm's specific internal control factors confirmed that there exists a positive and statistically significant relationship between the firm's specific internal control variables and the bank's profitability of ROA and ROE. In light of the importance of this impact, banking regulators and policymakers should design strategies for effective management and the development of risk management plans to ensure the stability of internal factors affecting the bank's financial performance and the type of risks the bank is exposed to.

The study result of earnings quality positively and statistically significantly correlated with the bank's profitability. The result shows that professionals, businesspeople, investors, and other shareholders alike should ensure an effective earnings quality in terms of the past, the present, and future earnings prospects. Banks should be able to use this criterion to demonstrate to their shareholders and investors, under stringent economic conditions, the bank's capability to generate

and make profits comparable to revenue and operating costs, shareholders' equity and balance sheet assets.

Due to the positive and statistically significant correlation between earnings quality and the bank's profitability, the bank should be able to minimise the bank's potential losses and increase its ability to pay its dividends to show the bank's all-embracing efficiency. The purpose is to absorb its financial shocks in terms of earnings volatility, market risk and composition, comprising interest rates and price risks, the rating of net interest margin and net worth level. This is to enable the bank to maintain its competitive leadership, thereby adding up to capital as an influential factor in measuring its continuous viability.

Management's operational efficiency negatively statistically significantly correlated with the bank's profitability. Professionals, businesspeople, investors, and other shareholders alike should have strong management operational efficiency with the ability and capability to plan, as financial stress and crisis management are within the control of the board of directors. The essence is to reduce the risk of the company's daily activities and operations and its risk portfolios and diversification. This is to ensure the bank's smooth, effective operations and good financial performance. To be seen as a strategic measure of risk management to improve the general financial performance of the bank and its profitability. Thus, it must be done and be done well, by risk control, monitoring, and evaluation systems, with the application of internal and external policy laws and regulations.

Furthermore, the study result of capital adequacy positively and negatively statistically insignificantly correlated with the bank's profitability. Professionals, businesspeople, investors, and other shareholders alike must ensure a good implementation of the capital adequacy result. This must go with strong capitalization to reduce the cost of financial distress through the application of its equity capital funds for the betterment of the bank's profitability.

It serves as a protective cover for depositors and shareholders by ensuring the capacity to absorb some appropriate aggregate number of potential losses in terms of lowering leverage and decreasing expenses through low-interest costs. Thereby furthering the progression of the financial system's ability, stability, and efficient scope of growth. Due to the outcome of the results, which reveal that capital adequacy positively correlated to the bank's profitability, the bank should adopt a dynamic growth strategy to ensure that its capital adequacy value is above the stated requirement of 10%. Thus, to ensure the sustainability of the bank in meeting its financial obligations by absorbing losses with a lower bank's risk of failure and insolvency.

The correlation outcome of liquidity measurement signifies that liquidity measurement and the bank's profitability correlated negatively. Although the relationship was not significant, the bank and other stakeholders should be able to raise their liquidity through the availability of liquid cash to demonstrate the readiness to maintain liquid cash and the banks' ability to achieve their short-term loan responsibilities and commitment. This will allow the bank to meet unexpected depositor withdrawals and eliminate any potential fluctuations that could lead to liquidity shocks without affecting daily operations or loan obligations. Due to the negative correlation effect, the bank should ensure that they could easily convert the bank's marketable assets into cash to avoid interest rate risk and cash flow risk sensitivity and exposure to excessive losses. This will inspire the depositors and lenders' confidence and ensure the bank's adequacy and consistency, resulting in the growth and survival of the bank.

The correlation result of asset quality and sensitivity to market risk, which shows that there is a positive and significant relation (regression analysis) and a weak positive and negative correlation between the bank's profitability and statistically nonsignificant is very essential as it assesses the fairness and soundness of assets, the quality of investments, and non-performing assets. In light of the importance of asset quality and sensitivity to market risk, stakeholders

including the bank should evaluate the bank's investment and loan or credit lending policies, financial procedures, and practices to ensure their adequacy, efficiency, and effectiveness within the company to avoid non-performing loan challenges in the banking system.

This will help the bank and other banks to minimise their credit or portfolio risks aligned to the assets and the loss of the asset's value to generate revenue, hence the elimination of non-performing loans to total loans and the less risky stance of the said bank. This calls for the banks' specific role in the attainment of the financial sector's profitability and its impact on economic growth and the country's economic well-being through the provision of affordable credit.

### 5.3 Recommendations for future research

The study outcomes, although well elaborated and developed, have some research gaps. The study has identified some gaps in this effect, which are very useful for theory and practice. These gags serve as a benefit for further and future research, in terms of design and evaluation and testing of existing theories, as well as the study results and the theory developed.

The survey results show that the macroeconomic variables of GDP growth; the monetary policy tool of money supply; and internal control variables of capital adequacy, asset quality, liquidity, and liquidity were statistically nonsignificant. This means they have no impact on the financial performance of the bank, although they are correlated positively and negatively. It may mean that the sample size in the study was too small and limited to allow for conclusions.

The outcome may be due to the exclusiveness of other universal banks and may be limited to only Ecobank customers and data reported in the country. It is therefore, recommended that further research be done to determine their correlation and statistical significance in the country by the inclusion of other universal banks within and outside the country to broaden the database.

Again, further study may resolve to compare different banks' results at the same time to see if they will exhibit similar or different outcomes.

Due to the limitation of the time factor, a cross-sectional research design was adopted as a good measure of the study. Suggesting that a shorter time is used between the data collection for both the predicators and that of the outcome variables, which is insufficient in making a better and proper assessment of the study outcome. This may have led to inadequate information or data and imprecise or biased information. This led to the unexpected outcome of some of the study results discussed and analysed. Further research needs to be conducted with the application of time series analysis through longitudinal research design by which the variables are measured at different points in time and at great length. Thus, exercising another methodological design is paramount to capture the impact of the independent variables on the bank's profitability, thereby increasing the model’s explanatory ability, reliability, and validity.

Again, money supply is used as a proxy for the monetary policy tools of central bank rates; cash reserve ratio, and reserve requirement due to time, leaving out the individual variables that affect the bank's profitability. On the other hand, a detailed discussion and analysis of the individual monetary policy tools of central bank rates, cash reserve ratio, and reserve requirement is required. This, therefore, created a pitfall for the study, resulting in a research gap. It would be very relevant to undertake a longer-term and more detailed research study that sought to quantify and measure their various effects. Further research should examine the individual monetary policy tools' impacts on the bank's profitability to demonstrate their positively or negatively correlated and their statistical significance.

Some of the survey results were inconsistent and not in conformity with theoretical principles and understanding, with particular references to economic and financial theories, which form the basis of the study analysis and exploration. The outcome is likely to result from inconsistent data

information gotten from the secondary data records or the methodology employed. Therefore, further research in analysing in detail their outcome is highly recommended to determine their validity and reliability with economic theory, thereby reviewing the evidence demonstrated in the study report. Thus, undertaken with the application of a different set of data records from different institutions and with different research methods to show their theoretical and practical relevance and impact.

The study developed interview questions specifically for the bank managers relating to the CAMELS analysis and professional self-identity. However, the bank managers failed to complete the interview checklist and just gave their biographical data leaving the rest of the questions unanswered. To the extent where a central manager has to sack the researcher from the office and decline from being selected for participation. This may have affected the qualitative data analysis of the research study resulting in the weaknesses of the survey study and making it completely irrelevant. This, therefore, gives room for a direction of further research strictly using appropriate qualitative methodology data analysis and the employment of an interview checklist in assessing the effectiveness and the required results based on different settings.

## 5.4 Conclusions

The results of the study survey relate to a quantitative and qualitative assessment of the impact of fiscal and monetary policies on the financial performance of commercial banks in Ghana and their effect on the economy, using Ecobank Ghana as a case study in the past fourteen years. Broadly, the paper assesses three major factors influencing the bank's profitability in terms of fiscal and monetary policy tools; macroeconomic variables; and the bank's internal control factors, which reveals some considerable variations. All satisfying, the criteria specified in the research, as there is no precise and definite investigation and the establishment of such a study in Ghana.

In assessing and identifying the impact of the fiscal and monetary policy tools of the government and the central bank and their effect on the financial performance of Ecobank, the overall fiscal and monetary policy tool outcome reveals that there is a positive correlation between the fiscal policy tools and ROA and ROE. The qualitative analysis shows that the fiscal policy tools of government spending and taxation show an upward adjustment with the bank's profitability over the entire period under investigation. Government spending and taxation show an increasing trend in terms of an upward adjustment over the entire period under investigation.

As shown in Figure 4.1, government spending increased from GHc4, 519.50m in 2006 through to GHc110, 414.47m in 2021 and taxation increased from GHc3, 196.0m in 2006 through to GHc67.590.39m in 2021. Money supply (M2+) also grew significantly in a nominal amount, from GHc4, 351.6m in 2006 through to GHc120, 521.82m in 2020. Demonstrating a positive correlation with the ROA and ROE, which also trended upwards, consequently in the same positive direction, increasing from GHc30.18m and GHc22.35m in 2017 through to GHc773.74 and GHc543.88 in 2020 respectively.

The regression analysis of the quantitative approach recorded an adjusted R-squared value of 42.1% and 38.3%, and a p-value of 0.015 and 0.022 at a 95% confidence level, with the fiscal policy tools predicting 42.1% and 38.3% of the variability in the bank's profitability (ROA and ROE). Confirming the existence of a positive and significant relationship between the fiscal policy tools and the profitability of the bank. The positive results are in line with the qualitative analysis. The p-value of 0.015 and 38.3% at a 95% confidence level revealed that the study model is statistically significant, leading to the acceptance of the alternative hypothesis.

With the individual tools, the correlation finding revealed that there exists a strong positive correlation between government spending and the bank's profitability of ROA and ROE, reporting high correlation values of 0.63.9 and 0.643 at p-values of 0.010 and 0.010, which are less than the

0.05 level of significance. Shows that a unit increase in government spending leads to a (0.639) 63.9% and (0.643) 64.3% rise in return on assets and equity. The level of significance of the p-values found to be statistically significant at a 1% significance level, indicating the statistical importance of the relationship and, therefore, the rejection of the null hypothesis. The results are in line with the qualitative analysis.

The correlation result of taxation revealed that there exists a strong positive correlation between taxation and the bank's profitability of ROA and ROE, recording high correlation values of 0.660 and 0.612 at p-values of 0.007 and 0.015, which is less than the 0.050 level of significance. The outcome demonstrates that a unit increase in taxation leads to a (0.660) 66.0% and (0.612) 61.2% increase in return on assets and equity, respectively. The level of significance of the p-value is found to be statistically significant at a 5% significance level, revealing the statistical importance of the relationship and hence, the rejection of the null hypothesis. The positive results are in line with the qualitative analysis, which shows that taxation positively correlates with ROA and ROE. An increase in taxation largely affects the lending behaviour of Ecobank.

The results of government spending and taxation are in line with the findings of Kipkemoi et al. (2016), which show that the bank's profitability and the fiscal policy tools of government spending and taxation correlated positively and significantly. The findings of Munteanua and Göndörb (2012) also confirmed the study's result by showing that there was a positive relationship between fiscal policy and banking behaviour. Implies that increasing banking performance in the economy directly relates to increasing aggregate demand brought about by the loosening of fiscal policy implementation. Thus, an increase in government spending and taxation leads to a proportional increase in banks' profitability.

The statistical qualitative analysis shows that the money supply increases from GHc4, 351.60 through to GHc120, 521.82 with ROA and ROA increasing from GHc30.18m and GHc22.35m in

2017 through to GHc773.74 and GHc543.88 in 2020, respectively. Monetary policy deals with the control of the money supply in the economy to influence interest rates and inflation by lowering inflation and keeping it stable. The outcome revealed that the government is strongly implementing an expansionary monetary policy intervention as against a contractionary monetary policy intervention in the economy.

The results met the economic expectations of the study and its significance. It shows that there is a positive and statistically significant relationship between the fiscal policy tools and the bank's profitability. Fiscal policy, interwoven with economic theories, affects economic growth and the financial performance of the banking sector through fluctuations in government expenditure and taxation.

In assessing and identifying the impact of the macroeconomic variables and their effect on the financial performance of Ecobank, the overall macroeconomic variables outcome of the qualitative analysis reveals there is a positive correlation between the macroeconomic variables and ROA and ROE. The qualitative analysis in Figures 4.1 and 4.2 shows that the total value of GDP growth, during the years under review went up significantly from GHc18, 705.1m in 2006, through to GHc383, 486.00m in 2020. The dependent variables of profit before tax (ROA) and profit after tax (ROE) trended upwards, consequently in the same positive direction as GDP growth and inflation rates, increasing from GHc30.18m and GHc22.35m in 2017 through to GHc773.74 and GHc543.88 in 2020, respectively.

The overall macroeconomic variables of the regression analysis of the quantitative approach followed the same trend by recording an adjusted R-squared value of 0.478, revealing that there is a positive relationship between the macroeconomic variables of GDP growth and inflation rate. As predicted (0.478), 47.8% of the variation in the bank's profitability (ROE) is significant, showing that the result is 47.8% significantly reliable. The p-value of 0.008 at a 95% confidence level

reveals that there is a statistically significant relationship between the macroeconomic variables and the profitability of the bank.

The positive outcome is in line with the qualitative analysis. The graphical result of the macroeconomic variables indicates that the total value of GDP growth went up very significantly. Affirming theoretical principles, the yearly percentage growth rate of real GDP is very crucial for every economy as it indicates the performance of the nation's economy. The result is, therefore, able to meet the expectations of the study by showing that there is a statistically important relationship between the macroeconomic variables and the bank's profitability (ROE). Hence, the rejection of the null hypothesis and the model provides a better fit for the acceptance of the alternative hypothesis.

The individuals' results demonstrated mixed revelations. The GDP growth outcome of the regression recorded standardized coefficients of 0.291, a t-value of 1.387 and a p-value of 0.191. However, the correlation coefficient values of -0.164 and -0.026 indicate that GDP growth is inversely correlated to the bank's profitability return on assets and equity. Thus, a unit increase in GDP growth leads to a decrease of (-0.164) 16.4% and (-0.026) 2.6% in return on assets and equity, respectively. The levels of significance of 0.559 and 0.926 are statistically not important. This correlation outcome was contrary to the qualitative analysis. Shamim et al. (2018) stated that GDP growth negatively and insignificantly correlated to the profitability of banks.

The inflation rate regression recorded standardized coefficients of 0.808, a t-value of 3.849, and a p-value of 0.002. The correlation recorded coefficient values of 0.441 and 0.694, which indicate that there is a positive correlation between the inflation rate and the return on assets and equity. This shows that a percentage unit increase in the inflation rate leads to an increase in the return on assets and the return on equity by (0.441) 44.1% and (0.694) 69.4%, respectively.

The p-value of 0.004 for ROE is statistically significant at a 95% confidence level, except for the statistically nonsignificant p-value of 0.100 for ROA. The positive correlation outcome conforms to the qualitative analysis, showing that the inflation rate positively correlates with ROA and ROE. The findings of Kutsienyo (2011), which were in line, show that there was a positive and significant relationship between inflation and the bank's profit. The assertion proves that increasing the rate of inflation causes return on assets and equity to increase, and in the same way, falling inflation rates lower and decrease universal banks' profitability.

Also in examining the bank's internal control factors employed by Ecobank in determining the financial performance and its effect on the bank's profitability, the qualitative analysis in Table 4.2, Figures 4.1 and 4.2, shows that there is a positive correlation between the bank's internal control factors and ROA and ROE. A percentage change in the bank's internal control variables leads to the same directional proportionate change in the bank's profitability.

The overall bank's internal control factors of the regression analysis of the quantitative approach followed the positive trend of the qualitative analysis. It recorded adjusted R-squared values of 0.870 and 0.681 and p-values of 0.000 and 0.012 at a 95% confidence level. It provides enough evidence that the study model is statistically significant. The bank’s specific internal control variables predicted and explained 87.0% and 68.1% variation in the bank’s profitability of ROA and ROE, respectively. The result confirmed the existence of positive and statistically significant variability between the internal control variables and the bank’s profitability, meaning the rejection of the null hypothesis and that the model provides a better fit. The result shows that the variables as a group were jointly statistically significant.

However, the individual results show diverse relations. The capital adequacy regression of the ROA recorded standardized coefficients of 0.127, a t-value of 0.495, and a p-value of 0.808. The correlation results of 0.084 and -0.306 of the capital adequacy ratio also indicate that there is

a positive and negative correlation between the capital adequacy ratio and return on assets and equity. A unit increase in capital adequacy ratio leads to a (0.084) 8.4% and (-0.306) 30.6% increase and decrease in return on assets and equity. While the level of significance of the p-values of 0.767 and 0.267 is statistically nonsignificant at a 5% significance level, leading to the support of the null hypothesis. The positive outcome is in line with, while the negative outcome is contrary to, the qualitative analysis, in that capital adequacy positively correlates with ROA and ROE. The submission of Tuffour et al. (2018) reveals that capital adequacy was positive and statistically significant related to returns on assets and equity. An indication that high capital adequacy leads to higher ROA and ROE.

The asset quality regression of the ROA recorded standardized coefficients of 0.393, t-value of 2.954, and p-value of 0.018, showing a positive and significant relationship, conforming to the qualitative analysis. The correlation result of asset quality with coefficient values of 0.020 and -0.136 shows that there is a positive and negative correlation between asset quality and return on assets and return on equity. It signifies that a unit increase in asset quality leads to a (0.020) 2.0% and a (-0.136) 13.6% increase in return on assets and equity. The level of significance of the p-values of 0.944 and 0.629 is statistically nonsignificant at a 95% confidence level, leading to the support of the null hypothesis. The positive outcome is in line with the qualitative analysis, while the negative outcome is contrary to it.

The outcome of asset quality by Tuffour et al. (2018) revealed that asset quality correlated positively and insignificantly to the banks' profitability. Which is an indication that efficient mobilization of banks' assets improves asset quality, leading to an increase in return on assets and equity and hence higher bank profitability.

The operational efficiency regression of the ROA recorded standardized coefficients of 0.539, t-value of 1.531, and p-value of 0.164, showing a positive and nonsignificant relationship,

conforming to the qualitative analysis. The correlation outcome of the operational efficiency values of -0.719 and -0.558 to return on assets and equity is an indication that operational efficiency and return on assets and equity correlated negatively. A unit increase in operational efficiency results in a (-0.719) 71.9% and (-0.558) 55.8% decrease in return on assets and equity, respectively. The level of significance of the p-values of 0.003 and 0.030 is statistically significant at a 5% significance level, affirming the alternative hypothesis. The negative correlation outcome is contrary to the qualitative analysis, which shows that operational efficiency positively correlates with ROA and ROE.

The result of management efficiency falls in line with that of Shamim et al. (2018), who reiterated that operational efficiency negatively and statistically significantly correlated to the bank's profitability. It shows that in periods of an increase in the expenditure pattern of the banks, the banks lead to poor operational efficiency and the profitability of the banks falls. In that, efficient profit-making banks are operating at a lower cost, for the lower the operation cost, the higher the banks' profit.

The earnings quality regression of the ROA recorded standardized coefficients of 1.225, t-value of 5.674, and p-value of 0.000, showing a positive and significant relationship. The correlation result of the earnings quality values of 0.844 and 0.729 to return on assets and return on equity shows that there is a positive correlation between earnings quality and return on assets and return on equity. The result signifies that a unit increase in earnings quality leads to a (0.844) 84.4% and (0.729) 72.9% increase in return on assets and equity. The higher the earnings quality, the higher the bank's profitability. The level of significance of the p-values of 0.000 and 0.002 reveals there is a significant correlation and statistical significance at a 95% confidence level, affirming the acceptance of the alternative hypothesis. The positive outcome conforms to the

qualitative analysis, which shows that earnings quality positively correlates with ROA and ROE. This gives an impetus for further investigation as none of the researchers has made any assessment.

The liquidity measurement regression of the ROA recorded standardized coefficients of -0.134, t-value of-0.957, and p-value of 0.367, showing a negative and nonsignificant correlation. The correlation outcome of -0.240 and -0.339 of liquidity measurement signifies that liquidity measurement and return on assets and return on equity are negatively correlated. A unit increase in the bank's liquidity leads to a decrease in return on assets and equity by (-0.240) 24.0% and (-0.33.9) 33.9%, respectively.

While the levels of significance of 0.389 and 0.141 are not significantly correlated and statistically important at a 5% significance level, dis-affirming the qualitative analysis leads to the support of the null hypothesis. The negative correlation outcome is contrary to the qualitative analysis, which shows that liquidity measurement positively correlates with ROA and ROE. Shamim et al. (2018) reiterated that liquidity and return on assets negatively and insignificantly correlated, indicating an inverse correlation between the banks' liquidity and the profitability of the universal banks. As a result, an increase in liquidity negatively affects the return on assets.

The sensitivity to market risk regression of the ROA recorded standardized coefficients of 0.339, t-value of 2.088, and p-value of 0.050, showing a positive and significant relationship, conforming to the qualitative analysis. The sensitivity to market risk results in 0.252 and 0.040 to return on assets and equity, which shows that sensitivity to the market and return on assets and equity positively correlated. Shows that a unit increase in sensitivity to market risk leads to a (0.252) 25.2% and (0.040) 4.0% increase in return on assets and return to equity. However, the levels of significance of 0.365 and 0.888 not statistically significantly correlated at a 95% confidence level, leading to the support of the null hypothesis. The positive correlation outcomes are in line with the qualitative analysis, which shows that sensitivity to market risk positively

correlates with ROA and ROE. However, none of the studies conducted any investigation based on sensitivity to market risk, making it empirically difficult to affirm its correlation path.

The recommendation is that the fiscal policy tools and the internal control variables be considered very critically as they positively affect the profitability of the bank and the economy for profitability and economic growth and development. Particularly government spending, as it can be seen from the individual results that the fiscal and monetary policy tools of government spending have values of 63.9% and 64.3%, which demonstrate a more significant positive correlation with return on assets and equity than the other tools.

With taxation recording 66.0% and 61.2% for return on assets and equity and inflation recording 44.1% and 69.4% for return on assets and equity. Again, earnings quality of 84.4% and 72.9% and operational efficiency values of negative 71.9% and 55.8% of the internal control variables needed much attention among the individuals' results. Their percentage values demonstrate a more significant positive correlation with return on assets and equity. The p-values thus found to be statistically significant at a 95% confidence level.

In summary, the regression and correlation results show diverse outcomes. The adjusted R-squared values in terms of the bank's internal control variables of 0.870, 0.681 of ROA and ROE, recorded p-values of 0.000 and 0.012, which reveal a positive and statistically significant correlation to the bank's profitability of return on assets and equity. The macroeconomic variables recorded an adjusted R-squared value of 0.478 and a p-value of 0.008 for ROE and the fiscal policy tools of 0.421 and 0.383 for ROA and ROE, and p-values of 0.015 and 0.022, respectively, which fall below the critical value of 0.050 at the 95% significance level. Reveals a positive and statistically significant correlation to the bank's profitability of ROA and ROE.

The analysis of inferential statistics results with the application of the correlation matrix with return on assets and equity as the measure of the bank's profitability shows that the study model

was both statistically significant and nonsignificant. The correlation results indicate that government spending, taxation, inflation rate, and earnings quality positively and statistically significantly correlated to ROA and ROE.

However, capital adequacy, asset quality, and sensitivity to market risk were positively correlated to ROA but statistically nonsignificant at a 95% confidence level. Again, management operational efficiency negatively and statistically significantly correlated to ROA and ROE, at a 95% confidence level. GDP growth and liquidity measurement correlated negatively to ROA and ROE. They are also statistically nonsignificant.

Usage should be concentrated on fiscal and monetary policy and the internal control variables since their impact is very significant. The study should include other universal banks in Ghana and other banks outside the country, which the scope of the research study failed to capture. The outcome will ensure the continuous provision of good results to many stakeholders, remaining an inevitable component of the universal banks' sustainable activity. The analysis of the data reveals that the outcomes conform to the study objectives to varying degrees.

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## APPENDIX A

**Table 4.4**

*Descriptive Statistical Analysis of the Responses from the Study Questionnaire*

| THEME | Frequency | Percentage |
|---|---|---|
| **Monetary policy tools affecting the financial performance of Ecobank in Ghana**. | F | % |
| Reserve Requirement | 34 | 56.3 |
| Discount Rate | 11 | 18.3 |
| Open Market Operation | 12 | 20 |
| Interest on Reserves | 2 | 3.4 |
| Interbank Interest Rate | 1 | 1.7 |
| Total | 60 | 100.0 |
| **The level of effect of increasing bank rate on the financial performance of Ecobank in Ghana** | F | % |
| Affects it negatively | 29 | 49.2 |
| Affects it positively | 28 | 47.5 |
| No effect | 2 | 3.4 |
| Total | 59 | 100.0 |

| **The level of effect of increasing reserve requirements on the financial performance of Ecobank in Ghana** | F | % |
|---|---|---|
| Affects it negatively | 46 | 78 |
| Affects it positively | 12 | 20.3 |
| No effect | 1 | 1.7 |
| | 59 | 100.0 |
| **The level of effect of increasing open market operations on the financial performance of Ecobank** | F | % |
| Affects it positively | 10 | 17.2 |
| Affects it negatively | 37 | 63.8 |
| No effect | 11 | 19 |
| Total | 58 | 100.0 |
| **Government fiscal policy that affects the financial performance of Ecobank in Ghana** | F | % |
| Taxation | 37 | 69.8 |
| Government Spending | 12 | 22.6 |
| Subsidy | 4 | 7.5 |
| Total | 53 | 100.0 |
| **Policy Intervention the Government of Ghana implementing most in the past 13 years.** | F | % |
| Expansionary Fiscal Policy | 3 | 4.9 |
| Contractionary Fiscal Policy | 58 | 95.1 |
| Total | 61 | 100.0 |
| **The level of effect of increasing interest rate on Ecobank borrowing customers in Ghana** | F | % |
| Affects it negatively | 51 | 92.7 |
| Affects it positively | 3 | 5.5 |
| No effect | 1 | 1.8 |
| Total | 55 | 100.0 |

Source: Research Findings, 2022

**Table 4.5**

*Descriptive Statistical Analysis of the Responses on the level of Agreement*

| THEME | F/% | | Neutral | Agreed | Strongly Agreed | Total |
|---|---|---|---|---|---|---|
| Reserve requirement changes affecting the | F | | 9 | 40 | 11 | 60 |
| lending behaviour of Ecobank in Ghana | % | | 15 | 66.7 | 18.3 | 100.0 |
| The increasing trend of reserve requirement in | F | | 12 | 20 | 27 | 59 |
| the last 13 years in Ghana | % | | 20.3 | 33.9 | 45.8 | 100.0 |
| Open market operation changes affecting the | F | | 26 | 31 | 3 | 60 |
| lending behaviour of Ecobank | % | | 43.3 | 51.7 | 5.0 | 100.0 |
| The increasing trend of open market operation | F | | 39 | 9 | 9 | 57 |
| in the last 13 years in Ghana | % | | 68.4 | 15.8 | 15.8 | 100.0 |
| Policy intervention in the past 13 years - | F | 1 | 5 | 27 | 17 | 47 |
| Contractionary Monetary Policy | % | 2.1 | 10.6 | 57.4 | 29.8 | 100.0 |
| Policy intervention in the past 13 years - | F | | 10 | 19 | 15 | 44 |
| expansionary monetary policy | % | | 22.7 | 43.3 | 34 | 100.0 |
| Contractionary monetary policy affecting and | F | | 10 | 27 | 15 | 54 |
| causing interest rates to rise | % | | 18.5 | 50.0 | 31.5 | 100.0 |
| Expansionary monetary policy affecting and | F | | 25 | 22 | 7 | 54 |
| causing interest rates to fall | % | | 46.7 | 40.7 | 13.0 | 100.0 |
| Contractionary monetary policy decreasing | F | 2 | 16 | 24 | 12 | 54 |
| money supply in Ghana | % | 3.7 | 29.6 | 44.4 | 22.2 | 100.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Expansionary monetary policy increasing | F | | 12 | 21 | 17 | 50 |
| money supply in Ghana | % | | 24 | 42 | 34 | 100.0 |
| Expansionary fiscal policy increases the money | F | | 13 | 21 | 20 | 54 |
| supply to boost economic growth | % | | 24.1 | 38.9 | 37 | 100.0 |
| Contractionary fiscal policy eliminating | F | | 11 | 28 | 15 | 54 |
| inflation in Ghana | % | | 20.4 | 51.9 | 27.8 | 100.0 |
| Expansionary fiscal policy increases the money | F | | 13 | 28 | 13 | 54 |
| supply in Ghana | % | | 24.1 | 51.9 | 27.8 | 100.0 |
| Contractionary fiscal policy decreases money | F | 2 | 7 | 19 | 26 | 54 |
| supply in Ghana | % | 3.7 | 13.0 | 35.2 | 48.1 | 100.0 |
| The very great extent to which fiscal policy | F | | 11 | 26 | 23 | 60 |
| affect the financial performance of Ecobank | % | | 18.3 | 43.3 | 38.3 | 100.0 |
| Taxation rate affecting the lending behaviour of | F | | 15 | 27 | 18 | 60 |
| Ecobank in Ghana | % | | 15.0 | 45.0 | 30.0 | 100.0 |
| The increasing trend of government taxation | F | | 15 | 24 | 21 | 60 |
| the rate in 13 years in Ghana | % | | 25.0 | 45.0 | 35.0 | 100.0 |
| Government spending affects the lending | F | | 12 | 23 | 25 | 60 |
| the behaviour of Ecobank Gh. | % | | 20.0 | 38.3 | 41.7 | 100.0 |
| The increasing trend Government spending in | F | | 10 | 23 | 27 | 60 |
| the last 13 years in Ghana | % | | 16.7 | 38.3 | 45.0 | 100.0 |
| The very great extent to which interest rate | F | 3 | 1 | 30 | 27 | 61 |
| changes affect leading behaviour of Ecobank | % | 4.9 | 1.6 | 49.2 | 44.3 | 100.0 |
| The increasing trend of interest rates in the last | F | | 11 | 19 | 31 | 61 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 13 years in Ghana | % | | 18.0 | 31.1 | 50.8 | 100.0 |
| Interest rate changes to a very great extent | F | 2 | 7 | 21 | 26 | 59 |
| affect | | | | | | |
| the borrowing behaviour of Ecobank customers | % | 3.3 | 11.8 | 35.6 | 44.1 | 100.0 |
| The general trend of Interest rate changes in the | F | | 20 | 17 | 22 | 55 |
| last 13 years in Ghana is increasing | % | | 33.9 | 28.8 | 37.3 | 100.0 |
| The general trend of borrowing by Ecobank | F | | 9 | 29 | 23 | 61 |
| customers in the last 13 years is increasing | % | | 14.8 | 47.5 | 37.7 | 100.0 |
| The increasing trend of asset quality | F | 4 | 8 | 20 | 30 | 58 |
| performance of Ecobank in the last 13 years | % | 6.8 | 13.8 | 34.5 | 51.7 | 100.0 |
| The increasing trend of management operating | F | | 21 | 20 | 14 | 59 |
| efficiency of Ecobank in the last 13 years | % | | 35.6 | 33.9 | 23.7 | 100.0 |
| The increasing trend of solvency performance | F | | 13 | 22 | 6 | 41 |
| of Ecobank in the last 13 years in Ghana | % | | 31.7 | 53.7 | 14.6 | 100.0 |
| The increasing trend of profitability | F | | 4 | 12 | 42 | 60 |
| performance of Ecobank in the last 13 years | % | | 7.0 | 21.0 | 72.0 | 100.0 |
| The increasing trend of liquidity Performance of | F | | 8 | 25 | 26 | 59 |
| Ecobank in the last 13 years in Ghana | % | | 13.6 | 42.4 | 44.1 | 100.0 |

Source: Research Findings, 2022

**Table 4.6**

*Descriptive Analysis of the Respondents' Responses to CAMELS Analysis*

| Ratios | F/ % | Total F/% | Rating: Insignificant | Moderately significant | Significant | Very Significant | Total F/% |
|---|---|---|---|---|---|---|---|
| Capital Adequacy/Solvency Ratios | | | | | | | |
| Debt to assets ratio | F | 40 | 5 | 2 | 11 | 18 | 36 |
| | % | 34.3 | 14.9 | 5.6 | 30.6 | 50.0 | 100.0 |
| Debt to capital ratio | F | 26 | - | 1 | 4 | 24 | 29 |
| | % | 54.3 | - | 3.4 | 13.8 | 82.8 | 100.0 |
| Debt-Equity Ratio | F | 19 | 2 | 3 | 5 | 7 | 17 |
| | % | 8.6 | 11.8 | 17.6 | 29.4 | 41.2 | 100.0 |
| Interest Coverage | F | 3 | - | - | 1 | 1 | 2 |
| Ratio | % | 2.9 | - | - | 50.0 | 50.0 | 100.0 |
| Asset Quality Performance | | | | | | | |
| Percentage of Loan | F | 14 | - | - | 7 | 9 | 16 |
| Loss Provision | % | 23.7 | - | - | 43.8 | 56.2 | 100.0 |
| Non-Performing | F | 45 | - | 5 | 7 | 33 | 45 |
| Asset to Net Loan | % | 76.3 | - | 11.0 | 15.5 | 73.5 | 100.0 |
| Management Operating Efficiency Performance | | | | | | | |
| The expense to | F | 50 | 1 | 4 | 11 | 33 | 48 |
| Total Income | % | 82.0 | 2 | 8.2 | 22.4 | 67.3 | 100.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Overhead Efficiency | F | 4 | - | 3 | 2 | 5 | 10 |
| Ratio | % | - | - | 30.0 | 20.0 | 50.0 | 100.0 |
| Net Interest Margin | F | - | - | 3 | 2 | 5 | 8 |
| | % | - | - | 25 | 12.5 | 62.5 | 100.0 |
| | | | | Earnings/Profitability Performance | | | |
| Return on Equity | F | 55 | | 1 | 11 | 32 | 44 |
| | % | 54.5 | | 2 | 25 | 72 | 100.0 |
| Return on Assets | F | 20 | - | 1 | 10 | 20 | 31 |
| | % | 19.8 | - | 3 | 32 | 65.0 | 100.0 |
| Equity Multiplier | F | 1 | - | - | - | 2 | 2 |
| | % | 0.9 | - | - | - | 100.0 | 100.0 |
| Net Profit Margin | F | 24 | - | - | 14 | 16 | 30 |
| | % | 23.7 | - | - | 47.0 | 53.0 | 100.0 |
| Operating Profit | F | 1 | - | - | 2 | - | 2 |
| Margin | % | 0.9 | - | - | 100.0 | - | 100.0 |
| | | | | Liquidity Performance | | | |
| Liquid Asset to | F | 32 | - | 2 | 11 | 31 | 44 |
| Average Total Asset | % | 52.5 | - | 2 | 36 | 64 | 100.0 |
| Liquid Asset to | F | 18 | - | 1 | 1 | 13 | 15 |
| Deposit | % | 29.5 | - | 6.7 | 6.7 | 86.7 | 100.0 |
| Net Loan to Deposit | F | 18.0 | - | 4 | 5 | 3 | 12 |
| and STBR | % | 11 | - | 33.3 | 41.7 | 21.0 | 100.0 |

Source: Research Findings, 2022

**Table 4. 7**

*Fiscal and monetary policy tools and profitability of EBGL in GHc Million*

| No. of Years | Fiscal and Monetary Policy Tools | | | Macro. Variable | Profits Before and After Tax | |
|---|---|---|---|---|---|---|
| | Government Spending | Taxation | Money Sup. (M2) | GDP Growth | ROA | ROE |
| 2006 | 5,153.90 | 3,196.00 | 4,351.60 | 18,705.10 | 129.30 | 86.36 |
| 2007 | 5,624.50 | 3,312.70 | 5,954.50 | 23,154.40 | 30.18 | 22.35 |
| 2008 | 8,009.80 | 4,368.50 | 8,287.40 | 30,178.60 | 43.89 | 33.58 |
| 2009 | 8,248.20 | 4,803.60 | 10,211.30 | 36,867.40 | 72.69 | 53.85 |
| 2010 | 11,532.20 | 6,504.50 | 13,637.30 | 46,042.00 | 90.71 | 60.12 |
| 2011 | 13,380.00 | 9,854.60 | 18,195.20 | 59,264.00 | 102.62 | 70.10 |
| 2012 | 20,944.70 | 12,517.20 | 22,620.60 | 75,315.00 | 196.16 | 143.17 |
| 2013 | 26,277.20 | 14,307.70 | 26,937.00 | 94,939.00 | 261.34 | 185.86 |
| 2014 | 31,962.20 | 19,229.80 | 36,843.20 | 113,343.00 | 433.54 | 309.61 |
| 2015 | 37,344.60 | 24,149.71 | 46,455.30 | 138,747.80 | 461.08 | 327.52 |
| 2016 | 51,125.00 | 25,728.66 | 56,692.10 | 167,315.50 | 457.18 | 325.59 |
| 2017 | 51,985.90 | 32,227.58 | 66,172.00 | 205,971.00 | 357.76 | 255.38 |
| 2018 | 58,196.90 | 37,784.19 | 76,552.30 | 300,596.00 | 500.97 | 337.59 |
| 2019 | 67,670.90 | 42,355.49 | 92,975.47 | 356,544.00 | 635.03 | 441.95 |
| 2020 | 96,400.43 | 44,452.26 | 120,521.82 | 383,486.00 | 773.74 | 543.88 |
| 2021 | 110,414.47 | 67.590.39 | | | | |

Source: Research Findings, 2022

**Table 4.8**

*Summary of Key Descriptive Statistical Measures*

| Variables | Descriptive Statistical Measures | | | | | | |
|---|---|---|---|---|---|---|---|
| | No. of Yrs | Mean | Std. Dev | Min | Max | Variance | Range | Std. Error |
| ROA | 15 | 4.0933 | 0.93691 | 2.80 | 6.00 | 0.878 | 3.20 | 0.24191 |
| ROE | 15 | 32.8000 | 7.67370 | 23.00 | 46.00 | 58.886 | 23.00 | 1.98134 |
| GE | 15 | 24.8667 | 3.75569 | 19.00 | 30.30 | 14.105 | 11.30 | 0.96972 |
| T R | 15 | 14.4493 | 2.05905 | 11.61 | 17.50 | 4.240 | 5.89 | 0.53164 |
| BMS | 15 | 28.0533 | 8.11048 | 15.70 | 40.20 | 65.780 | 24.50 | 2.09412 |
| GDP | 15 | 6.4667 | 3.20639 | .40 | 14.40 | 10.281 | 14.00 | 0.82789 |
| INFR | 15 | 12.4200 | 3.61884 | 7.90 | 18.10 | 13.096 | 10.20 | 0.93438 |
| CAR | 15 | 13.4327 | 2.76497 | 9.28 | 19.57 | 7.645 | 10.29 | 0.71391 |
| AQ | 15 | 3.6987 | 1.96014 | .19 | 7.40 | 3.842 | 7.21 | 0.50611 |
| ME | 15 | 69.6867 | 4.11754 | 63.32 | 77.11 | 16.954 | 13.79 | 1.06314 |
| EQ | 15 | 29.9933 | 3.82919 | 22.89 | 36.67 | 14.663 | 13.78 | 0.98869 |
| LR | 15 | 67.4000 | 7.86311 | 57.00 | 82.00 | 61.829 | 25.00 | 2.03025 |
| SMR | 15 | 58.4480 | 11.93437 | 40.48 | 80.62 | 142.429 | 40.14 | 3.08144 |
| INTR | 15 | 22.0385 | 7.18732 | 11.30 | 31.20 | 51.658 | 19.90 | 1.99340 |

Source: Research Findings, 2022

**Table 4.12**

*Correlation matrix between the independent and the dependent variables*

| Correlations | | | |
|---|---|---|---|
| | | ROA | ROE |
| TGE | Pearson Correlation | 0.639** | 0.643** |
| | Sig. (2-tailed) | 0.010 | 0.010 |
| | N | 15 | 15 |
| TAX | Pearson Correlation | 0.660** | 0.612* |
| | Sig. (2-tailed) | 0.007 | 0.015 |
| | N | 15 | 15 |
| BMS | Pearson Correlation | -0.054 | 0.102 |
| | Sig. (2-tailed) | 0.848 | 0.716 |
| | N | 15 | 15 |
| CA | Pearson Correlation | 0.084 | -0.306 |
| | Sig. (2-tailed) | 0.767 | 0.267 |
| | N | 15 | 15 |
| AQ | Pearson Correlation | 0.020 | -0.136 |
| | Sig. (2-tailed) | 0.944 | 0.629 |
| | N | 15 | 15 |
| ME | Pearson Correlation | -0.719** | -0.558* |
| | Sig. (2-tailed) | 0.003 | 0.030 |
| | N | 15 | 15 |

| | | | |
|---|---|---|---|
| EQ | Pearson Correlation | 0.844** | 0.729** |
| | Sig. (2-tailed) | 0.000 | 0.002 |
| | N | 15 | 15 |
| L | Pearson Correlation | -0.240 | -0.339 |
| | Sig. (2-tailed) | 0.389 | 0.141 |
| | N | 15 | 15 |
| SMR | Pearson Correlation | 0.252 | 0.040 |
| | Sig. (2-tailed) | 0.365 | 0.888 |
| | N | 15 | 15 |
| INFR | Pearson Correlation | 0.441 | 0.694** |
| | Sig. (2-tailed) | 0.100 | 0.004 |
| | N | 15 | 15 |
| GDPG | Pearson Correlation | -0.164 | -0.026 |
| | Sig. (2-tailed) | 0.559 | 0.926 |
| | N | 15 | 15 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source researcher 2022

**Table 4.13:**

*The fiscal policy tools, monetary policy, macroeconomic variables and the bank's specific internal variables and ROA and ROE in percentage value*

| Years of Rev | Fiscal and Monetary Policy Tools % | | | Macro Variables % | | Banks Specific Internal Variables | | | | | | Bank Profitability | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gov. Exp. | Tax Rev. | Broad M(M2+ | Real GDP | Inf. Rate | CAR % | AQ % | ME % | EQ % | LR % | SMR % | ROA % | ROE % |
| 2006 | 21.4 | 13.5 | 38.8 | 6.2 | 10.5 | 13.76 | 0.19 | 75.21 | 24.78 | 71.00 | 80.62 | 3.00 | 23.00 |
| 2007 | 24.3 | 14.3 | 35.9 | 6.5 | 12.7 | 09.95 | 1.50 | 74.46 | 25.54 | 62.00 | 68.75 | 2.80 | 24.00 |
| 2008 | 26.5 | 14.5 | 40.2 | 8.4 | 18.1 | 09.28 | 2.30 | 68.67 | 31.32 | 58.00 | 40.48 | 3.70 | 45.00 |
| 2009 | 22.4 | 13.0 | 26.9 | 4.0 | 15.9 | 14.90 | 4.00 | 66.31 | 33.68 | 82.00 | 51.53 | 4.70 | 37.00 |
| 2010 | 26.0 | 14.0 | 33.8 | 8.0 | 8.6 | 14.96 | 4.70 | 66.63 | 33.36 | 79.00 | 46.65 | 4.10 | 28.00 |
| 2011 | 23.8 | 17.5 | 33.2 | 14.4 | 8.6 | 12.31 | 1.60 | 69.14 | 30.85 | 68.00 | 53.93 | 3.80 | 30.00 |
| 2012 | 28.6 | 17.1 | 24.3 | 9.3 | 8.8 | 13.51 | 4.10 | 66.89 | 33.10 | 67.00 | 60.47 | 5.20 | 40.00 |
| 2013 | 29.9 | 15.1 | 19.1 | 7.3 | 13.5 | 12.04 | 4.20 | 68.15 | 31.84 | 62.00 | 68.95 | 4.60 | 37.00 |
| 2014 | 28.4 | 17.1 | 36.8 | 4.2 | 17.0 | 13.82 | 2.40 | 63.32 | 36.67 | 62.00 | 68.82 | 6.00 | 46.00 |
| 2015 | 27.6 | 17.3 | 26.1 | 3.9 | 17.7 | 13.37 | 4.90 | 68.07 | 31.92 | 57.00 | 70.23 | 5.30 | 39.00 |
| 2016 | 30.3 | 15.2 | 22.0 | 3.5 | 15.4 | 11.86 | 2.40 | 72.89 | 29.35 | 63.00 | 67.09 | 4.50 | 36.00 |
| 2017 | 20.3 | 12.36 | 16.7 | 8.1 | 11.8 | 11.26 | 7.40 | 77.11 | 22.89 | 76.00 | 45.00 | 3.00 | 26.00 |
| 2018 | 19.4 | 12.24 | 15.7 | 6.3 | 9.4 | 12.56 | 3.90 | 74.08 | 25.91 | 71.00 | 56.26 | 3.60 | 30.00 |
| 2019 | 19.0 | 11.93 | 21.7 | 6.5 | 7.9 | 18.58 | 5.69 | 64.79 | 28.60 | 59.00 | 54.68 | 3.70 | 26.00 |
| 2020 | 25.1 | 11.61 | 29.6 | 0.4 | 10.4 | 19.18 | 6.20 | 57.79 | 30.09 | 74.00 | 43.26 | 3.40 | 25.00 |

Source: Research Findings, 2022

# APPENDIX B

## Appendix B 1

*Research study questionnaire*

**UNICAF UNIVERSITY-CYPRUS**
**DEPARTMENT OF ACCOUNTING AND FINANCE**

A questionnaire Assessing the Impact of Fiscal and Monetary Policies on the Financial Performance of Universal Banks in Ghana and Its Effect on the Economy from 2006 to 2018. Using Ecobank Gh Ltd. Kumasi, as a Case Study.

The questionnaire is designed to elicit data from a full-time staff of Ecobank Gh. Ltd. The purpose of the research is to look at the Impact of Fiscal and Monetary Policies on the Financial Performance of Universal Banks in Ghana and Its Effect on the Economy from 2006 to 2018. The study is an educational assessment needed for a research project to be submitted to UNICAF University for partial fulfilment of a PhD academic programme. The researcher will be grateful if you could complete the questionnaire. Maximum confidentiality and anonymity are provided.

**Please Tick Where Appropriate (√)**

1. State the number of years Ecobank Gh. Ltd has been in operation----------
   ---

2. Indicate your gender status:
   [ ] Male
   [ ] Female

3. Indicate your highest level of education attained:
   [ ] Diploma
   [ ] Bachelor
   [ ] Masters
   [ ] PhD

4. Indicate your number of years of service with Ecobank Gh. Ltd ----------
   ---

5. What is your current position/occupation in the bank? Choose more than one if any.
   [ ] Junior Staff
   [ ] Senior Staff
   [ ] Management Member
   [ ] Member of Board of Directors
   [ ] Others, specify your job title where appropriate ----------

**Profitability Performance**

6. Which of the following does Ecobank use to measure its profitability performance in Ghana?
   [ ] Return on Equity
   [ ] Return on Asset
   [ ] Equity Multiplier
   [ ] Asset Utilization
   [ ] Net Profit Margin
   [ ] Operating profit margin
   [ ] Others, specify ----------

7. How would you rate the following measurement ratios performance of Ecobank in the last 12 years in Ghana?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Highly Insignificant | Insignificant | Moderately Significant | Significant | Very Significant |

   [ ] Return on Equity
   [ ] Return on Asset
   [ ] Equity Multiplier
   [ ] Asset Utilization
   [ ] Net Profit Margin
   [ ] Operating profit margin
   [ ] Others specify ----------

   The general trend of profitability performance of Ecobank in the last 13 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

   Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

   [ ] 2006/08----------
   [ ] 2009/11----------
   [ ] 2012/15----------
   [ ] 2016/18----------

**Liquidity Performance**

8. Which of the following does Ecobank use to measure its liquidity performance in Ghana?

[ ] Liquid Asset to average total asset ratio
[ ] A Liquid asset to deposit
[ ] Net Loan to Deposit and Short Term Borrowing Ratio
[ ] Others specify----------

9. How would you rate the following liquidity measurement ratios performance of Ecobank in the last 12 years in Ghana?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Highly Insignificant | Insignificant | Moderately Significant | Significant | Very Significant |

[ ] Liquid Asset to average total asset ratio
[ ] A Liquid asset to deposit
[ ] Net Loan to Deposit and Short Term Borrowing Ratio
[ ] Others, specify ----------

The general trend of the liquidity performance of Ecobank in the last 13 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

**Asset/ Credit/Quality Performance**

10. Which of the following does Ecobank use to measure its credit or asset or quality performance in Ghana?
[ ] Percentage of Loan Loss Provision
[ ] Net non-Performing Assets to Net Loan and Advance
[ ] Others specify----------

11. How would you rate the following credit/asset/quality measurement ratios performance of

Ecobank in the last 12 years in Ghana?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Highly Insignificant | Insignificant | Moderately Significant | Significant | Very Significant |

[ ] Percentage of Loan Loss Provision
[ ] Net non-Performing Assets to Net Loan and Advance
[ ] Others specify----------

The general trend of the credit/asset/quality performance of the bank in the last 13 years in Ghana is increasing?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

**Operating Efficiency Performance**

12. Which of the following does Ecobank use to measure its operating efficiency Performance in Ghana?
    [ ] Expense to Total income
    [ ] Overhead efficiency ratio
    [ ] Net Interest Margin
    [ ] Others, specify ----------

13. How would you rate the following operating efficiency measurement ratio performance of Ecobank in Ghana?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Highly Insignificant | Insignificant | Moderately Significant | Significant | Very Significant |

[ ] The expense to Total income
[ ] Overhead efficiency ratio
[ ] Net Interest Margin
[ ] Others, specify ----------
The general trend of the operating efficiency performance of Ecobank in the last

13 years in Ghana, is increasing?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

**Capital Adequacy/Solvency Ratios**

14. Which of the following does the Ecobank use to measure its Solvency Performance?
    [ ] Debt-to-assets ratio
    [ ] Debt-to-capital ratio
    [ ] Debt-to-equity ratio
    [ ] Interest coverage ratio
    [ ] Others, specify ----------

15. How would you rate the following measurement ratios of the solvency performance of Ecobank?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Highly Insignificant | Insignificant | Moderately Significant | Significant | Very Significant |

[ ] Debt-to-assets ratio
[ ] Debt-to-capital ratio
[ ] Debt-to-equity ratio
[ ] Interest coverage ratio
[ ] Others, specify ----------

The general trend of solvency performance in the last 13 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

16. Which of the central bank's monetary policy tools affect the financial performance of Ecobank in Ghana.
    [ ] Reserve Requirement
    [ ] Discount Rate
    [ ] Open Market Operation
    [ ] Interest on Reserves
    [ ] Interbank Interest Rate

17. How would you rate the following monetary policy tools affecting the financial performance of Ecobank in Ghana?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Highly Insignificant | Insignificant | Moderately Significant | Significant | Very Significant |

    [ ] Reserve Requirement
    [ ] Discount Rate
    [ ] Open Market Operation
    [ ] Interest on Reserves
    [ ] Interbank Interest Rate

18. To what extent do central bank rate changes affect the lending behaviour of Ecobank in Ghana? Very great extent.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

    The general trend of bank rate changes in the last 13 years is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

    Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

    [ ] 2006/08----------
    [ ] 2009/11----------
    [ ] 2012/15----------
    [ ] 2016/18----------

19. How does an increase in bank rate affect the financial performance of Ecobank bank in Ghana?
    [ ] Affect it negatively
    [ ] Affect it positively
    [ ] No effect

20. To what extent do central bank reserve requirement changes affect the lending behaviour of Ecobank bank in Ghana? Very great extent.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

The general trend of reserve requirement changes in the last 13 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

21. How does an increase in reserve requirement affect the financial performance of Ecobank bank in Ghana?
    [ ] Affect it negatively
    [ ] Affect it positively
    [ ] No effect

22. To what extent do open market operation changes affect the lending behaviour of Ecobank bank in Ghana? Very great extent

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

The general trend of open market operation in the last 13 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

23. How does a purchase of an open market operation affect the financial performance of Ecobank in Ghana?
    [ ] Affect it negatively
    [ ] Affect it positively
    [ ] No Effect

**Answer questions 24 to 32 using the Likert scale by ticking.**

| | Numbering | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| **Q** | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| 24 | Which policy intervention below is the Bank of Ghana implemented most in the past last 13 years in Ghana? | | | | | |
| | Contractionary Monetary Policy (CMP) | | | | | |
| | Expansionary Monetary Policy (EMO) | | | | | |
| 25 | Does contractionary monetary policy significantly affect and causes interest rates to rise and directly restrict the amount of money in circulation and commercial banks' credit in the economy to minimize inflation, and promote economic growth in Ghana? | | | | | |
| 26 | Does expansionary monetary policy significantly affect and causes interest rates to fall and directly increase the amount of money in circulation and commercial banks' credit in the economy to stimulate the growth of aggregate demand and promote economic growth, thereby expanding the GDP in Ghana? | | | | | |
| 27 | Does contractionary monetary policy by the Central Bank of Ghana decrease its money supply through instruments such as selling government bills and bonds, increasing reserve requirements, increasing the discount rate and increasing the interest rate in Ghana? | | | | | |
| 28 | Does expansionary monetary policy by the central bank of Ghana raise its money supply | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | through instruments such as buying government bills and bonds, decreasing the reserve requirement, decreasing the discount rate and decreasing the interest rate? | | | | | |
| 29 | Does expansionary fiscal policy increase the money supply through increasing discretionary spending and transfer payments and reductions in taxes such as income tax, capital gains and dividends taxes, small business taxes, payroll and corporate taxes, as a budgetary tool in the economy by providing individuals and businesses with plenty of money to spend to boost the growth of the economy in Ghana? | | | | | |
| 30 | Does contractionary fiscal policy by the government through cutting expenditure, subsidies, transfer payments and/or increasing taxes to take money out of the system, thereby decreasing money supply and aggregate demand and contracting purchasing power, reduce the quantity of money in circulation from individuals and businesses to spend and, in terms of a healthy economic level, to reduce growth to eliminate inflation in Ghana? | | | | | |
| 31 | Does expansionary fiscal policy by the Government of Ghana increase its money supply through instruments such as an increase in expenditure, subsidies, and a decrease in taxation in Ghana? | | | | | |
| 32 | Does contractionary fiscal policy by the Government of Ghana decrease its money supply through instruments such as a decrease in expenditure and subsidies and an increase in taxation in Ghana? | | | | | |

33. Which of the following government fiscal policy tools affect the financial performance of Ecobank in Ghana.
    [ ] Taxation
    [ ] Government Spending
    [ ] Subsidy
    [ ] None of them

34. To what extent does the government fiscal policy affect the financial performance of commercial banks in Ghana? Very great extent.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

35. To what extent does an increase in the taxation rate affect the lending behaviour of Ecobank in Ghana? Very great extent.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

36. The general trend of government taxation rate in the last 13 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

37. To what extent does an increase in government spending affect the lending behaviour of Ecobank in Ghana? Very great extent.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

38. The general trend in government spending in the last 13 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

39. Which policy intervention is the Government of Ghana implementing most in the past last 13 years in Ghana?
    [ ] Contractionary Fiscal Policy (CFP)
    [ ] Expansionary Fiscal Policy (EFO)

    Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

    [ ] 2006/08----------
    [ ] 2009/11----------
    [ ] 2012/15----------
    [ ] 2016/18----------

40. To what extent do interest rate changes affect the lending behaviour of Ecobank to its customers in Ghana? Very great extent.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

    The general trend of interest rate changes in the last 12 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

    Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

    [ ] 2006/08----------
    [ ] 2009/11----------
    [ ] 2012/15----------
    [ ] 2016/18----------

41. To what extent do interest rate changes affect the borrowing behaviour of Ecobank customers in Ghana? Very great extent.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

The general trend of borrowing by Ecobank customers in the last 13 years in Ghana is increasing.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

Give the trend example within the years below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Decreasing Fast | Decreasing | Fluctuating | Increasing | Increasing Fast |

[ ] 2006/08----------
[ ] 2009/11----------
[ ] 2012/15----------
[ ] 2016/18----------

42. What are the causes of this general trend in borrowing by Ecobank customers in the last 13 years in Ghana?----------
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43. How does an increase in interest rate affect Ecobank borrowing customers in Ghana?
[ ] Affect customers negatively
[ ] Affect customers positively
[ ] No effect on customers

44. What are the future expectations by Ecobank customers of interest rate charges in Ghana?-
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**Sincere Thanks to You for Your Time**

**Appendix B 2**

*Research Study Interview Checklist*

**UNICAF UNIVERSITY-CYPRUS**
**DEPARTMENT OF ACCOUNTING AND FINANCE**
**SEMI-STRUCTURED INTERVIEW SCHEDULE-**
**BANK MANAGERS**

Interview Checklist on Assessing the Impact of Fiscal and Monetary Policies on the Financial Performance of Universal Banks in Ghana and Its Effect on the Economy from 2007 to 2018. Using Ecobank Gh. Ltd. Kumasi as a Case Study.

Please Tick Where Appropriate **(√)**

1. State the number of years Ecobank Gh. Ltd has been in operation----------
   ----------
2. Indicate your gender status:
   [ ] Male
   [ ] Female

3. Indicate your highest level of education attained:
   [ ] Diploma
   [ ] Bachelor
   [ ] Masters
   [ ] PhD

4. Indicate your number of years of service with Ecobank Gh. Ltd ----------
   ----------
5. What is your current position/occupation in the bank? Choose more than one if any.
   [ ] Junior Staff
   [ ] Senior Staff
   [ ] Management Member
   [ ] Member of Board of Directors
   [ ] Others, specify your job title where appropriate ----------

**The banking sector financial indicators and performance. Assessing the financial and profitability performance of Ecobank using CAMELS accounting financial ratios analysis.**

**6. Capital Adequacy Ratio**

a. Does Ecobank use Capital Adequacy Ratio to measure its performance? ----------

b. What is the general trend of the Capital Adequacy Ratios performance of Ecobank in the last 13 years in Ghana? Give examples of certain year's trend.----------
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---
---

c. What categories of Capital Adequacy ratios does Ecobank use as measurements?

[ ] Tier-1 or core capital ratio

[ ] Tier-2 capital ratio

[ ] Risk-Weighted Assets

d. How are these categories performing in Ecobank in the last 13 years in Ghana?----------
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---

**7. Asset Quality Ratio**

a. Does Ecobank use Asset Quality Ratio to measure its performance? ----------

b. What is the general trend of the Asset Quality Ratio performance of Ecobank in the last 13 years in Ghana? Give examples of certain year's trend.----------
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---
---

c. What categories of Asset Quality ratios does Ecobank use as measurements?

[ ] NPL [30] days Past Due

[ ] Write-Off Ratio

[ ] NPL [30] + Write-Offs Ratio

d. How are these categories performing in Ecobank in the last 10 years in Ghana?----------
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**8. Management Quality**

a. Does Ecobank use Management Quality to measure its performance? ----------

b. What is the general trend of the Management Quality performance of Ecobank in the last 13 years in Ghana? Give examples of certain year's trends.----------
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---

c. Does Ecobank as an institution be able to properly react to financial stress and how?----------
---
---
---

d. How do you rate management's capability in pointing out measures, looking after and controlling risks of the institution's daily activities?----------
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---
---

e. Does management ensure the safe operation of the institution in terms of complying with the necessary and applicable internal and external regulations and how?----------
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---
---
---

f. How is management quality performance in Ecobank in the last 13 years in Ghana?----------
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---
---

**9. Earnings/profitability Ratio**

a. Does Ecobank use Management Quality Ratio to measure its performance? ----------

b. What is the general trend of the Management Quality Ratio performance of Ecobank in the last 13 years in Ghana? Give examples of certain year's trend.----------
---
---
---
---

c. What categories of Profitability Ratios does Ecobank use as a measurement?

Margin Ratios [ ] Returns ratios [ ]

d. What categories of Margin Ratios does Ecobank use as a measurement?

Gross profit margin [ ] Net Interest Margin [ ] Net profit margin [ ]

e. How are these categories performing in Ecobank in the last 13 years in Ghana?----------
---
---
---
---

f. What categories of Returns Ratios does Ecobank use as a measurement?

Return on assets (ROA) [ ] Return on equity (ROE) [ ]

g. How are these categories performing in Ecobank in the last 13 years in Ghana?----------
---
---
---
---

**10. Liquidity/Solvency Ratios**

a. Does Ecobank use Liquidity/Solvency Ratios to measure its performance? ----------

b. What is the general trend of the Liquidity/Solvency Ratios performance of Ecobank in the last 13 years in Ghana? Give examples of certain year's trend.----------
---
---
---
---

c. What categories of liquidity ratios does Ecobank use as measurements?

Current ratio [ ] quick ratio or acid test [ ] cash ratio [ ] Net Working Capital [ ]

d. how are they performing in the last 10 years in Ghana?----------
---
---
---

**11. Sensitivity**

a. Does Ecobank use a Sensitivity Ratio to measure its performance? ----------

b. What is the general trend of the Sensitivity Ratio performance of Ecobank in the last 13 years in Ghana? Give examples of certain year's trend.----------
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---
---
---

c. What categories of Sensitivity ratios does Ecobank use as a measurement? ----------

d. Does Ecobank assesses its sensitivity to market risk by monitoring the management of credit concentrations by lending to specific industries and how?----------
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---
---
---

e. How do you rate Ecobank's sensitivity to market risk exposure to foreign exchange, commodities, equities and derivatives?----------
---
---
---

f. How are these categories performing in Ecobank in the last 13 years in Ghana?----------
---
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**Sincere Thanks to You for Your Time**

**Appendix B 3**

*Gatekeeper Letter Template*

Ecobank Gh. Ltd.

Main Branch

Kumasi, Ghana

18/11/2018

Research into assessing the impact of fiscal and monetary policies on the financial performance of commercial banks in Ghana and its effect on the economy from 2006 to 20018 (a case study Ecobank Gh. Ltd.).

Dear Managing Director,

I am a doctoral student at Unicaf University Malawi. As part of my degree, I am carrying out a study on assessing the impact of fiscal and monetary policy tools on the financial performance of commercial banks in Ghana and its effect on the economy from 2006 to 2018, using Ecobank Gh. Ltd as a case study.

I am writing to enquire whether you would be interested in/willing to grant permission to recruit both staff and customers and to request assistance to be allowed to access your bank with a questionnaire and an interview question to fill out and administer. This would not take a large amount of time and conducted at a convenient time and date to be arranged with the bank. All I will need is to arrange a suitable time with you to come and give out the questionnaires and conduct an interview with the customers and the bank staff. I will also be asking team members participating in the study if they want to take part. Subject to approval by the Unicaf Research Ethics Committee

(UREC) this study will be using fiscal and monetary policies to assess the financial performance of commercial banks in Ghana and their effect on the economy from 2008 to 2017.

The study examines the effects of fiscal and monetary policy and the profitability of commercial banks. To analyse the impact of government expenditure as fiscal policy and bank of Ghana actions as a monetary policy on commercial banks in Ghana and macroeconomic factors through a regression model. The research supervisor is Dr Bashkim Isufi

Concerning this and If this is possible please could you E-mail the researcher at pastonylhc@yahoo.com to confirm that you are, willing to allow the researcher to recruit on your premises, giving access to the members of your staff and customers and to access their data after participants have consented by agreeing to take part in the study. The participants will be engaged for one month.

Thank you in advance for your time and your consideration of this project. Kindly please let me know if you require any further information or need any further clarifications.

Yours Sincerely,

Anthony Madana

Student Name: Anthony Madana

Position: Student

Address: Box 838, Kumasi, Ghana

Telephone Number: 0244870045

E-mail:pastonylhc@yahoo.com

Supervisor's title and name: Dr Bashkim Isufi

Position: Associate Lecturer

Address:

E-mail: b.isufi@unicaf.org

Address: UNICAF Building, Famagusta Avenue, 6019, Larnaca, Cyprus

**Appendix B 4**

*Debriefing Form Template*

The researcher researched the study on assessing the impact of fiscal and monetary policies on the financial performance of commercial banks in Ghana and their effect on the economy. Ecobank Kumasi, as a case study and your company Ecobank Gh. Ltd. Kumasi branches were selected as a case study to solicit information for the research study. Your outfit considered the said effect to participate in the research by allowing your staff and customers to be participants in the study. The study examines the effects of fiscal and monetary policy and the profitability of commercial banks using Ecobank Gh. Ltd. Kumasi branches as a case study. The study analyzed the impact of government expenditure and taxation as fiscal policy tools and the Bank of Ghana's actions as a monetary policy tool on commercial banks in Ghana and macroeconomic factors through a regression model. The researcher will take care of the avoidance of confidentiality which involves safeguarding storage methods and resorting to code numbers through the application of password-protected computer access, encrypted electronic messages and the preservation of keys in a secure environment by coding, limiting its accessibility to several persons. The researcher will be kept confidential all information received from the participants will be kept confidential through transcribing tape recordings involving adopting pseudonyms means distorting identifiable details of interviews and all materials will be destroyed just after the publication of the research material. As participants, you have the right to withdraw your data retrospectively and without explanation. The researcher wants to thank your outfit for your time, energy and your consideration of this project. Kindly please let me know if you require any further information or need any further clarifications or wish to make a complaint on ethical grounds through the following contact details of the researcher and the supervisor below.

| **Name of researcher** | **Name of Supervisor** |
|---|---|
| Anthony Madana | Dr Bashkim Isufi |

| Unicaf student contact details | Unicaf Supervisor Contact details |
|---|---|
| P. O. Box 838 | Unicaf University Malawi (UUM) |
| Kumasi, Ghana | Tel: O17033G16369 |
| Tel: 0244870045 | Email: a.tsopanakis@unicaf.org |
| Email: pastonylhc@yahoo.com | |

**Part 2: Certificate of Consent**

**This section is mandatory and should be signed by the participant(s)**

I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss them. I have received satisfactory answers to all my questions and I have received enough information about this study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia (e.g. audio recordings, video recordings) for my participation in this study. I understand that my data will remain anonymous and confidential. I consent voluntarily to be a participant in this study.

| | |
|---|---|
| Print name of Participant: | Ecobank Gh. Ltd. Kumasi, Main Office |
| Signature of Participant: | |
| Date: | 18/11/2020 |

If illiterate:

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had an opportunity to ask questions. I confirm that the individual has given consent freely.

| | |
|---|---|
| Print name of witness: | |
| Signature of witness: | |
| Date: | |