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THE IMPACT OF COVID-19 ON BANKS PROFITABILITY

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DEDICATION

I dedicate this work to my dear and beloved parents Mr and Mrs Herman and my beloved Wife Alice Padi who has supported me throughout my entire life, especially during the period of my Masters studies at the University of Education, Winneba.

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LIST OF ABBREVIATIONS

ROE	Return on Equity
COVID-19	Coronavirus Disease 2019
FBN	First Bank of Nigeria
UBA	United Bank for Africa
ADB	Agricultural Development Bank
GCB	Ghana Commercial Bank
ABSA	Absa Bank

ABSTRACT

The purpose of this study was to examine the impact of the profitability of banks before and after covid-19. The study falls within the quantitative research paradigm and used secondary data. A survey research design was adopted in the study. A total of Five (5) banks were sampled for this study. Data were analyzed using statistical software program Statistical Package for the Social Sciences (SPSS) V. 23. The findings highlighted nuanced shifts in various financial indicators post-COVID-19, showcasing how the pandemic influenced the dynamics of bank performance. Notably, the study revealed a significant decrease in the Liquid Funds/Total Deposit Ratio, indicating a shift in banks' asset allocation away from liquid holdings. Moreover, the ROE exhibited a widened spectrum post-COVID-19, with a noticeable decline in average profitability. Before the pandemic, factors like liquid funds/total deposits, cost-to-income ratio, and net interest margin collectively accounted for substantial changes in ROE. In the aftermath of the pandemic, there was a marked shift in influential factors affecting ROE. Liquid funds/total deposits lost significance, while the cost-to-income ratio and net interest margin emerged as key determinants. One pivotal recommendation involves creating an environment that incentivizes financial institutions to bolster their resilience against potential future crises. Prioritizing strategic cost management stands as a crucial directive for banks in Ghana to navigate the challenges posed by economic uncertainties and crises like the COVID-19 pandemic.

CHAPTER ONE

INTRODUCTION

The chapter highlights the background of the study, the problem statement, the purpose of the study and the research objectives. The chapter further discusses research questions, research questions that guide the study, limitations, and scope of the study and ended with an organizational plan for the study.

1.1 Background of the Study

A deadly virus started to spread over the world in late 2019, especially in Asia. This virus, which caused the deaths of nearly hundred thousand people globally, was known as the 2019 Corona Virus or Covid-19 in later years. On March 11, 2020, the World Health Organization (WHO) proclaimed Covid-19 a global pandemic. The World Health Organization reports that on March 12, 2020, Covid-19 was discovered for the first time in Ghana. The development of Corona Virus Disease (Covid-19) has brought about new challenges and effects. Additionally, the outbreak has caused significant market movements and affected economic activity in a number of countries (Romadhon, 2022). The Covid-19 pandemic has had a significant impact on worldwide economic activity, causing the biggest global economic recession in a century (OECD, 2020). Even though the world economy is expected to recover, the rate of recovery is not anticipated to be evenly distributed among countries, with affluent countries likely to see robust development while many poor countries are projected to collapse. Asia's financial industry was not immune to the pandemic, which caused exceptional operational and financial difficulties for financial institutions. The Asia Development Bank (ADB) estimates that pandemic losses could range between $5.8 and $8.8 trillion (approximately 6.4% to 9.7% of global GDP) (Park et al., 2020). Adding insult to injury, this unprecedented incidence rattled the

macroeconomic and health systems and had a significant influence on the financial systems of each nation. The pandemic caused a slowdown in overall demand, output, trade, and economic activity. Unemployment surged, and financial institutions (FIs) in almost every nation feared an increased risk of failing without government support (Barua & Barua, 2021). The Covid-19 outbreak adversely affected the bank's financial performance as well as its ability to mediate credit and resurrect the economy (Barua & Barua, 2021; Sudja'i & Mardikaningsih, 2021). It also caused a sharp rise in defaults on commercial and family loans.

Policymakers have taken steps to safeguard financial stability and reduce risks to the banking industry ever since the pandemic started. Recognizing the critical role banks play in the process of Africa's economic recovery, it is imperative to take the Covid-19 pandemic's consequences on bank profitability in emerging nations into consideration. Careful case-by-case analysis is necessary to account for the pandemic's impact on banks (Barua & Barua, 2021). Consequently, the health virus was a problem during the Covid-19 pandemic. A variety of businesses, most notably the financial sector, could see an increase in the risk of insolvency as a result of the Covid-19 pandemic (Hadiwardoyo, 2020). One of the sectors whose performance has suffered the most from the pandemic problem is the banking sector (Devi et al., 2020). However, internal governance before the pandemic strongly influences bank resilience in the event of the Covid-19 pandemic (R. Ghosh & Saima, 2021).

Therefore, the ability to endure the pandemic calamity increases with governance quality (Ghosh & Saima, 2021). Banks in Ghana had greater internal governance prior to the Covid-19 pandemic than they had after the financial crisis, making them more likely to survive the pandemic (Cakranegara, 2020). This implies that a decline in

financial performance might be influenced by outside factors. In this case, the government must take urgent action to lessen the pandemic's harmful impacts (Barua & Barua, 2021).

The pandemic, which exposed financial institutions to enormous operational and financial pressures, did not spare the African financial industry. The COVID-19 pandemic caused a substantial increase in corporate and family debt defaults, which negatively impacted banks' ability to provide credit intermediaries and promote economic recovery (Minney 2020; Tyson 2020; Barua and Barua 2020). In fact, the average return on equity for African banks dropped by 50% to 7% in 2020, although this is predicted to rise to levels similar to those before the crisis within the next three years assuming the continent's economic recovery continues on the anticipated course (Jurd de Girancourt et al. 2021). Since the start of the pandemic, regulators have taken action to maintain financial stability and lower the risks to the banking sector. Nevertheless, given the importance of banks to Africa's resilience and recovery, it is crucial to comprehend how the COVID-19 pandemic may affect their profitability in emerging nations. A precise case-by-case analysis is necessary to comprehend the pandemic's implications on banks (Barua and Barua 2020). In a report titled "The Business Racker," the Ghana Statistical Service (GSS) and the World Bank evaluated the effects of the COVID-19 pandemic on various facets of the Ghanaian economy and came to the conclusion that the pandemic had a significant detrimental effect on the country's private sector businesses (GSS, 2021). According to the data, only 1.4% of the businesses polled let go of some employees, while 46% of private sector companies cut workers' pay. Additionally, the epidemic hastened the development of a digital platform for commerce, particularly in Ghana's banking industry. It is also useful to show that not all economic sectors were affected by the pandemic because

some are rather resistant to its harmful effects. This indicates that not all industries would be negatively impacted by the epidemic as first thought. As the most lucrative industry in Ghana, banking receives a large portion of its income from lending to the government (Musah, 2020; Musah, et al., 2021; Musah &Adutumwaah, 2021). This shows that empirical studies like this one, rather than making general assumptions, are the best way to forecast how the pandemic may affect Ghana's banking industry.

According to numerous studies (Beck & Keil, 2021; Demirgüç-Kunt et al., 2021; Borri & Giorgio, 2021; Elnahass et al., 2021; Acharya & Steffen, 2020), the banking sector was expected to be crucial to the economies of many nations by absorbing shocks by providing the crucial liquidity to support the business sector. To aid in the government's efforts to combat the pandemic and to aid private sector businesses, central banks also developed improved policy interventions (Alabbad & Schertler, 2022; Demirgüç-Kunt et al., 2021; Mirzaei, Saad, & Emrouznejad, 2022). They also loosened up previously strict monetary restrictions to make it easier for businesses to access credit. Despite the fact that the covid-19 pandemic hit practically all nations, not all of them experienced the same economic effects because of variations in the pandemic's severity, governments' responses, and the amount of resilience in each nation (Katusiime, 2021; Yan & Jia, 2022; Nguyen, 2022). In contrast to Europe, America, Asia, and the Middle East, the epidemic was, for example, less severe in Africa (Katusiime, 2021). Ghana is not an exception, as the interruption of the world's supply chain and transportation network means that all nations engaged in international trade will be badly impacted. Many economies experienced a slowdown as a result of the pandemic, and some even experienced recession (Yan & Jia, 2022). The covid-19 pandemic had caused Ghana's economic growth to drop from 6.5% in 2019 to 0.51% in 2020.

1.2 Statement of the Problem

Every economy has been negatively impacted by the COVID-19 pandemic (Brickell et al., 2020; Zheng & Zhang, 2020). In general, it resulted in the closure of certain businesses while opening doors for others. Microfinance Institutions (MFIs), which act as their bankers, serve the majority of small and medium-sized businesses and the impoverished populations in developing nations (Cozarenco, Hudon, & Szafarz, 2016; Zamore, 2018). As a result, even though the pandemic tends to open up a door for banks to improve their social performance, its negative effects on businesses will have a direct impact on their financial performance. Customers of banks and microfinance financial institutions both benefited from rate reductions, which banks were able to offer. The pandemic only served to worsen Ghana's banking system, which had only recently emerged from a financial crisis that started in 2015. The financial industry is generally considerably more prepared for the pandemic, nevertheless, as a result of the lessons learned from the recent financial crisis (IMANI, 2020). The pre-pandemic data on financial institutions nevertheless contain important insights about the industry before, during, and after the financial sector crisis that need to be addressed. This is significant because calls have been made for debates about how to revive the economy in the post-COVID-19 period.

Contemporary literature in concurrence suggests that it is of great significance to examine its effect on banking stability and to evaluate any probable signals for recovery (Li, Farmanesh, Kirikkaleli, & Itani, 2021). Additionally, literature suggests that this covid-19 shock is not similar to the financial crisis of 2008 (Ahmed & Mohammad, 2022; Mohammad & Khan, 2021; Ramelli & Wagner, 2020). There is a dearth of studies on how banks performed during the Covid-19 period especially in the context of financial systems of developed and developing economies.

The study offers fresh data in support of the claim that firms, particularly those in the financial sector, were not affected by the epidemic in the same way everywhere. The study will serve as the foundation for the conduct of comparable studies in all facets of the Ghanaian economy as well as other African nations since it is presently the only empirical research that has evaluated the influence of the COVID-19 epidemic on the profitability of banks. The study's findings will help the Bank in Ghana's Central Region develop a banking sector policy framework that would increase the sector's resilience to external shocks.

The present study seeks to find out the extent with which COVID-19 impact the Bank profitability in Ghana and to add up to the existing knowledge available.

1.3 Purpose of the Study

This study aims to examine the profitability of banks before and after covid-19 in Ghana especially Central Region.

1.4 Research Objectives

The following research objectives are formulated to guide the study:

1. To ascertain how COVID-19 affected the performance of banks leading to changes in bank profitability.
2. To determine the bank profitability before and after the covid-19.
3. To determine the factors that cause profit deficiency in the banking sector in the Covid period.
4. To help bank authorities detect loopholes and take preventive measures that can improve profit during crises like COVID-19.

1.5 Research Questions

1. What is the effect of COVID-19 on bank performance leading to changes in bank profitability?
2. What is the bank's profitability before and after the covid-19?
3. What is the factors that cause profit deficiency in the banking sector in the Covid period?
4. What is the preventive measure that can improve profit during crises like COVID-19?

1.6 Significance of the Study

The findings of the study have several implications and recommendations on policy and strategy for policymakers and regulators of banks, especially in Ghana. The findings enable policymakers of bank to the impact of Covid-19 on Profit of banks in Ghana.

Further, the study will enable policymakers of banks to devise solutions to handle the current challenges faced before and after covid-19, and also, formulate policies that will enhance bank performance.

It will also serve as a source of motivation for other institutions that intends to enhance their profitability as well as their financial performance since the study will make available information on the significance of bank on their profitability.

1.7 Scope of the Study

The current study is about the bank profitability before and after covid-19. The profitability is the measure of organization’s profit relative to its expenses and this would be accessed against covid-19 influence after and before. These performances

are mainly used by stakeholders in banks and other financial institutions. Therefore, this study is limited to bank profitability in the banking sector in Ghana, especially Central Region. The study is also limited by time constraints.

1.8 Organization of Chapters

The rest of the study was scientifically organized into other different chapters. Chapter two carefully presented the theoretical framework and literature available on covid 19 impact on bank profitability and the hypothetical structure that forms the underlining basis of the study. Chapter three described the general research design, and methodology and discusses the blueprint that answers the research hypothesis. Chapter four included data analysis, results, and discussion. Chapter five entails the summary of the main findings, the conclusion of the study and its market implications, recommendations, and suggested areas for further study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The current health crisis has gone beyond the health sector. It has affected economic activities including the Ghana Banks performance where banks have experienced some level of effect. The Corona virus causes pneumonia of unknown cause first detected in Wuhan, China and first reported to the World Health Organization (WHO) on 31st December 2019. The World Health Organization announced the official designation of this deadly virus on February 11, 2020. On March 11 it detected Covid 19, a pandemic posting to over 118,000 cases of the coronavirus illness in 110 countries and territories around the world and the sustained risk of further Global spread. We seek to determine the impact of covid-19 on the banks profitability in Ghana considering their performance. This Chapter presents a discussion on the relevant literature reviewed as far as the impact of covid-19 on Bank Profitability is concerned. The chapter also considers theoretical review, empirical review, conceptual framework, and conclusion (Omar, 2022).

2.1 Theoretical Review

This study aims to examine the impact of covid-19 on bank profitability in Ghana especially Central Region. To address this aim, the study used the frameworks below.

- Black Swan Theory (Nassim Nicholas Talib, 2001; 2007)
- X-efficiency hypothesis from efficient-structure theory (Jeon & Miller, 2005)

2.1.1 Black Swan Theory

According to the "Black Swan theory," an occurrence that is unexpected has a significant impact, and is highly unpredictable. Covid-19 was an unanticipated, global event that has been compared to a black swan. Talib (2001; 2007) developed the Black Swan hypothesis and its application to economics. When a scientist discovered a black bird that resembles the recognized swan identically, it astounded the bird experts of the time (Talib, 2007). As a result, Talib used the then-novel black swan concept to explain sudden, unanticipated events that have a good or negative impact on the profitability of banks and other business activity (Ngwakwe, 2020). This idea is appropriate for this paper because the covid-19 outbreak damaged Ghanaian banks' profits. Due to the health crisis's unpredictability, it significantly impacted bank performance. The simultaneous impact of the coronavirus pandemic has caused various oscillations in the international markets and money markets, prompting investors to sparkle (Fitzgerald, 2020).

Global supply chains have been impacted by national border closures and travel restrictions, which has also led to unpredictable volatility increases in bank performance (Financial Times, 2020; The Telegraph, 2020).

2.1.2 X-efficiency hypothesis from efficient-structure theory

According to the X-efficiency hypothesis, banks can increase profits by improving their managerial abilities to manage and control cost levels. The cost and income levels of the banks may have been affected by COVID-19, which would have reduced their bank profitability. Given that the pandemic's onset was an unusual external shock, banks should have encountered certain management and adjustment

challenges. Additionally, it is expected that as general economic activity decreased, which affected all business sectors, bank revenue levels would also diminish.

Therefore, a higher cost-to-income ratio will lead to banks becoming less efficient as a result of rising bank costs and falling bank income levels. People, who are significant economic agents, are expected to have cut their personal consumption as a result of being advised to stay at home and avoid social situations as a result of the lockdown enforcement, which is expected to have made the economy even worse. Additionally, because of the uncertainty, we may anticipate that during times of crisis, people won't be motivated to spend more money. Of course, the banking industry would fall under this as well, just like other commercial industries.

Hladika (2021) asserts that the pandemic has caused a considerable decline in the demand for goods and services in the banking industry. Of course, this will have an impact on how the banks operate, which will lead to a reduction in operating revenues. Additionally, as a result of the pandemic's onset, there have been less bank transactions, card payments, and ATM cash machine uses globally (Ozili & Arun, 2020). As a result of a decrease in fees received by the banks, bank profits have decreased. Along with a drop in profitability, the pandemic's impact on the banking industry also increased credit risk exposure as nonperforming loans (NPL) increased by 25% (Ozili & Arun, 2020). Thus, this will have an impact on the profitability levels of the institutions.

An increase in efficiency and thus increased profitability is implied by a decline in a bank's cost-to-income ratio, which indicates that income exceeds costs.

On the other hand, a rise in a bank's cost-to-income ratio, which indicates that expenses are greater than revenues, denotes a decline in efficiency and, consequently, a decline in profitability.

2.2 Empirical Review

There have been various findings from different studies that have explained the impact of covid-19 on bank profitability. Therefore, it's imperative to discuss the findings and strategies used in these different studies to enhance how this study can be conducted effectively.

2.2.1 Bank Profitability

Experts, decision-makers, and academics continue to pay attention to banking performance because of the importance of banks to the economic well-being, expansion, and progress of a country. According to Rahman et al. (2015), Sufian & Habibullah (2009), and Titko et al. (2015), a bank's profitability is the most frequent indicator of its success. This profitability is often quantified by ratios like Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM). According to various research articles (Rahman et al., 2015; Sufian & Habibullah, 2009; Titko et al., 2015), bank profitability is a function of both internal (bank) and external (macroeconomic and industrial) components. Due to conflicting or even wholly incongruent empirical data, the contribution of many factors to the profitability of banks in developing nations is still up for debate. For instance, it has been discovered that the consistency of bank profitability determinants varies throughout countries and among different bank profitability measurements (Ozili, 2021).

One of the studies that emphasizes variations in bank profitability determinants among nations is Boateng's (Boateng, 2018). The study finds that credit risk, NIM,

capital adequacy, and inflation all have a large impact on bank profitability as measured by ROA when looking at bank-specific and macroeconomic factors that affect bank profitability in Ghana and India. While cost-to-income ratio and bank size have no effect on bank profitability in India but are highly significant in Ghana, liquidity risk and GDP growth have no meaningful impact on bank profitability in either country.

In a similar vein, Almaqtari et al. (2019) found that ROE has a positive and significant impact on asset quality ratios, asset management ratios, bank size, and liquidity ratios while finding that bank size, branch count, asset management ratio, operational efficiency, and leverage ratio are the main bank-specific factors in explaining the profitability of Ghanaian commercial banks as measured by ROA. Furthermore, ROE is significantly impacted by GDP, inflation, interest rates, the financial crisis, and exchange rates, whereas ROA is significantly impacted by demonization, interest rates, exchange rates, and inflation rates.

Bank profitability varies greatly over time and between nations. For instance, Rahman et al. (2015) and Sufian and Habibullah (2009) looked into the elements that affect bank profitability in Ghana as determined by ROA, ROE, and NIM, and both studies found that loan levels had a favorable and significant impact on bank profitability. Sufian and Habibullah (2009) found that non-interest income, credit risk, and costs significantly affect the three measures of bank profitability, while Rahman et al. (2015) found that capital strength (either regulatory capital or equity capital), cost effectiveness, and off-balance-sheet activities significantly affect the three measures of bank profitability. Sufian and Habibullah (2009) also find that, with the exception of inflation, which has a negative relationship with bank profitability in Ghana as

represented by NIM, neither macroeconomic determinants nor the impact of non-uniform size across all bank profitability measures used significantly affect bank profitability. Non-interest income, credit risk, and GDP are the main factors that determine NIM, but Rahman et al. (2015) found inconsistent results in the effects of these other variables. In contrast, size has a positive and significant impact on ROA and ROE, while inflation has a negative and significant impact on these same variables.

The behavior of the bank profitability determinants in the Economic Community of West African Countries is also looked into (Adelopo et al., 2018) in the years leading up to, during, and following the global financial crisis. The results of this study show that return on assets (ROA) before, during, and after the financial crisis was significantly impacted by cost management, liquidity, and company size (Adelopo et al., 2018). On the other hand, the impact of bank-specific variables like market dynamics, credit risk, and capital strength as well as macroeconomic variables like GDP and inflation depends on the time period and the metrics used to quantify bank profitability. The researchers came to the conclusion that the association between a variety of bank-specific characteristics and bank profitability was mostly unaffected by the financial crisis. Le & Ngo (2020) emphasized that increasing the number of points of sale (POS) terminals, bank cards, and ATMs available might increase bank profitability in the countries they studied. Bank profitability is negatively impacted by market forces, which may be a sign that competition has a positive effect on banking earnings. This study highlights the importance of financial market development for the profitability of the banking industry by demonstrating in particular how higher financial development can increase bank profitability. Additionally, the banking industry carries a larger credit risk due to the higher interest rates it charges to offset

the associated default risk. Similarly, both the global financial crisis and the economic recovery significantly impacted bank earnings. In their analysis of the key factors influencing bank profitability in developing nations, Kohlscheen et al. (2018) noted a downward trend in profitability following higher short-term rates brought on by higher funding costs, whereas higher long-term interest rates are associated with increased profitability. Additionally, loan growth appears to be more important to bank profitability than GDP growth during normal periods, while rising country risk premiums significantly reduce bank profits, highlighting the need for a credible monetary and fiscal framework to maintain overall financial stability.

2.2.2 Covid-19 Pandemic

The World Health Organization named the SARS-CoV-2 virus, a rapidly spreading coronavirus disease, a global pandemic on March 11th, 2020. The effects of this extraordinary health crisis were felt by people in all corners of the globe. Around two years after the epidemic, on March 7th, 2022, there had been a total of 445,096,612 confirmed cases and 5,998,301 reported deaths due to the coronavirus globally (WHO, 2022). Most governments implemented the necessary measures and restrictions, such as social isolation, national lockdowns, and the closure of non-essential businesses that require interpersonal contact, to reduce and contain the virus's spread (Kunt et al., 2021). As could be predicted, the world economy was put on hold by these extraordinary measures as economic activity fell and a global recession resulted. This is demonstrated by the substantial decline in the worldwide GDP to -3.3% in 2020, which is a major decline from the global GDP growth of -1.3% during the global financial crisis of 2008 (The World Bank, 2022). Pandemic was soon declared a global health emergency including countries with high standard of living, like the Nordic countries. Although the virus first appeared in the Chinese

city of Wuhan in the beginning of December 2019, the epidemic was quickly deemed a worldwide health emergency, affecting even developed nations with high standards of life, such as the Nordic countries. The emergence of Corona Virus Disease (Covid-19) has introduced new difficulties and consequences.

The outbreak has also impacted economic activity in a number of nations and generated major market moves (Romadhon, 2022). Significant global economic shocks have been formed by the Covid-19 pandemic, resulting in the largest global economic recession in the last century (OECD, 2020). Even if the global economy is on the road to recovery, the rate of recovery is not projected to be fairly spread across nations, with developed countries experiencing robust development while many developing countries fall apart. The epidemic affected the financial sector in Asia as well, which led to significant operational and financial challenges for financial institutions. According to the Asia Development Bank (ADB), pandemic losses might total between $5.8 and $8.8 trillion, or around 6.4% to 9.7% of the world's gross domestic product (Park et al., 2020). To make matters worse, this unique occurrence severely disrupted the macroeconomic, healthcare, and financial systems in each country. The epidemic caused a slowdown in overall demand, output, trade, and economic activity. Unemployment surged, and financial institutions (FIs) in almost every nation feared an increased risk of failing without government support (Barua & Barua, 2021).

The Covid-19 outbreak adversely affected the bank's financial performance as well as its ability to mediate credit and resurrect the economy (Barua & Barua, 2021; Sudja'i & Mardikaningsih, 2021). It also caused a sharp rise in defaults on commercial and family loans. Policymakers have taken steps to safeguard financial stability and

reduce risks to the banking industry ever since the pandemic started. Recognizing the essential role banks play in the Asian economic recovery process, it is imperative to take the Covid-19 pandemic's consequences on bank profitability in emerging economies into consideration. Careful case-by-case analysis is necessary to account for the pandemic's impact on banks (Barua & Barua, 2021). The Covid-19 pandemic not only has an impact on the health crisis, but it also has an impact on the global economic crisis, particularly in Ghana. The Covid-19 pandemic's economic crisis was different from the one that occurred in 1998 (Cakranegara, 2020; Stievany & Jalunggono, 2022). The economic crisis of today is distinct from the one of 2008. The rupiah's depreciation against the US dollar, which had a disproportionate effect on the massive and leveraged corporate sector, was what initially precipitated the crisis in 1998. The existence of subprime loans granted by Lehman Brothers in the US property sector contributed to the 2008 financial crisis.

Consequently, the health virus was a problem during the Covid-19 epidemic. A variety of businesses, most notably the financial sector, could see an increase in the risk of insolvency as a result of the Covid-19 epidemic (Hadiwardoyo, 2020). According to earlier study, a financial crisis could result in a decline in the performance of businesses in Ghana (Istiningrum, 2014). One of the sectors whose performance has suffered the most from the pandemic problem is the banking sector (Devi et al., 2020). However, internal governance before the pandemic strongly influences bank resilience in the event of the Covid-19 pandemic (Ghosh & Saima, 2021). Therefore, the ability to endure the pandemic calamity increases with governance quality (Ghosh & Saima, 2021). Banks in Indonesia had superior internal governance prior to the Covid-19 epidemic than they had during the financial crisis, making them more likely to survive the pandemic (Cakranegara, 2020). This implies that a decline in financial

performance might be influenced by outside factors. In this case, the government must take urgent action to lessen the pandemic's harmful impacts (Barua & Barua, 2021). Prior to the Covid-19 pandemic, domestic economic circumstances slowed in the fourth quarter of 2019 in line with the global economic slump, which was accompanied by positive signs for the planned phase I trade agreement between the United States and China. Investment fell, which caused a slowdown in the domestic economy. Government spending and export performance have not yet improved, but consumer spending is still strong.

The domestic economy grew by 5,02% in 2019 as opposed to 5,17% in 2018. This slowdown led to an increase in commercial bank loans of 6,08%, while Third Party Funds (also known as DPK) climbed by 6,54%. As a result, banks' liquidity condition was slightly better than it was the year before. In actuality, banking resilience is still upheld, supported by high capital levels sufficient to withstand any challenges. According to credit risk, market risk, and the reduction of liquidity risk, the banking sector's risk profile is maintained (OJK, 2019). According to the condition of bank capital, which was relatively strong with the Capital Adequacy Ratio (CAR) reported at 23.31%, the condition of banking resilience in general was still maintained in the fourth quarter of 2019. This demonstrates the banks' sufficient capacity for risk absorption, which is supported by profits that are still increasing and the quality of bank loan that is still comparatively poor. (OJK, 2019).

2.2.3 Covid-19 and Banks

The banking industry was among the primary sectors of many economies that the covid-19 pandemic severely disrupted. To lessen the pandemic's impact on their economies, the government and policymakers have experimented with a variety of

policy solutions (Sang, 2022). Researchers Feyen, Gispert, Kliatskova, and Mare (2021), for instance, look at the variables that affect policymakers' activity and responsiveness in emerging markets and developing countries. The results show that politicians in richer and more populous countries reacted more quickly and took more policy measures, whereas countries with higher levels of private debt have a tendency to take banking, liquidity, and financial measures earlier. Have looked at how policy changes in different nations have impacted economic development and recovery (Yan & Jia, 2022; Katusiime, 2021). They go on to say that policymakers' actions appear to be unaffected by the COVID-19 outbreak, macroeconomic factors, or political contexts. Feyen et al. (2021) draw attention to a number of policy choices, such as loosening the classification and treatment of non-performing loans, that are at odds with the principles of international financial standards and recent recommendations from standard-setting organizations like the International Monetary Fund (IMF) and the World Bank. The advent of a pandemic, according to Wei and Han (2021), has made it more challenging for monetary policy to reach the financial sector. But they believe that using conventional monetary policy will help the financial sector and halt the post-pandemic economic collapse.

The Basel III reforms and various nation-specific improvements to bank supervision and regulation, according to Berger et al. (2021), have increased the banking sector's resilience to COVID-19 shocks. They claim that national government initiatives have aided in the financial sector's stabilization and, in some nations, have minimized the pandemic's detrimental economic consequences on the sector's primary activities. Demirgüç-Kunt et al. (2021) assess the effects of liquidity support, prudential measures, borrower assistance, and monetary policy measures on anomalous bank returns in their examination of the function of various policy efforts in alleviating

bank stress. They find that borrower assistance and liquidity support policies had the most positive impacts on atypical bank returns, with liquidity support being especially advantageous to banks with limited liquidity. Furthermore, Demirgüç-Kunt et al. (2021) claim that drops in interest rate policy primarily benefit banks with less liquidity, proving that monetary policy significantly contributed to the current global crisis. Although some banks have seen a reduction in the negative effects of the pandemic as a result of these regulatory improvements, this is not the case for all institutions. In an interesting assertion about the connection between economic policy and central bank independence (CBI), Elgin, Yalaman, Yasar, and Basbug (2021) claim that countries with more independent central banks have greater restrictions on the lowering of monetary policy interest rates and deposit reserve ratios, while having relatively larger fiscal and macro-financial packages.

Financial markets were under pressure as a result of an unprecedented global disease that threatened not only the health of the population but also the health of the entire economy (Goldstein, Koijen, & Mueller, 2021). The lockdown and work suspension measures, according to Guo, Li, and Li (2021), caused the real economy to enter a recession, which in turn caused the financial markets to have less liquidity and become more volatile. Research of the tail risk contagion across international financial markets during the pandemic shows that the COVID-19 pandemic has had a negative impact on the global financial system, which heightens tail risk spill-overs in the global financial market. Izzeldin, Muradolu, Pappas, and Sivaprasad's (2021) investigation on the COVID-19 financial crisis' effects on stock markets around the world and other business sectors follows a similar line of thought. Their data suggest that the US and UK financial markets have suffered the most. Nguyen (2022) contends that the systematic shock had a particularly negative effect on the utilities,

energy, and real estate sectors as well as the consumer discretionary sector, which includes the travel and luxury goods industries, and the industrial sector, which includes the airline industry. This conclusion contrasts with Nguyen's (2022) findings. According to Goldstein, Koijen, and Mueller (2021), the U.S. government bonds, corporate bonds, and money market funds all experienced substantial stress in March 2020. They believe that at least some of the speedy recovery of the U.S. financial market can be attributed to the Fed's prompt action to prevent a significant financial catastrophe. According to Kwan and Mertens (2020), the Coronavirus Aid, Relief, and Economic Security (CARES) Act has somewhat decreased the chance of specific shocks and defaults, although there are still significant differences between sectors. According to Falato, Goldstein, and Hortacsu (2021), the Fed's bond purchase program helps to stop withdrawals, especially from the most vulnerable funds, and the liquidity support filters through funds to the real economy. They examine the pandemic-related fragility that these funds encountered in their study and examine how the Federal Reserve's measures helped to address it.

According to Borri and Di Giorgio (2021), the traditional definition of systemic risk is the possibility of the banking system collapsing completely, which is seen as financial instability. The argument is that a few extraordinary events have led to the deterioration and final tragedy of the situation. Shocks like the 2008 global financial crisis, in accordance with Duan, El Ghoul, Guedhami, Li, and Li (2021), accelerate banks' tail co-movements, ultimately leading to the collapse of entire financial systems. The Great Financial Crisis, the European sovereign debt crisis, and the COVID-19 crisis are the three crises that Borri and Di Giorgio consider while analyzing the systemic risk of the major European banks in 2021. They examine how the COVID-19 pandemic will affect systemic risk in 2020 with a particular focus on

the banks in several different countries. The results are in line with those published by Duan et al. (2021), which show that the pandemic raises the systemic risk presented by big, riskier banks with high loan-to-asset ratios.

2.2.4 Covid-19 and Bank Profitability

The covid-19 pandemic had a detrimental impact on Ghana's business sector, according to the Ghana Statistical Service's Business Tracker Report (GSS, 2021). The impact of the pandemic on the financial industry, however, was not assessed in the research. The impact of the COVID-19 epidemic on the financial performance of Ghana banks in other nations has been looked at in certain research. The majority of these studies (Yan & Jia, 2021; Elnahass et al., 2021; Kozak, 2021; Katusiime, 2021; Barua, 2020) reach the conclusion that the covid-19 epidemic decreased bank stability and their financial performance as well. According to Kozak (2021), banks in central and eastern south European nations saw a surge in non-performing loans during the pandemic, which had a detrimental effect on their profitability. In research on how the COVID-19 pandemic affected Ugandan commercial banks' profitability, Katusiime (2021) found a negative correlation between the pandemic and return on assets, return on equity, and net interest margin. Similar to this, Yan and Jia (2022) discovered evidence that the covid-19 epidemic had an impact on the viability of the Chinese banking industry. Sang (2022) on the other hand claimed that the covid-19 pandemic forced Vietnamese commercial banks to increase their efficiency above that of the pre-pandemic period, which led to better financial results. In a policy paper for the World Bank, Demirgüç-Kunt et al. (2021) came to the conclusion that the pandemic had put a lot of strain on the banking industry because banks were required to support the government and private sector with liquidity, which had a negative impact on their

financial performance. The majority of these financial aids, according to the study, were provided at a discounted rate, which did not increase the banks' profit margins.

Similar to this, Surahman, Kamal, Rosari, Susilowati, and Cakranegara (2022) noted that the covid-19 pandemic had an impact on the risk profile of commercial banks in Indonesia, which negatively impacted their financial performance. Additionally, Alabbad and Schertler (2022) noted a detrimental impact of the pandemic on commercial banks. The analysis to now indicates that the bulk of findings from other nations reveal that the covid-19 pandemic decreased banks' financial performance. The severity of the pandemic's effects and the likelihood that commercial banks can continue to turn a profit, nevertheless, will determine the impact. It is reasonable to assume that the covid-19 pandemic had a negative influence on Ghana's banks' earnings given the poor impact the pandemic had on the country's overall business performance, according to the Ghana Statistical Service's business tracker report.

2.3 Conceptual Framework

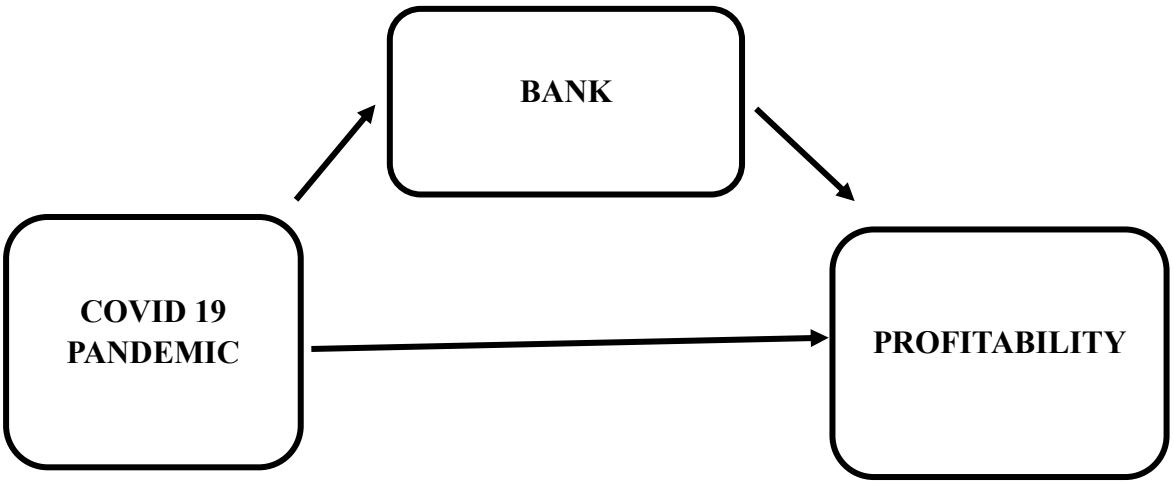

Figure 2.1: Proposed Conceptual Framework Model

Source: Author's construct, 2023

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

Research methodology refers to the systematic approach employed to address a research problem. In their work, Kheni et al., (2008) assert that it involves a structured framework used to navigate the various techniques utilized to achieve the objectives of a study. This chapter elucidates the diverse methods employed to accomplish the study's aims, providing a comprehensive understanding of the research methodology and design employed. The chapter encompasses crucial elements such as the target population and sampling strategy utilized to select participants for the study. It outlines the research instrument employed, the sources of data, the methods employed for data collection, and the ethical considerations taken into account during the research process. These aspects are thoroughly expounded upon to ensure a clear understanding of the research methodology employed in the study.

3.1 Research Approach

This study adopted a quantitative approach. According to Gravetter and Forzano (2018), quantitative research is based on measuring variables in order to obtain scores, usually numerical values that are submitted for statistical analysis, summary, and interpretation therefore suggesting that the main purpose of quantitative research is to make the research valid by means of numbers. Kazadi (2011) holds the same view by stating that the purpose of quantitative research methodology is to evaluate data objectively by rendering numbers.

3.2 Research Design

Myers et al. (2013) define research design as an organized process through which the problem at hand or under study is solved by careful planning, organization, collection, and analysis of the available data into synthesized useful information. The study adopted a descriptive survey design. A descriptive study is concerned with determining the frequency with which something occurs or the relationship between variables (Bryman & Bell, 2022). Thus, this approach was appropriate for this study, since the researcher intended to collect detailed information through descriptions and was useful for identifying variables. The study used a descriptive survey design. The purpose of using descriptive surveys was to collect detailed and factual information that describes an existing phenomenon. Data was collected based on the concepts defined in the research model.

In furtherance, the choice of design was made with resort to Fowler (2013) who posits that survey research is used when the researcher is interested in studying certain characteristics, motivations, and opinions of a population. Also, the research design employed in this study makes it easy to collect and extract information about the independent and dependent variables.

3.3 Population

Researchers define the research population as the whole group of people, events, or things that the researcher needs to examine (Zikmund, 2010). According to Asamoah-Duodu (2013), population denotes a collection of units or components through which a researcher is concerned and aims to generalize the result of the researcher. It is the grouping of Individuals, households, or organizations with comparable features about

which a researcher wants to make inferences (Cooper & Schindler, 2014). The target population of this study comprised banks in Ghana.

3.4 Sample Study

Sampling is the process of selecting a portion of cases and analyzing them to gain an understanding and make deductions and inferences about the whole set (Lokesh et al, 2009). As indicated by Cohen (2003), researchers most often do not get access to the entire population to obtain information due to certain factors such as expense, time, and accessibility. The sample size for the study is 5 banks in Ghana namely; FBN, UBA, ADB, GCB, and ABSA.

3.5 Sampling Technique

The researchers found it convenient to employ a probability sampling technique for the study which gives each element of the population a known and equal chance to be included as a sample. The approach of probability sampling technique used by the researchers for the study was simple random sampling.

3.6 Types and Sources of Data

The study employed secondary research data. Secondary research data is a form of data already gathered and processed and is accessed and reanalyzed often for a different purpose by another (Babbie, 2020). The researcher used secondary data sources to gather information about the 5 banks' (FBN, UBA, ADB, GCB, and ABSA) profitability. Secondary data was gathered from existing credible and recognized sources. The data comprised of materials that are desirable, current, accurate, sufficient, and relevant collected from library textbooks, the internet and magazines, and personnel files in the organization.

3.7 Data Collection

The data was collected from individual financial reports from the 5 banks (FBN, UBA, ADB, GCB, and ABSA). The data was collected for a period of Five years (2016 to 2022). This gave the picture of how the profitability of the 5 selected banks has changed with Covid-19 and after Covid-19. The pre-Covid-19 period was from 2016 to 2019 and the post-Covid-19 period was from 2020 to 2022. The researcher adopted an event study methodology in collecting data.

3.8 Method of Data Analysis

Data analysis is the process of bringing order, structure and meaning to the data collected. This stage allows the researcher to make an in-depth analysis of the data gathered for further processing and consideration. The data collected was extracted into Microsoft Excel. The data was cleaned, coded, and entered into IBM SPSS version 23. The Averages of each of the banks before the COVID-19 period and after the COVID-19 period were calculated. The study utilized descriptive and inferential statistics. Descriptive statistics included mean, standard deviation, maximum, and minimum. Inferential statistics related to multiple linear regression analysis. This study adopted an event study methodology where the profitability of the 5 selected banks was based on the occurrence of an event (COVID-19). The researcher checked the profitability ratios before and after COVID-19.

3.9 Ethical Consideration

According to Cooper and Schindler (2008), ethics may be defined as the norms or requirements of conduct that guide moral choices about our conduct and relationships with others. Formal ethical approvals had been observed to make certain that it is in the prescribed ethical standards before starting the data collection procedure. Also,

this study did not use illegal methods in gathering the forms of records used. Findings was kept anonymous as expected so no one can know their identity. Divulging the identity of particular respondents in relation to precise data is deemed unethical, hence, keeping all findings anonymous.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This section has presented the findings from the data analysis. The findings are based on the objectives and the variables of the study. The discussion of findings was also presented based on the findings of the study.

4.1 Descriptive Statistics

This section outlines statistical findings presenting the mean, minimum, maximum, and standard deviation of data. The analysis delves into the profitability comparison of Ghanaian banks (FBN, UBA, ADB, GCB, and ABSA) before and after the onset of COVID-19, aiming to assess the pandemic's impact on these banks' profitability. Specifically, the statistical evaluation spans three years before (2016, 2017, 2018) and three years after (2020, 2021, 2022) the emergence of COVID-19 to gauge any discernible effects on the profitability trends within Ghanaian banks.

4.1.1 Pre-Covid Descriptive Analysis

This section aimed to determine the characteristics of the variables preceding the COVID-19 period. The analysis primarily relied on the mean and standard deviation for its assessment.

Table 4.1: Pre-Covid Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Liquid Funds/Total deposit	5	1	3	2.26	.968
Return on Equity	5	15	36	24.60	7.692
Cost to Income	5	0	1	.51	.171
Net Interest Margin	5	8	13	10.68	2.242

Source: Field Study (2023)

From Table 4.1, in examining the data preceding the COVID-19 period, the researcher delved into key variables to ascertain their status. The analysis revealed distinctive characteristics within various financial metrics. The Liquid Funds/Total deposit ratio, ranging from 1 to 3 across the entities studied held an average of 2.26 with a standard deviation of 0.968. This diversity indicated a moderate variation in the allocation of liquid funds concerning total deposits among the analyzed entities. In terms of Return on Equity, the span from 15 to 36, coupled with an average of 24.60 and a standard deviation of 7.692, highlighted substantial variability in profitability linked to shareholders' equity among the entities. This variance underscored differing levels of financial performance across the studied institutions. Meanwhile, the Cost to Income ratio, fluctuating between 0 and 1, exhibited an average of 0.51 alongside a standard deviation of 0.171. This data suggested a moderate level of diversity in expense management concerning income generation among the entities examined. Examining the Net Interest Margin, the observed range from 8 to 13, with an average margin of 10.68 and a standard deviation of 2.242, suggesting a relatively consistent net interest margin across the entities studied. This finding denoted a moderate level of variability in this crucial metric among the analyzed institutions.

4.1.2 Post-Covid Descriptive Analysis

This section aimed to determine the characteristics of the variables after the COVID-19 period. The analysis primarily relied on the mean and standard deviation for its assessment.

Table 4.2: Post-Covid Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Liquid Funds/Total deposit	5	72	1.08	.8800	1.3693
Return on Equity	5	-13.30	11.40	4.7000	10.45873
Cost to Income	5	.29	.81	.4760	.21349
Net Interest Margin	5	7.40	10.90	8.7000	1.39284

Source: Field Study (2023)

From Table 4.2, in the evaluation of data post the COVID-19 period, the researcher conducted an in-depth analysis of pivotal variables to gauge their standing. This assessment revealed distinct traits within various financial metrics, reflecting shifts in the economic landscape. The Liquid Funds/Total deposit ratio showcased a substantial shift post-Covid, spanning from 72 to 1.08. The average ratio notably decreased to 0.8800, accompanied by a standard deviation of 1.3693. This marked alteration indicated a significant reduction in the proportion of liquid funds concerning total deposits among the entities studied in the aftermath of the COVID-19 period. Examining Return on Equity post-Covid revealed a range from -13.30 to 11.40, indicating a broader spectrum compared to the pre-Covid period. The average Return on Equity notably declined to 4.7000, while the standard deviation surged to 10.45873. This notable increase in variability pointed to significant fluctuations among the entities in terms of profitability related to shareholders' equity after the

COVID-19 period. The Cost to Income ratio, fluctuating between 0.29 and 0.81 post-COVID, displayed an average of 0.4760 and a standard deviation of 0.21349. This data suggested a moderate level of variation in expense management concerning income generation, indicating slight changes compared to the pre-COVID period. Regarding the Net Interest Margin post-Covid, the observed range spanned between 7.40 and 10.90. With an average margin of 8.7000 and a standard deviation of 1.39284, the entities showcased a relatively stable net interest margin compared to the pre-COVID period, albeit with slight variability among them.

4.2 Summary of Banks Performance

This section outlines statistical findings presenting the Liquid Funds/Total deposit, Return on Equity, Cost-to-income ratio, and Net Interest Margin of data. The analysis delves into the profitability comparison of 5 Ghanaian banks (FBN, UBA, ADB, GCB, and ABSA) before and after the onset of COVID-19, aiming to assess the pandemic's impact on these banks' profitability. Specifically, the statistical evaluation spans three years before (2016, 2017, 2018) and three years after (2020, 2021, 2022) the emergence of COVID-19 to gauge any discernible effects on the profitability trends within Ghanaian banks.

4.2.1 Pre-Covid Summary of Banks Performance

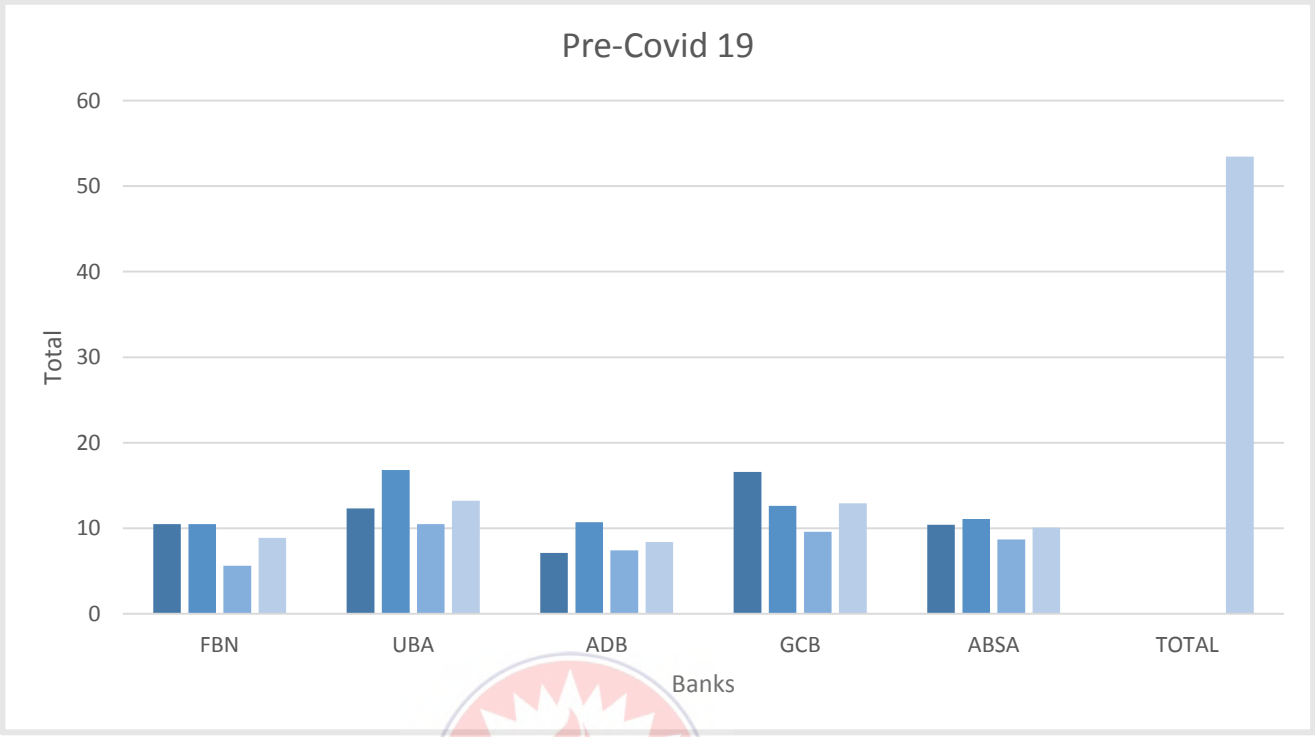

Figure 4.1: Pre-covid Chart

From Figure 4.1, FBN displayed a consistent rise in its Liquid Funds/Total Deposit ratio from 1.01 in 2016 to 1.78 in 2018, indicating improved liquidity over the years. Return on Equity (ROE) varied notably from 3% in 2016 to 23.7% in 2018, averaging at 14.53%. This signals an upward trend in profitability relative to shareholders' equity. The Cost to Income Ratio (CIR) showed a slight increase from 0.64 in 2016 to 0.8 in 2018, averaging at 0.72, suggesting a moderate rise in expenses concerning income. However, the Net Interest Margin (NIM) experienced fluctuations, notably dropping to 5.6 in 2018 from 10.5 in both 2016 and 2017, averaging at 8.87.

UBA showcased consistent growth in its Liquid Funds/Total Deposit ratio, rising from 0.62 in 2016 to 1.33 in 2018, indicating substantial improvement in liquidity. ROE figures remained high throughout the years, ranging from 23.7% to 43.7%, with an average of 35.8%. This reflects the bank's efficient utilization of shareholders'

equity for generating profits. UBA maintained a relatively low and stable CIR, averaging at 0.31-0.33, indicating good control over expenses concerning income. The NIM displayed fluctuations but remained generally high, averaging at 13.2.

ADB maintained a relatively stable Liquid Funds/Total Deposit ratio across the three years, averaging at 0.86, indicating a consistent liquidity position. ROE figures ranged between 21% and 23.5%, averaging at 22.07, suggesting stable profitability concerning equity. The CIR fluctuated slightly, averaging at 0.56, indicating moderate cost control. However, the NIM displayed fluctuations, averaging at 8.4, suggesting varying interest income and expenses.

GCB witnessed a decline in its Liquid Funds/Total Deposit ratio from 0.99 in 2016 to 0.8 in 2018, averaging at 0.89. This indicates a potential decrease in liquidity. The ROE varied notably from 16.9% to 38.4%, averaging at 26.33, showcasing fluctuating but generally healthy profitability. GCB maintained a moderate CIR at an average of 0.38, suggesting stable cost management relative to income. However, the NIM displayed a declining trend, averaging at 12.93, suggesting a decrease in net interest income.

ABSA exhibited varied Liquid Funds/Total Deposit ratios across the years, averaging at 0.84, indicating moderate liquidity. ROE figures ranged between 19.1% and 29.5%, averaging at 24.33, suggesting consistent profitability. The CIR experienced fluctuations but averaged at 0.61, indicating moderate cost control. ABSA's NIM fluctuated but averaged at 10.07, indicating relatively stable net interest income.

4.2.2 Post-Covid Summary of Banks Performance

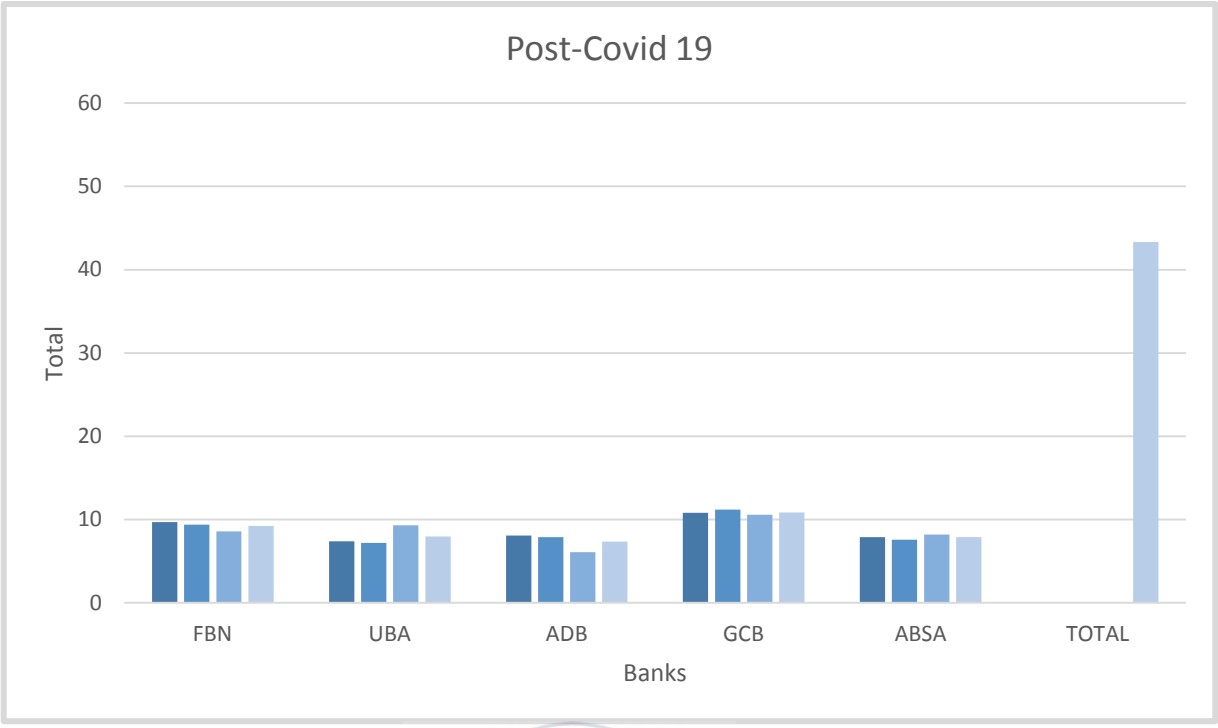

Figure 4.2: Post-covid Chart

From Figure 4.2, FBN demonstrated a reasonably stable yet fluctuating Liquid Funds/Total Deposit ratio, ranging from 0.96 to 1.29 with an average of 1.08, indicating moderate liquidity. Its Return on Equity (ROE) depicted fluctuations from 7.2% to 12.5% to 9.5%, averaging at 9.73%, reflecting varying profitability concerning shareholders' equity. Notably, the Cost to Income Ratio (CIR) showed a decreasing trend from 0.5 to 0.47 to 0.31, averaging at 0.43, signifying an improving ability to manage costs relative to income. However, the Net Interest Margin (NIM) fluctuated between 8.6% and 9.7%, averaging at 9.23%, displaying variations in the bank's capacity to generate interest income.

UBA (United Bank for Africa) sustained relatively stable figures in the Liquid Funds/Total Deposit ratio, ranging from 0.89 to 0.93, with an average of 0.91, indicating steady albeit slightly declining liquidity. The ROE fluctuated from 5% to

16.4% to 12.5%, averaging at 11.3%, showcasing varied profitability concerning shareholders' equity. UBA maintained a consistent Cost to Income Ratio, averaging at 0.29, indicating stable cost management concerning income. However, the NIM showed fluctuations between 7.2% and 9.3%, averaging at 7.97%, indicating variability in interest income generation.

ADB (Agricultural Development Bank) demonstrated varying liquidity with fluctuations in the Liquid Funds/Total Deposit ratio, ranging from 0.71 to 1.01, averaging at 0.9. The ROE depicted significant fluctuations from 7.7% to 8.7% to -56.4%, averaging at -13.33%, indicating challenges in generating profits concerning shareholders' equity. The CIR exhibited fluctuations, averaging at 0.81, implying varied cost management relative to income. The NIM ranged between 6.1% and 8.1%, averaging at 7.37%, indicating fluctuations in generating interest income.

GCB (Ghana Commercial Bank) maintained moderate stability in its Liquid Funds/Total Deposit ratio, ranging from 0.71 to 0.84, averaging at 0.79, indicating steady liquidity. However, the ROE experienced significant fluctuations from -30% to 21.4% to 21.9%, averaging at 4.43%, suggesting challenges and highs in profitability concerning shareholders' equity. GCB consistently managed its costs relative to income, averaging at 0.55 in CIR. The NIM displayed some variability, ranging from 10.6% to 11.2%, averaging at 10.87%, signifying fluctuations in generating interest income.

ABSA (Absa Bank) showcased moderate fluctuations in its Liquid Funds/Total Deposit ratio, ranging from 0.68 to 0.76, with an average of 0.72, indicating some variability in liquidity. The ROE depicted significant fluctuations from -20.1% to 24.2% to 30.1%, averaging at 11.4%, suggesting challenges and highs in profitability

concerning shareholders' equity. ABSA showcased fluctuations in CIR, averaging at 0.32, indicating varied cost management relative to income. The NIM ranged from 7.6% to 8.2%, averaging at 7.9%, showing moderate variability in generating interest income.

4.3 Normality of Data Set

The normality of the data set for both the pre-COVID period and the post-COVID period.

Table 4.3: Normality Test for Data Distribution

Variables	Skewness	Kurtosis+
Pre-Liquid Funds/ Total deposit	-.912	.669
Pre-Return on Equity	.333	1.350
Pre-Cost to Income	-.205	-1.759
Pre-Net Interest Margin	.338	-2.960
Post-Liquid Funds/ Total deposit	.521	.256
Post-Return on Equity	-1.864	-3.441
Post-Cost to Income	1.134	.689
Post-Net Interest Margin	1.217	.909

Source: Field Study (2023)

Since most basic statistical methods of analyzing data are based on the assumption of normally distributed data, it was imperative to ensure the normality of the data set. Although the Central Limit Theorem (CLT) suggests that a breach in the normality of a data set with over 100 observations are not so grievous, it is still necessary for making meaningful and reliable deductions and interpretations (Mishra et al., 2017). Since statistical tests are often more objective compared to graphical tests, skewness, and kurtosis scores were used to measure the normality of data distribution. Both

skewness and kurtosis values for study variables were within their recommended thresholds of +2 to -2 (Fidell & Tabachnick, 2003) indicating that the data was normally distributed. Results from the normality test via IBM SPSS Statistic (Version 23.0) are presented above in Table 4.3.

4.4 Regression analysis

Regression analysis was done to check the impact of the COVID-19 pandemic on profitability of Ghanaian banks. The analysis was done based on the data before COVID-19 and after COVID-19. Liquid Funds/Total deposits, cost-to-income ratio, and Net Interest Margin were used as the predictor variables, and their impact on return on equity tested in the regression.

4.4.1 Pre-Covid Regression Analysis

Table 4.4: Pre-Covid Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997[a]	.994	.9751	.217

a Predictors: (Constant), Liquid funds/total deposits, cost-to-income ratio, and net interest margin

From the model summary in Table 4.4, the pre-Covid 19 correlation coefficient (R) was 0.997. This indicates that liquid funds/total deposits, cost-to-income ratio, and net interest margin had a strong relationship with return on equity in the period before COVID-19. The model summary shows that the regression had an R squared of 0.994. This shows that in the period before COVID-19, liquid funds/total deposits, cost-to-income ratio, and net interest margin contributed 99.4% to the change in return on

equity. This shows that their contribution to return on equity was very high in the pre-COVID period.

Table 4.5: Pre-Covid ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	235.200	3	78.400	52.956	.000[b]
	Residual	1.480	1	1.480		
	Total	236.680	4			

a Dependent Variable: Return on equity

b Predictors: (Constant), Liquid funds/total deposits, cost-to-income ratio, and net interest margin

From Table 4.5, this section provides information about the regression model. It shows that the sum of squares for the regression model is 235.200, and it has 1 degree of freedom (df). The mean square for regression is 78.400. The F-statistic is 52.956, and the associated p-value (Sig.) is less than 0.001 (indicated by .000b). This suggests that the regression model is statistically significant.

Table 4.6: Pre-Covid Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	61.222	10.563		5.796	.109
	Liquid funds/total deposits	-3.137	.646	-.390	-4.860	.129
	cost to income ratio	-48.735	7.977	-1.086	-6.109	.103
	Net interest margin	-.420	.606	-.122	-.692	.614

a. Dependent Variable: Return on equity

From Table 4.6, the regression analysis showed that if Liquid funds/total deposits, cost to income ratio and net interest margin are held constant, the return on equity of banks in Ghana would stand at 61.222 in the period before Covid-19. The analysis showed that unit increase in Liquid funds/total deposits would reduce return on equity by 3.137. A unit increase in cost to income ratio would reduce return on equity by 48.735 while unit increase in net interest margin would reduce return on equity by 0.420. Liquid funds/total deposits, cost to income ratio and net interest margin showed significance greater than 5% which indicates that Liquid funds/total deposits, cost to income ratio and net interest margin had insignificant effect on return on equity in the period before Covid-19.

4.4.2 Post-Covid Regression analysis

Table 4.7: Post-Covid Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997[a]	.995	.9801	.496

a Predictors: (Constant), Liquid funds/total deposits, cost-to-income ratio, and net interest margin

From the model summary in From Table 4.7, the post-Covid 19 correlation coefficient (R) was 0.997. This indicates that liquid funds/total deposits, cost-to-income ratio, and net interest margin had a strong relationship with return on equity in the period after COVID-19. The model summary shows that the regression had an R squared of 0.995. This shows that in the period after COVID-19, liquid funds/total deposits, cost-to-income ratio, and net interest margin contributed 99.5% to the change in return on equity. This shows that their contribution to return on equity was very high in the post-COVID period.

Table 4.8: Post-Covid ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	435.301	3	145.100	64.810	.000[b]
	Residual	2.239	1	2.239		
	Total	437.540	4			

a Dependent Variable: Return on equity

b Predictors: (Constant), Liquid funds/total deposits, cost-to-income ratio, and net interest margin

From Table 4.8, this section provides information about the regression model. It shows that the sum of squares for the regression model is 435.301, and it has 1 degree of freedom (df). The mean square for regression is 145.100. The F-statistic is 64.810, and the associated p-value (Sig.) is less than 0.001 (indicated by .000b). This suggests that the regression model is statistically significant.

Table 4.9: Post-Covid Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.272	7.043		1.175	.449
	Liquid funds/total deposits	4.174	5.487	.055	.761	.586
	cost to income ratio	-47.182	3.520	-.963	-13.405	.047
	Net interest margin	1.748	.538	.233	3.249	.190

a. Dependent Variable: Return on equity

From Table 4.9, the regression analysis showed that if Liquid funds/total deposits, cost-to-income ratio, and net interest margin are held constant, the return on equity of banks in Ghana would stand at 8.272 in the period after COVID-19. The analysis showed that a unit increase in Liquid funds/total deposits would increase return on equity by 4.174. A unit increase in cost to income ratio would reduce the return on equity by 47.182 while a unit increase in net interest margin would increase return on equity by 1.748. Cost to income ratio and net interest margin showed significance less than 5% which indicates Cost to income ratio and net interest margin had significant effect on return on equity in the period after Covid-19. Lastly, liquid funds/total

deposits showed significance greater than 5% which indicates liquid funds/total deposits had an insignificant effect on return on equity in the period after Covid-19.

4.5 Discussion of Results

The first objective of this current study sought to ascertain how COVID-19 affected the performance of banks leading to changes in bank profitability. The findings of the study revealed that, the evaluation of key financial metrics after the COVID-19 pandemic reveals a nuanced impact on bank performance and profitability. This is supported by Alkhazali et al., 2023, who assert that capital in the years leading up to the COVID-19 pandemic affected bank profitability during the crisis in emerging economies. One significant observation lies in the substantial shift seen in the Liquid Funds/Total Deposit Ratio. Post-COVID, there was a notable decrease in this ratio, indicating a reduced proportion of liquid funds in relation to total deposits. This change suggests that banks might have repositioned their assets away from liquid holdings, potentially to address immediate economic pressures or adapt to changing market demands in the aftermath of the pandemic. Another pivotal metric, the Return on Equity (ROE), displayed a widened spectrum post-COVID, with a significant decline in the average ROE (Sen et al., 2023). This divergence in profitability across different banks implies varied impacts stemming from the pandemic. Some banks experienced considerable decreases in ROE, possibly due to heightened economic uncertainties, increased operational costs, or shifts in customer behavior affecting revenue streams. In contrast, the Cost to Income Ratio exhibited moderate fluctuations post-COVID, signaling a moderate level of variation in expense management concerning income generation (Cline, 2023). While changes occurred, the extent seemed relatively controlled, suggesting that banks maintained a measured approach to managing expenses amidst the evolving economic landscape. Moreover,

the Net Interest Margin (NIM) showed relative stability post-COVID, with minor variability observed among entities. This consistency suggests that despite the broader economic shifts, banks were able to uphold a relatively steady margin between interest earned and interest paid.

The second objective of this current study sought to determine the bank profitability before and after COVID-19. The findings of the study revealed that, before the onset of COVID-19, bank profitability in Ghana appeared tightly linked to several key factors: liquid funds/total deposits, cost-to-income ratio, and net interest margin. This finding is in line with Kathuri, 2022 who asserts that Firm liquidity showed a negative and insignificant regression coefficient with financial performance. The findings during this period revealed that these factors collectively accounted for a significant 99.4% contribution to changes in return on equity (ROE), a key measure of bank profitability (Nawary et al., 2023). The relationship between these factors and ROE was notable. For instance, an increase in liquid funds/total deposits was associated with a reduction in ROE by 3.137 units. Similarly, an increase in the cost-to-income ratio resulted in a substantial reduction of ROE by 48.735 units, while a rise in net interest margin led to a minor decrease in ROE by 0.420 units. However, despite these clear associations, individually, these factors were deemed insignificant in their effects on ROE before COVID-19, as their significance levels exceeded 5%.

Also, following the impact of COVID-19, the dynamics of bank profitability altered. Notably, liquid funds/total deposits, which previously held influence, became insignificant in their impact on ROE in the post-COVID period. Conversely, the cost-to-income ratio and net interest margin emerged as significant determinants of ROE after the pandemic. During this post-COVID phase, a unit increase in the cost-to-

income ratio was found to markedly decrease ROE by 47.182 units. Conversely, a unit increase in net interest margin was associated with a significant increase in ROE by 1.748 units. These factors collectively contributed to a substantial 99.5% of the changes observed in ROE, highlighting their heightened influence on bank profitability in the aftermath of the pandemic.

Comparing the numbers, before COVID-19, the return on equity of banks in Ghana stood at 61.222 units, while after COVID-19, this measure dropped significantly to 8.272 units. This stark decline underscores the profound impact of the pandemic on bank profitability, showcasing shifts in the significance and influence of factors such as cost-to-income ratio and net interest margin on determining the financial health and performance of banks in Ghana.

The third objective of this current study sought to determine the factors that can cause profit deficiency in the banking sector during the Covid period. The findings of the study revealed that the factor that appears to contribute significantly to profit deficiency is the cost-to-income ratio. This is supported by (Khatib et al., 2022) who assert that nonperforming loan ratios, cost-to-income ratios, and liquidity were found to be the main deficiencies of profitability. This ratio signifies the proportion of a bank's operating expenses in relation to its income. The analysis conducted during the COVID-19 period indicated that a unit increase in the cost-to-income ratio was linked with a substantial decrease in return on equity (ROE) by 47.182 units. This finding suggests that higher operating expenses in proportion to income significantly eroded profitability in the banking sector post-COVID-19 (Ahmed et al., 2022). As the cost-to-income ratio increased, it exerted a notably negative impact on the ROE, indicating a direct correlation between higher operational costs and reduced profitability.

Therefore, during the COVID-19 period, the elevated cost-to-income ratio emerged as a critical factor contributing to profit deficiency within the banking sector, significantly affecting the return on equity and overall profitability of banks.

The fourth objective of this current study sought to help bank authorities detect loopholes and take preventive measures that can improve profit during crises like COVID-19. The analysis conducted revealed that the elevated cost-to-income ratio significantly contributed to profit deficiency in the banking sector post-COVID-19 (EL-Chaarani et al., 2023). Specifically, a unit increase in this ratio was associated with a substantial decrease in return on equity (ROE) by 47.182 units. This indicated a direct correlation between higher operational expenses relative to income and reduced profitability during the crisis.

To improve profit during such challenging times, proactive preventive measures become imperative. Strategic cost optimization stands out as a key approach. By revisiting operational expenses, banks can implement cost-cutting measures and optimize resources to alleviate the negative impact of increased costs on overall profitability (Mouzas & Bauer, 2022). Embracing operational efficiency enhancements through technology adoption, automation, and process optimization can further mitigate the adverse effects of higher expenses on financial performance. Diversification strategies also play a crucial role. Spreading risk across various business segments or investment portfolios can create a buffer against significant financial losses in any specific area, contributing to sustained profitability amidst crises (Giakoumelou et al., 2022). Customer-centric adaptations and understanding evolving consumer needs are vital. Tailoring products or services to address emergent demands ensures continuous revenue streams and fosters customer loyalty, mitigating

potential profit declines during challenging periods. Furthermore, proactive financial resilience planning, establishing robust contingency plans, and stress-testing financial models are essential. These practices help banks prepare for future uncertainties, building adequate reserves and liquidity buffers that can safeguard profitability even in adverse situations. Strategic collaborations and partnerships with other institutions offer opportunities to pool resources, share costs, and tap into diverse expertise (Amey & Eddy, 2023). Such collaborations provide cost-effective solutions and expand market reach, contributing to enhanced profitability during crises.

Finally, maintaining flexible and agile decision-making processes is crucial. Quick adaptation to changing market conditions and a willingness to pivot strategies swiftly can significantly mitigate profit deficiencies in the banking sector during crises like COVID-19. Implementing these comprehensive preventive measures collectively reinforces financial resilience, optimizes costs, and ensures adaptability, ultimately bolstering profitability during challenging times in the banking sector.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter of the research provides a summary of the findings, presents definitive conclusions, and offers insightful recommendations. This chapter also discusses the significance and limitations of the study, outlines specific aims derived from the findings, and suggests directions for future research.

5.1 Summary of the Study Findings

This study delved into the impact of the COVID-19 pandemic on the banking sector's performance and profitability in Ghana, uncovering crucial insights across key financial metrics and their association with return on equity (ROE).

The findings highlighted nuanced shifts in various financial indicators post-COVID-19, showcasing how the pandemic influenced the dynamics of bank performance. Notably, the study revealed a significant decrease in the Liquid Funds/Total Deposit Ratio, indicating a shift in banks' asset allocation away from liquid holdings. This change possibly addressed immediate economic pressures or adapted to evolving market demands post-pandemic.

Moreover, the ROE exhibited a widened spectrum post-COVID-19, with a noticeable decline in average profitability. This divergence signaled varying impacts among banks, with some experiencing substantial decreases in ROE, possibly due to economic uncertainties, increased operational costs, or shifts in customer behavior impacting revenue streams.

The study emphasized the role of specific financial metrics in driving bank profitability both before and after COVID-19. Before the pandemic, factors like liquid funds/total deposits, cost-to-income ratio, and net interest margin collectively accounted for substantial changes in ROE. However, their individual effects were considered insignificant before COVID-19.

In the aftermath of the pandemic, there was a marked shift in influential factors affecting ROE. Liquid funds/total deposits lost significance, while the cost-to-income ratio and net interest margin emerged as key determinants. Particularly, an increase in the cost-to-income ratio substantially decreased ROE, while a rise in net interest margin significantly boosted ROE, contributing to a substantial portion of changes observed post-COVID-19.

Crucially, the study identified the elevated cost-to-income ratio as a significant contributor to profit deficiency during the COVID-19 period, directly impacting the reduced profitability and ROE in the banking sector. To address such challenges and bolster profitability during crises like COVID-19, the study proposed several preventive measures. These included strategic cost optimization, operational efficiency enhancements, risk diversification, customer-centric adaptations, financial resilience planning, strategic collaborations, and maintaining agile decision-making processes.

5.2 Conclusion

The study delineates the nuanced impact of the pandemic on the banking sector's performance, emphasizing the sector's ability to adapt and respond to unprecedented challenges. The insights provided underscore the importance of proactive strategies

and adaptive measures to foster sustained profitability and resilience in the face of evolving economic landscapes and crisis situations.

5.3 Further Reseach

One primary constraint lies in the availability and timeliness of data. The reliance on existing data restricted the depth of analysis, potentially limiting the study's comprehensive understanding of the immediate post-COVID period's impact on financial metrics. Delays or gaps in data collection hindered a real-time assessment of the sector's evolving dynamics.

Another limitation pertains to the study's scope and generalizability. Focusing on a subset of banks during a specific timeframe compromises the broader applicability of findings to the entire banking sector or to different phases of the pandemic.

Temporal effects are also critical to consider. The study captured only a snapshot of the post-COVID period, potentially overlooking the long-term effects of the pandemic on banking performance, profitability, and financial stability.

Additionally, unobserved variables that were not accounted for in the study might have considerable influence on bank profitability during and after the COVID-19 period. These variables could introduce uncertainties and gaps in comprehending the complete picture of the sector's response to the pandemic.

5.4 Recommendations

5.4.1 Policy Decision

Fostering resilience within the banking sector stands as a crucial imperative for policymakers in Ghana, especially in the aftermath of the COVID-19 pandemic. One pivotal recommendation involves creating an environment that incentivizes financial

institutions to bolster their resilience against potential future crises. This could entail the establishment of supportive regulatory frameworks designed to fortify banks' capacities to weather unforeseen economic turbulence. Implementing stress-testing mechanisms becomes integral to assessing the sector's preparedness and identifying vulnerabilities, enabling proactive measures to mitigate risks.

Encouraging collaborative measures between regulatory bodies and financial institutions emerges as another vital strategy. By fostering partnerships and cooperation, regulatory bodies and banks can jointly develop robust contingency plans tailored to ensure financial stability amid turbulent periods. This collaborative approach enables the pooling of expertise, resources, and insights to devise comprehensive strategies that effectively respond to and mitigate the adverse effects of economic upheavals or crises.

Moreover, advocating for flexibility in regulations during crises is paramount. Policymakers should consider frameworks that offer a degree of flexibility to banks without compromising prudential standards. This flexibility allows banks to swiftly adapt their strategies and operations to navigate through uncertain times without jeopardizing the integrity of the financial system. It provides the necessary agility for institutions to respond effectively to evolving challenges while maintaining essential safeguards.

By enacting these recommendations, policymakers can create an environment conducive to the resilience and adaptability of the banking sector. These measures align with the imperative to proactively equip financial institutions with the tools and frameworks necessary to confront and navigate future crises while ensuring the stability and integrity of the financial landscape.

5.4.2 To Practice

Prioritizing strategic cost management stands as a crucial directive for banks in Ghana to navigate the challenges posed by economic uncertainties and crises like the COVID-19 pandemic. By placing a premium on cost optimization strategies, banks can effectively manage expenses without compromising operational efficiency. This approach involves a careful assessment of expenditures, identifying areas for optimization or streamlining processes, and implementing cost-effective measures while ensuring sustained operational effectiveness. Such a strategy not only safeguards financial health but also fosters resilience amid volatile economic conditions.

Embracing technological integration emerges as a fundamental avenue for banks to fortify their operations and services. Leveraging technological advancements enables banks to streamline internal processes, automate routine tasks, and enhance the delivery of customer-centric services. However, the integration of technology should be coupled with robust measures to ensure data security and privacy. This entails implementing stringent protocols, investing in secure infrastructures, and adhering to regulatory standards to safeguard sensitive customer information. By harnessing technology effectively, banks can bolster operational efficiency, elevate customer experiences, and maintain a competitive edge in the dynamic banking landscape.

Exploring diversified income streams and risk management practices constitutes another pivotal strategy for banks to mitigate financial vulnerabilities during unforeseen crises. By diversifying income sources, banks reduce their reliance on specific revenue streams, thereby minimizing the impact of potential disruptions in any single sector or market segment. Simultaneously, robust risk management

practices aid in identifying, assessing, and mitigating potential risks that could adversely affect the bank's financial stability. Implementing comprehensive risk mitigation strategies allows banks to proactively address vulnerabilities and fortify their resilience against unforeseen economic challenges.

Incorporating these strategic directives into their operational frameworks positions banks in Ghana to navigate uncertainties, adapt to changing market dynamics, and foster financial resilience. It's a proactive approach that not only ensures operational effectiveness but also contributes to sustained growth and stability even amidst turbulent economic conditions.

5.4.3 To Academia

Encouraging academic institutions to delve deeper into research focused on crisis resilience within the banking sector emerges as a critical initiative. By fostering a conducive environment for rigorous academic exploration, institutions can unravel nuanced insights into crisis management strategies, thereby contributing to the development of novel methodologies and models. These innovations serve as invaluable tools for anticipating and navigating future crises effectively. Robust research endeavors pave the way for the creation of predictive frameworks, risk assessment models, and strategic guidelines that bolster the sector's preparedness in the face of uncertainty.

Facilitating skill enhancement programs for banking professionals becomes imperative to equip them with the agility required to navigate rapidly changing economic landscapes and emerging challenges. Continuous learning and skill development programs tailored to the evolving needs of the banking industry enable professionals to adapt swiftly to dynamic market conditions. By fostering a culture of

learning and upskilling, banks empower their workforce to respond effectively to challenges, harness opportunities, and drive innovation within the sector.

Furthermore, fostering platforms for academia-industry collaborations holds immense potential in facilitating the exchange of best practices and innovative strategies within the banking sector. These collaborative initiatives serve as conduits for the cross-pollination of ideas, experiences, and expertise between academic institutions and industry practitioners. By bridging the gap between theory and practical application, these collaborations enable the implementation of cutting-edge strategies, fostering innovation and promoting the adoption of forward-thinking approaches within the banking landscape.

Overall, advocating for research, skill enhancement, and collaborative knowledge-sharing initiatives creates an ecosystem conducive to continual learning, innovation, and adaptation within the banking sector. This holistic approach nurtures a pool of skilled professionals, fosters the development of robust crisis management strategies, and cultivates an environment primed for innovative practices that fortify the sector's resilience against future uncertainties.

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APPENDICES

APPENDIX A

BEFORE COVID-19

LIQUID FUNDS/TOTAL DEPOSIT				
BANKS	2016	2017	2018	**AVERAGE**
FBN	1.01	1.1	1.78	2.7
UBA	0.62	0.87	1.33	1.93
ADB	0.83	0.84	0.89	2.56
GCB	0.99	0.85	0.8	3.28
ABSA	0.7	0.69	1.13	0.84
TOTAL				11.3
RETURN ON EQUITY				
BANKS	2016	2017	2018	**AVERAGE**
FBN	3	16.9	23.7	14.53333
UBA	43.7	40	23.7	35.8
ADB	21.7	23.5	21	22.06667
GCB	38.4	16.9	23.7	26.33333
ABSA	29.5	19.1	24.4	24.33333
TOTAL				123.0667
COST TO INCOME RATIO				
BANKS	2016	2017	2018	**AVERAGE**
FBN	0.64	0.72	0.8	0.72
UBA	0.31	0.33	0.28	0.306667
ADB	0.54	0.63	0.52	0.563333
GCB	0.4	0.36	0.38	0.38
ABSA	0.55	0.68	0.61	0.613333
TOTAL				2.583333
NET INTEREST MARGIN				
BANKS	2016	2017	2018	AVERAGE
FBN	10.5	10.5	5.6	8.866667
UBA	12.3	16.8	10.5	13.2
ADB	7.1	10.7	7.4	8.4
GCB	16.6	12.6	9.6	12.93333
ABSA	10.4	11.1	8.7	10.06667
TOTAL				53.46667

APPENDIX B

AFTER COVID-19

LIQUID FUNDS/TOTAL DEPOSIT				
BANKS	**2020**	**2021**	**2022**	**AVERAGE**
FBN	0.96	0.99	1.29	1.08
UBA	0.93	0.92	0.89	0.913333
ADB	1.01	0.98	0.71	0.9
GCB	0.81	0.84	0.71	0.786667
ABSA	0.73	0.76	0.68	0.723333
TOTAL				4.403333
RETURN ON EQUITY				
BANKS	**2020**	**2021**	**2022**	**AVERAGE**
FBN	7.2	12.5	9.5	9.733333
UBA	16.4	12.5	5	11.3
ADB	7.7	8.7	-56.4	-13.3333
GCB	21.4	21.9	-30	4.433333
ABSA	24.2	30.1	-20.1	11.4
TOTAL				23.53333
COST TO INCOME				
BANKS	**2020**	**2021**	**2022**	**AVERAGE**
FBN	0.5	0.47	0.31	0.426667
UBA	0.27	0.3	0.3	0.29
ADB	0.78	0.74	0.9	0.806667
GCB	0.58	0.53	0.53	0.546667
ABSA	0.41	0.3	0.24	0.316667
TOTAL				2.386667
NET INTEREST MARGIN				
BANKS	**2020**	**2021**	**2022**	**AVERAGE**
FBN	9.7	9.4	8.6	9.233333
UBA	7.4	7.2	9.3	7.966667
ADB	8.1	7.9	6.1	7.366667
GCB	10.8	11.2	10.6	10.86667
ABSA	7.9	7.6	8.2	7.9
TOTAL				43.33333