IMPACT OF COVID-19 PANDEMIC ON PERFORMACE OF KENYAN BANKS
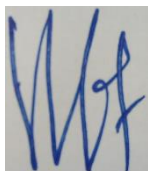
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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, ACCOUNTING, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES,

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DECEMBER, 2021

DECLARATION

I, declare that this research project is my original work and has not been presented for a degree in any other university.
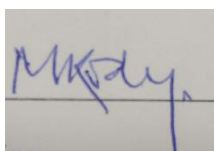
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This research project has been submitted for examination with my approval as the university supervisor

Sign   Date 2nd December 2021

Martin Odipo

ACKNOWLEDGEMENT

I acknowledge the invaluable guidance of my supervisor, Martin Odipo, family and friends for their support during this project process.

DEDICATION

I dedicate this project to my family; My Mother, Anastacia, Wife Jacinta and sons; Pius and Gregory.

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BOPO	Operating Costs to Operating Income
CAR	Capital Adequacy Ratio
CBK	Central Bank of Kenya
COVID	Coronavirus Disease
DOI	Diffusion of Innovation
FDR	Financing to Deposit Ratio
FLM	Financial Leverage Multiplier
IDX	Indonesia Stock Exchange
MANOVA	Multivariate Analysis of Variance
NIM	Net Interest Margin
NOM	Net Operating Margin
NPF	Non-Performing Financing
NPF	Not Performing Financing
NPL	Non-Performing Loans
NSE	Nairobi Securities Exchange
OJK	Otoritas Jasa Keuangan
ROA	Return On Assets
ROE	Return On Equity
ROI	Return On Investment
ROIC	Return On Invested Capital
SPSS	Statistical Package for Social Sciences
SUR	Seemingly-Unrelated Regression
TATO	Total Asset Turnover
UNICEF	United Nations International Children's Emergency Fund

ABSTRACT

Across many nations, the arrival of the pandemic came at a time that they were experiencing some degree of economic stress or political tension, which has resulted in a significant adverse impact on the customers, employees, investors, and governments. The study sought to assess the effect that impact of COVID-19 pandemic on performance of Kenyan banks. Specifically, the study sought to determine the impact of COVID-19 pandemic on loans advance; establish the impact of COVID-19 pandemic on deposits and determine the impact of COVID-19 pandemic on profitability of Kenyan banks. The research employed a descriptive research design. The target population of this study was 42 Kenyan commercial banks. This research involved all the 37 banks in Kenya between 2019 and 2020. The researcher collected quarterly secondary data from individual financial reports from CBK using data collection sheet. The data was collected for a period of two years. The researcher adopted an event study methodology in collecting data. The event window was two years from 2019 to 2020. This was done one year before the event (COVID 19) and one year during COVID 19. Quarterly data was collected for the variables. The data was analyzed using SPSS version 25. The study utilized descriptive and inferential statistics. The researcher checked the performance before and during COVID-19. Comparison was done to establish the impact of Covid-19 on performance of Kenyan banks. The findings showed that the mean loans advances in the pre-Covid period was less than the mean loan advances in the Covid-19 period. This shows that loans advances increased with the onset of Covid-19. The study concludes that Covid-19 has a positive effect on loans advanced by Kenyan commercial banks. This shows that the Kenyan commercial banks have experienced increased level of loans advanced in the Covid-19 period. From the descriptive statistics, the mean deposits in the Covid-19 period was higher than the mean in the pre-Covid period. This shows that customer deposits increased with Covid-19. This leads to the conclusion that Covid-19 has a positive effect on deposit levels in Kenyan commercial banks. This shows that Covid-19 increased the level of deposits across the Kenyan commercial banks. The findings showed that Covid 19 reduced the profitability of Kenyan banks since the profits in the pre-Covid period was higher than that in the Covid-19 period. The study, concluded that Covid-19 has a negative impact on the profitability of Kenyan commercial banks. This shows that the banks experienced reduction in their profitability levels during Covid-19. The study recommends that Kenyan commercial banks come up with relevant strategies that would ensure that they manage covid-19. This study recommends that the commercial banks come up with programs that would support the fight against Covid-19 in order to reduce the negative effects on profitability.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The sudden arrival of the coronavirus pandemic (COVID-19) worldwide has pushed companies into changing their tactics and strategies based on shifting demand and consumption patterns (Yin et al., 2020). Since its discovery in China at the end of 2019- Wuhan area, the virus has continued to spread all over the planet, with several variations and mutations. Lfiti and Hichri (2021) notes that according to the World Health Organization, more than two million people had died with 90 million people being infected by the end of 2020. Governments across the globe have tried to move fast to mitigate the existing shortcomings presented by the virus; however, the massive social, economic and political impacts remain profound. According to Yin et al. (2020), the growing information uncertainty has been reflected in financial and banking transactions and the corresponding relationships with consumers.

This study was based on three theories of, diffusion of innovation, crisis management and real options theory. Diffusion of innovation theory operates under the premise that creating and adopting new ideas and behaviors are not simultaneous. In the aftermath of the pandemic, it has become primal that banks seek new ways or remodel past operations to increase profitability and inadvertently their success in the market. Crisis management theory works under three stages: identification, planning and adjusting to changes in addressing severe widespread unfavorable occurrences. Leaders and managers should be equipped to detect crisis and prepare employees to sail through courageously. Banks ought to identify alarming signs and respond accordingly to prevent and mitigate losses. Real options theory entails investment decisions when the future is unpredictable. A firm should evaluate investment options in light of prevailing external risks. holding investment funds for future consideration become favorable to managers.

The banking sector in Kenya has had to undergo radical changes to maintain competitiveness and service provision during the pandemic. Across developing nations such as Kenya, the focus has been on small and medium-sized companies, which constitute a significant portion of the economy. Through central bank directives and other fiscal management tactics, banks have worked on reducing interests in loans, deferring payments and creating long lines of credit that businesses can benefit from and use to continue operations. Kenyan banks have been

experiencing declining performance in the previous years. The sector experienced a dip in the performance in 2020 compared to the previous years. The bank has also banked on coming out with necessary measures in countering the effects of Covid-19 pandemic. The key question is whether the performance of commercial banks is as a result of Covid-19 or other factors.

1.1.1 COVID-19 Pandemic

According to UNICEF (2020), COVID-19 is a novel disease, which is caused by the corona virus, which belongs to the same family with severe acute respiratory syndrome (SARS). With the initial cases being not very severe as reported in China, different countries had witnessed different levels of severance depending on the resident's immunity and health care facilities available in the states. The disease becoming a real risk threatening the lives of most people worldwide, the virus is contracted through contact with infected respiratory fluids, contact with infected individuals or interacting with infected objects. The virus was declared a public health emergency of international concern affecting the way of living and business operations all over the world, since March 2020. With most of the nations including Kenya being affected by the pandemic, the results in attempt to control the virus have significantly affected the economic operations within the nation.

With most Kenyan firms, which are listed in the stock market having their markets for the products they make being affected by the COVID-19 pandemic, understanding the virus trends, facts and risks is important for any firm, which expects to be successful. Firms need to know what they can do with the presence of the COVID-19 to regain their operations momentum. With social distancing being at the centre of the pandemic, firms needed to improvise new ways of offering their products while still adhering to the social distance with online business transactions being more preferred.

The COVID-19 pandemic effects have become a major focus of the world with several researches recently being initiated with two major approaches for measuring COVID-19. Some of the studies like Fernandez et al (2021) and Al-Awadhi (2020) used the number of cases in the specific nations to measure the impact of the COVID-19 on the stock performance, others used the approach of the number of days when active cases have been in the nation to measure the variable like in the case of (Adenomon & Maijamaa, 2020). As the impact on most of the African nations is as a result of measures taken to control the virus, the current study adopted the measure of days since the announcement of the first case to measure the variable of COVID-19.

1.1.2 Performance

Organizational performance is defined as the measure of how an organization achieves its maximum profit/output from the use of its scarce resources (Jenatabadi, 2015). It solely aims at achieving the organizations mission through sound management, strong governance and rededication to achieving results (Popova & Sharpanskykh, 2010).

In finance, organizational performance is measured in terms of profitability ratios. These include return on assets, return on investment, net profit margin and return on equity (Nataraja, Chilale & Ganesh, 2018). Kim (2016) used return on investment (ROI), return on equity (ROE), return on invested capital (ROIC) and return on assets (ROA) as the measures of performance. However, Batchimeg (2017) measured financial performance through on ROA, ROE and earnings before interest.

1.1.3 COVID-19 Pandemic and Performance

According to Leoni (2013), Banks are in their nature vulnerable to economic downturns, especially when there is an increase in non-performing loans. The spread of pandemics, especially in developing nations, tends to be associated with deposit turnover. As the financial resources and revenue sources of clients dwindle, they tap into their savings and accounts, creating large-scale withdrawals. In this case, as Lagoarde-Segot and Leoni (2013) note, smaller and unstable banks are likely to collapse or report massive losses.

Empirically, Covid-19 Pandemic and performance have shown different findings. Ichsan et al (2021) found that Covid-19 positively influenced performance of commercial banks. Sutrisno, Panuntun and Adristi (2020) found that performance was positively affected by the Covid-19 pandemic. However, Nurdiansari et al (2021) found that Covid-19 reduced financial performance of banks. On the other hand, Candera et al (2021) found no difference in the financial performance before and during Covid-19. This is similar to those of Wardhani et al (2021) who found that the sector's financial performance banking experienced no difference before and during Covid-19. This shows that there is need to investigate the impact of Covid-19 on performance of banking firms.

1.1.4 Commercial Banks in Kenya

The commercial banking segment in Kenya is comprised of 42 banks which are divided further into three broad categories using a predetermined composition comprised of their net assets, Client's inflow, capital and reserves, share of deposits and loan portfolio. Based on the defined criteria, those banks whose composite weighted index is greater than five percent are classified as large group banks. Those banks with a composite index of between one to five percent are classified as medium group banks while those with less than one percent weighted composite index are classified as small group banks. Currently, in Kenya there are 8 tier 1 commercial banks, 14 tier two commercial banks and 20 tier three commercial banks (CBK, 2020).

Over the past few years, the commercial banking sector has witnessed unprecedented shift in the market share segment. According to CBK (2020), in the financial year ending 2017, those financial institutions under tier one category grew their market from 65.3% to 66% during the 2016/2017 financial period. The increase in market share was highly attributed to the increased customer's deposits which is expected to continue with the same trend till 2020. Similar trend was observed in the midium banks which recorded an increase from 26% in December 2016 to 26.10% in December 2020. However, the market shares of the small banks saw a fall in their dominance with a whopping 1.5% which was translated as decrease from its previous financial year from 9% to 7.5%. The reduction in market dominance is highly correlated to the merger of two tier three financial institutions by both tier one and two in the same financial year.

According to CBK (2020) commercial banking sector capital and reserves grew by 7.8%. This increase was attributed to increased deposits in the large and medium banks unlike the small banks which registered a decrease. Over the same period, the commercial banking sector profit decreased by 9.2%. The decline in profit margin has been attributed to increased expenses in the sector as compared to the decrease in income of the customers. It was similarly found that the income in the banking sector declined by 3.12% whereas the expenses increased by 0.5% over the same period.

1.2 Research Problem

Across many nations, the arrival of the pandemic came at a time that they were experiencing some degree of economic stress or political tension, which has resulted in a significant adverse impact on the customers, employees, investors, and governments. The decline in profits has been one of the major predictors of performance which the industry has focused upon and

continues to improve the strategic outcomes (Acharya & Steffen, 2020). Many banks reported a significant decline in profits due to changes in consumer behavior and regulatory frameworks undertaken to lessen the impact of the pandemic.

Kenyan banks have been experiencing decline in their performance metrics. For example, in 2020, the banking sector experienced 175% increase in losses on loans and advance from Ksh 39 billion in 2019 to Ksh 109 billion in 2020 which was the highest in 20 years. For the sector, Earnings per Share recorded a weighted decline of 32.4% in 2020, compared to a weighted growth of 8.7% recorded in 2019. Improved performance in banking is very critical for the economy and the population. The reduced economic contribution of the sector to the economy would have detrimental effects on the economy and livelihoods of Kenya. This calls for improvement in the policies for better performance among banks in Kenya.

On the research field, various researchers have investigated firm performance in Covid-19 pandemic. Internationally, Barua and Barua (2021) studied COVID-19 implications for banks based on evidence from an emerging economy while Obeidat, Tarawneh, Khataibeh and Ghassan (2021) studied the performance of banks and whether covid-19 made any difference in developing countries. They noted that Covid-19 had an effect on the performance of banks. In addition, Sutrisno, Panuntun and Adristi (2020) studied the effect of Covid-19 pandemic on the performance of Islamic bank in Indonesia and found reduced performance with Covid-19; while Ichsan et al (2021) researched determinants of Sharia Bank's Financial Performance during the Covid-19 Pandemic finding a mixed impact on performance metrics of banks. Other researchers included Nurdiansari et al (2021) who analyzed financial performance before and during the Covid-19 pandemic era at Bank Rakyat Indonesia; Candera, Muslimin and Permatasari (2021) looked at banking financial performance before and during the Covid 19 pandemic in Indonesia; and Wardhani et al (2021) who looked at banking financial performance during Covid-19.

Locally, Kaberia and Muathe (2021) studied the effect of Covid-19 pandemic on performance of women owned micro, small and medium enterprises in Kenya; Kayugi (2020) studied Covid-19 and its effect on the performance of Nairobi Securities Exchange in Kenya; while Orenge (2020) studied the effects of Covid-19 pandemic on stock performance for firms listed at the Nairobi Securities Exchange. These studies found mixed results on the impact of Covid-19 on performance. Other local studies reviewed Ndungu and Bosire (2020) who looked at the determinants of financial performance of commercial banks listed at NSE; Ratemo and Ndede

(2021) researched on liquidity risk and financial performance of Commercial Banks in Kenya. Despite the studies focusing on Covid-19 and performance, the local studies have focused on other sectors other than banks. For the studies done in banks, their focus has been on other variables other than Covid-19. This research sought to answer the question: what is the impact of Covid-19 on performance of Kenyan Banks?

1.3 Research Objective

1.3.1 General Objective

To assess the impact of COVID-19 pandemic on performance of Kenyan banks.

1.3.2 Specific Objectives

Specifically, the study sought to:

 i.   determine the impact of COVID-19 pandemic on loans advance among Kenyan banks

 ii. establish the impact of COVID-19 pandemic on deposits in Kenyan banks

 iii. to determine the impact of COVID-19 pandemic on profitability of Kenyan banks

1.4 Value of the Study

In its contribution to theory, this research will add to the available literature on COVID-19 pandemic on performance of commercial banks. This would be of value to scholars and other researchers. The scholars would find the research as a source of literature for their scholarly works. Researchers would make use of this research as a basis for further research.

For policy, this research may be used as a basis for policy development. The policy makers like CBK would find this research relevant. The understanding on impact of COVID-19 pandemic on performance of Kenyan banks, the policy makers would be able to come up with favourable policies that would improve performance of commercial banks in the era of pandemic.

For practice, this study will be valuable to the management of Kenyan banks. This research will provide information on the performance of banks in the era of COVID-19. The research will also provide recommendations which can be adopted by the management of Kenyan banks to improve their bank's performance. The understanding would enable the management to come up with relevant strategies which would enhance performance in the Covid-19 era.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter contained the literature on which the study is based. It gave the theories and determinants of performance of banks. It reviewed the empirical research done in the area of pandemic and performance. The chapter also conceptualized the variables and gave a summary at the end.

2.2 Theoretical Review

2.2 1 Diffusion of Innovation Theory

Diffusion of innovation (DOI) theory was developed by Rogers in 1962 (Miller, 2015). This model operates under the premise that creating and adopting new ideas and behaviors are not simultaneous. Instead, they are processes where some people are more capable of adapting to change than others, and hence, they do not occur simultaneously. The diffusion process is communicated among members of a social system repeatedly and over specific channels. As such, to achieve diffusion, there has to be innovation, communication channels, times, and social systems (Dearing & Cox, 2018). Several contextual factors affect diffusion. For instance, when there are complementary or competing innovations, adopters of innovation have choices; however, if an event of disruption necessitates immediate change, there may be more failures either in the innovated product or service or the implementation method used by the adopters (Marzec & Osiewalski, 2008).

In the aftermath of the pandemic, it has become primal that banks seek new ways or remodel past operations to increase profitability and inadvertently their success in the market. One of the main challenges has been resistance to the new changes and how to accelerate market acceptance (Jamshidi & Kazemi, 2019). Bankers and managers must ensure that they have developed a relative advantage when they adopt technology and that it is compatible with the current values and experiences that the bank has. Moreover, there is a deep and significant connection between the adopted technology and user intentions. Notably, as Jamshidi and Kazemi (2019) explain, the more complex an innovation is to use, the greater the challenge in adoption. This concept underpins the necessity of simplicity.

2.2.2 Theory of Crisis Management

Gonzalez-Herrero and Pratt (1998) proposed a crisis management model which identified three different stages of crisis management: diagnosis of crisis, planning and adjusting to changes. The first stage involves detecting the early indicators of crisis. It is for leaders and managers to sense the warning signals of a crisis and prepare the employees to face the same with courage and determination. Superiors must review the performance of their subordinates from time to time to know what they are up to. The role of a manager is not just to sit in closed cabins and shout on his subordinates. He must know what is happening around him. Monitoring the performance of the employee regularly helps the managers to foresee crisis and warn the employees against the negative consequences. Banks should not ignore the alarming signals of crisis but take necessary actions to prevent it (Nojavan, Salehi & Omidvar, 2018).

Once a crisis is being detected, crisis management team must immediately jump into action. Ask the employees not to panic. Devise relevant strategies to avoid an emergency situation. Sit and discuss with the related members to come out with a solution which would work best at the times of crisis. It is essential to take quick decisions. Management needs to be alert and most importantly patient. They should make sure the facts and figures are correct. In the third stage, employees must adjust well to new situations and changes for effective functioning of organization in near future.

It is important to analyze the causes which led to a crisis at the workplace. Mistakes should not be repeated and new plans and processes must be incorporated in the system. The theory of crisis management was developed with the initial idea that organizations confronted with unstable and unforeseeable environments should establish teams consisting of all those business units that can adjust to severe challenges (Marsden, 2010). This theory fits the current study in that the management of commercial banks need to manage the crisis created by Covid-19. This is because it is an unstable and unforeseeable challenge that has created problems to the banks. This theory would enable the researcher to see how the management handles the effects of Covid-19 on the performance of their individual banks.

2.2.3 Real Options Theory

Myers (1987) proposed the real options theory as best approach to evaluate projects containing significant operating and strategic options, suggesting that the theory can integrate strategy and

finance. The theory states that a firm always has a 'real option'. This is a choice available to a company regarding an investment opportunity.

Real ptions theory is a modern theory on how to make decisions regarding investments when the future is uncertain. Real options theory draws parallels between valuation of financial options available and real economy (Song et al., 2015). However, such options are limited in times of a pandemic like Covid-19. Real options theory assumes that firms have some choice regarding when to invest – their proposed project is similar to an option; there is an opportunity, which is not an obligation, to approve it and go ahead.

Real options theory is based on logical financial options in capital investments in the sense that they create a certain level of valuable flexibility. If a firm has financial options, it then has the freedom to make the best choices and decisions, such as where and when to make a specific capital investment. According to the real options theory, managers tend to defer investment when uncertainties rise, which may lead to miss profitable projects (Rębiasz, 2019). COVID-19 brings higher external risks, which lead managers to increase their cash holdings in case of emergencies. More cash retention takes up the investment funds and reduces enterprises' momentum of sustainable development.

2.3 Determinants of Performance of Banks

2.3.1 Liquidity and Performance

Liquidity is the degree by which individuals or organizations available cash can fund unexpected and interim commitments, otherwise hold funds easily convertible into cash for settling day to day obligation on short term basis. Liquidity represents means through which liquid assets shields liabilities due within a single accounting year of an organization. Liquidity is also considered to be the gravity and velocity of converting on-cash assets to cash. Zhang (2010) defines liquidity as having available and sufficient funds to settle clients' withdrawals and further debts as they mature.

Liquidity problems may cast adverse effect on a given financial institutions ability to achieve profits and also puts their capital base at risk. Particularly, inability to fund short term obligation presents challenges which may provide fundamental basis for banks bankruptcy. Understandably, financial institutions experiencing liquidity problems might encounter difficulties in satisfying depositors' withdrawals. Liquidity is measured using different parameters by researchers. Husna and Satria (2019) measured in terms of current ratio which

was the ratio of current assets to current liabilities. Durrah et al (2016) measured liquidity in terms of the quick ratio which related current assets less inventory and current liabilities. Kozarevic, Delic and Omerovic (2019) measured liquidity in terms of day sales outstanding ratio which related account receivables to sales revenue. This study will measure liquidity in terms of current ratio.

A financial institution that is able to make sufficient provision of cash or its equivalent at all times means such institution is highly liquid. Liquidity situation is solidified when assets convertibility rate is achieved deprived of significant fall in value. Prompt settlement of financial obligations provide advantage for banks to have readily access to funding when the need arises. Cash, reserves and investments in government treasury bills are among the highly liquid assets of banks. Normal banking operations comes to a halt due to failure to honour depositors' withdrawals triggered by non - availability of immediate cash (Abor et al, 2019). Chen et al (2018); and Charmler et al (2018) found that liquidity related positively with performance. However, Waswa, Mukras and Oima (2018) established that a negative relationship existed between liquidity and performance.

2.3.2 Leverage and Performance

Dimitrov and Jain (2006) defines financial leverage as the utilization of fixed cost financing; it is mostly a choice item it is not a necessity for any firm to have a long-term debt. Vithessonthi and Tongurai (2015) argue that a decision to use financial leverage is made when firm uses funds derived from a fixed cost in order to earn more than the fixed financing costs incurred. Firms might opt to finance their activities and capital expenditures with the help of internal sources and issuance of common stocks. Firms employ financial leverage with the aim goal of increasing return to common shareholders.

Leverage is measured through leverage ratios (Halling, Yu & Zechner, 2016).). Ojo (2012) found that leverage had a positive effect on performance. However, Ibhagui and Olokoyo (2018) suggested that leverage is negatively associated with firm performance. This concurs with the findings of Iqbal and Usman (2018) who found that financial leverage depicted a negative relationship with performance. Widyastuti (2019) found no relationship between leverage and performance.

2.3.3 Assets Tangibility and Performance

Asset tangibility relates to the level of assets used in a company's operations (Almeida & Campello, 2007). The tangibility of assets is a metric that compares the value of fixed assets to the value of the company's total assets. Adarov and Stehrer (2019) measured assets tangibility in terms of fixed asset ratio. On the other hand, Dada and Ghazali (2016) measured assets tangibility in terms of asset tangibility ratio. Asset tangibility ratio will be used to measure assets tangibility in this research. Adarov and Stehrer (2019) found a positive relationship while Miloş and Miloş (2015) found that tangibility of assets relates negatively with performance.

2.4 Empirical Studies

2.4.1 Global Studies

Barua and Barua (2021) studied COVID-19 implications for banks based on evidence from an emerging economy. This paper utilized Bangladesh as a case study of an emerging economy and examines possible impacts of the pandemic on the country's banking sector. Bangladesh's banking sector already had a high level of non-performing loans (NPLs) and the pandemic was likely to worsen the situation. Using a state-designed stress testing model, the paper estimated the impacts of the COVID-19 pandemic on three particular dimensions—firm value, capital adequacy, and interest income—under different NPL shock scenarios. Findings suggested that all banks were likely to see a fall in risk-weighted asset values, capital adequacy ratios, and interest income at the individual bank and sectoral levels.

Obeidat, Tarawneh, Khataibeh and Ghassan (2021) studied the performance of banks and whether covid-19 made any difference in developing countries. The performance of all listed Jordanian banks (13) during the period 2010-2020 was examined in terms of return on assets (ROA) and net interest margin (NIM). Using the seemingly-unrelated regression (SUR), the dependent variables (ROA and NIM) are regressed on independent variables including equity capital, bank expenses, size, income diversification, loan loss provisions, lending to the government, and economic growth. The 2020 financial statements show that the profits of Jordanian banks (return on assets) have decreased from 1.43 percent in 2019 to 0.74 percent in 2020, or by about 48 percent. As far as the econometric results are concerned, it is interesting to note that while loan loss provisions impact bank profitability in a negative and significant manner, this "cost" is passed- on, at least partly, to bank customers in the form of wider costs of financial intermediation (NIM). While the known determinants of bank performance are

applicable to the Jordanian banks, it is encouraging to note that these banks have managed to finish their 2020 financial year in a good shape. Indeed, this is the result of their strong financial positions that enabled them to increase their loan loss provision by large proportions.

Sutrisno, Panuntun and Adristi (2020) researched on the effect of Covid-19 Pandemic on the performance of Islamic bank in Indonesia. The purpose of the study was to examine impact of the Covid-19 pandemic on the performance of Islamic banks in Indonesia. The performance of Islamic bank consists of capital adequacy ratio (CAR), non-performing financing (NPF), profitability as measured by return on assets (ROA), return on equity (ROE), and net operating margin (NOM)., operating expenses to operating income ratio (OEIR) and financing to deposit ratio (FDR). The population in the study was 13 Islamic commercial banks operating in Indonesia. From this population 12 banks were taken as samples and one bank was not taken because the data were incomplete. The data was taken quarterly; four quarters before the pandemic and three quarters during the pandemic. To test the hypothesis, the independent sample t-test was used. The results showed that the profitability as measured by ROE and NOM had significant effect, as well as the financing to deposit ratio being significantly different. Meanwhile, CAR, NPF, ROA, and OEIR were not affected by the Covid-19 pandemic.

Ichsan, Suparmin, Yusuf, Ismal and Sitompul (2021) did research on the determinant of Sharia Bank's financial performance during the Covid-19 Pandemic. This research analyzed the financial performance of Islamic Banks during the Covid-19 pandemic, using records of annual financial statements from 2011 to 2020, through multiple linear regression testing and linearity testing of the model; Ramsey test was applied. As a result of this study, the results of the t test found that the capital adequacy ratio (CAR), operating costs to operating income (BOPO), financing to deposit ratio (FDR) had a positive and significant effect on financial performance (ROA) while not performing financing (NPF) had a negative and insignificant effect on financial performance (ROA). Furthermore, simultaneously capital adequacy ratio (CAR), operating costs to operating income (BOPO), financing to deposit ratio (FDR) and Not Performing Financing (NPF) significantly influenced the financial performance (ROA) of Sharia banks in Indonesia.

Nurdiansari, Susilawati, Sriwahyuni and Paulina (2021) analyzed financial performance before and during the Covid-19 Pandemic Era at PT. The financial statements used for analysis are the second quarter financial reports that have been published on the Indonesian stock exchange. This study used financial cash ratio, loan to deposit ratio, primary ratio, capital adequacy ratio,

return on equity and return on assets. The results of the study showed that the level of cash ratio, loan to deposit ratio, primary ratio, capital adequacy ratio, return on asset, and return on equity had decreased in 2020.

Candera, Muslimin and Permatasari (2021) studied banking financial performance before and during the Covid 19 pandemic in Indonesia. The variables used to measure banking financial performance were: risk profile, earnings, and capital. The data used was financial reports published by Otoritas Jasa Keuangan (OJK). The analysis used is the Multivariate Analysis of Variance (MANOVA). The results of the analysis found that there was no difference in the financial performance of Islamic banking on risk profile, earnings and capital indicators before and during the COVID-19 pandemic; there was no difference in the conventional financial performance of earning indicators before and during the Covid 19 pandemic and there was no difference in the financial performance of conventional banking earning indicators during covid-19. This analysis shows that the performance of Islamic finance is still able to deal with the impact of the COVID 19 pandemic in Indonesia.

Wardhani, Rosalina, Elvany and Awaluddin (2021) researched on banking financial performance during Covid-19. Measurement of financial performance in this study was the DuPont system method. The reason for this consideration was to analyze contrasts in money related execution; sometime recently and amid Covid-19. Analyzing the impact of the pointers contained on dupont framework strategies; to be specific Net Profit Margin (NPM), Total Asset Turnover (TATO), Financial Leverage Multiplier (FLM), Return on assets (ROA) and Return On Equity (ROE). This study's population was banking sector companies listed in Indonesia Stock Exchange (IDX), for the period 2019-2020. This study's sample is based on a purposive sampling technique to obtain as many as 23 banking companies. Information in this think about was analyzed by Wilcoxon signed-rank test approach. The test result shows that the sector's financial performance banking experienced no difference before and during Covid-19.

2.4.2 Local Studies

Kaberia and Muathe (2021) researched on the effect of Covid-19 pandemic on performance of women owned micro, small and medium enterprises in Kenya. This study used available secondary multi-disciplinary resources; research papers, case studies, stakeholder reports and other online sources. Findings detailed that woman owned businesses are disproportionately affected by the pandemic. The study recommended targeted policy, research and resource

interventions to help small ventures prepare for recurrence of such contagions through resurgence of the same or new pandemics in future.

Kayugi (2020) studied the Covid-19 and its effect on the performance of Nairobi Securities Exchange in Kenya. This paper was organized in such a way that brief overview of different economic crises that have affected the world were presented. The objective of the paper being to find out the effect of first case of Covid-19 in Kenya announcement on the performance of Nairobi securities exchange. The design of the paper was descriptive based. The Nairobi Securities Exchange (20) share index data was obtained 72 days before and 72 days after the announcement of the first case of Covid-19 in Kenya. The mean indices were computed and tested for statistical significance. The independent variable is the announcement of Covid-19 in Kenya while the Nairobi Securities Exchange indices before and after the announcement of Covid-19 in Kenya are the dependent variables. The results were tested at 0.05 level of significance. The study found a significant effect of Covid-19 on performance.

Orenge (2020) looked at the effects of covid-19 pandemic on stock performance for firms listed at the Nairobi Securities Exchange. In determining the effect, the research considered other variables. The control variables were: exchange rates, stock trade volumes and the days to 2019 dividends book closure. The study adopted a quantitative approach where quantitative data was collected and analyzed through regression. The study used the natural logarithm of share prices to represent stock performance and the number of company shares traded in a day to represent share trade volume. Number of days to 2019 dividends was used to measure the effect of dividends declaration on share prices while real exchange rates were used to measure exchange rates. The effect of COVID-19 was measured by number of days since the first case was announced. The data was collected for 30 days since the first case was announced and eliminated weekends as the market closes for the weekend. The study results indicated that except for the exchange rates, the other variables under study affected share performance negatively. For a unit increase in COVID 19 effect, stock performance reduced by 0.203 while for a unit increase in trade volume, it reduced by 0.136 units. The study also established that for a unit increase in days to 2019 (last trading period) dividends, there was a decrease in stock performance by 0.998, which was the highest absolute effect.

Ndungu and Bosire (2020) looked at the determinants of financial performance of commercial banks listed at NSE in Kenya. A descriptive study design attributed to a census approach aiming at the eleven listed commercial banks in Kenya was applied. The research relied on

secondary data obtained from the audited financial statements of the said banks to create the correlation between the research variables. The information on the financial performance effect of the listed banks was collected using a data collection matrix. The data was analyzed using SPSS and the outcome presented in tables using statistical aspects, which included means and standard deviations. The study established that government securities had a positive and strong correlation with financial performance. Similarly, real estate, loans and, stocks had a positive and weak correlation with financial performance. The findings of the study show loans was most significant, followed by funds allocated to government securities then by funds allocated to stocks and least significant was real estate financing at 95% confidence level. The findings show that there was a strong positive correlation between funds allocation and financial performance of commercial banks.

Ratemo and Ndede (2021) did a study on liquidity risk and financial performance of commercial banks in Kenya. Causal research design was adopted in the study targeting 42 commercial banks operating in Kenya. Secondary data were extracted from financial books of individual commercial banks and CBK reports. Data analysis was undertaken by use of Stata 14.0 where descriptive results and panel models were generated. Results revealed that bank size is positively and significantly related to financial performance of commercial banks. It was also found that asset quality is negatively and significantly related to commercial banks' financial performance.

Sporta, Patrick, Ngumi and Nanjala (2017) attempted to determine the effect of financial leverage as a financial distress factor on financial performance of commercial banks in Kenya. Secondary data was used and census of commercial banks from 2005 to 2015. Extracts from financial statements of 38 commercial banks out of the possible 44 commercial banks in operation as at 31st December, 2015 in accordance to CBK as a regulatory body were utilized. Data was collected from 2005 to 2015. Descriptive and analytical designs were adopted. The results showed perfect positive correlation between debt equity ratio with return on equity and return on assets as well return on equity. The study was limited to the commercial banks in Kenya, the findings were only interpreted to commercial banks in Kenya and they will not be generalized for all financial institutions.

2.5 Conceptual Framework

Independent Variable

```
┌─────────────────────────┐
│                         │
│   COVID-19 Pandemic     │ ───────────┐      Dependent Variable
│                         │            │   ┌──────────────────────────┐
└─────────────────────────┘            └──▶│ Performance              │
Control Variables                          │    • Return on Assets    │
┌─────────────────────────┐                │                          │
│   • Liquidity           │ ──────────────▶└──────────────────────────┘
│   • Leverage            │
│   • Asset's tangibility │
└─────────────────────────┘
```
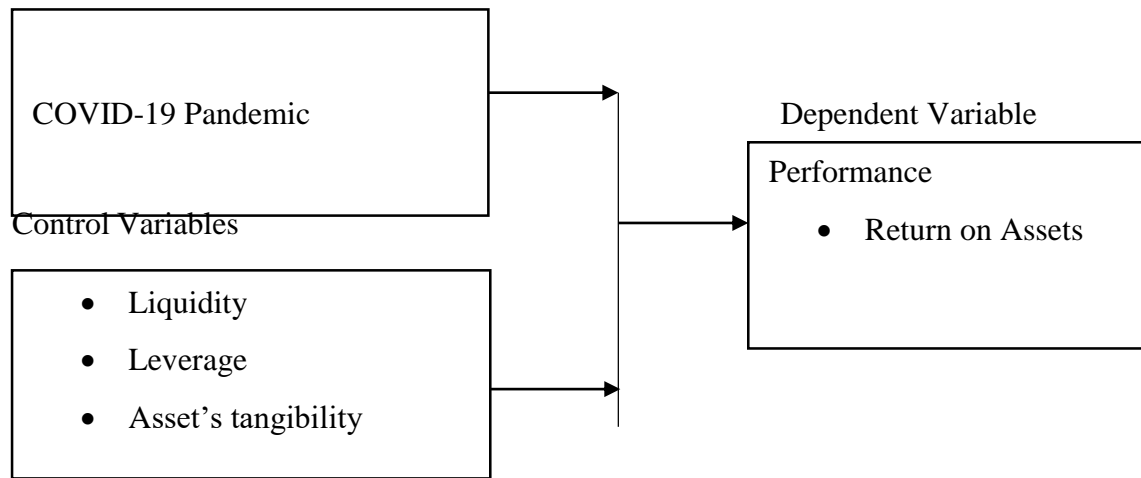
Figure 2.1: Conceptual Framework

2.6 Summary of Literature Review and Research Gap

This study reviews literature relating to COVID-19 pandemic and performance of Kenyan banks. The empirical studies have mainly focused on developed economies where the impact may be different. The review has also shown that various gaps exist in the area of COVID-19 pandemic and performance. The researchers have focused on different concepts and contexts with mixed results indicated by the reviews. This research sought to fill this research gap by undertaking a study on the impact of COVID-19 pandemic on performance of Kenyan banks.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter explored the research method and techniques deployed by the researcher in obtaining data. It included: the research design, population, data collection and data analysis.

3.2 Research Design

Myers et al. (2013) defines research design as an organized process through which the problem at hand or under study is solved by careful planning, organization, collection and analysing of the available data into synthesized useful information. The research employed descriptive research design. Durrheim (2006) argued that a descriptive research design is useful in the descriptive process for the phenomenon under observation. Kothari et. al., (2004) further adds that elaborative research design provides a description of situations in natural phenomenon. Descriptive research design was considered suitable in this study since it helped in assessing the COVID-19 and performance of commercial banks, and how it impacted the performance of banks.

3.3 Population

The target population of this study was Kenyan commercial banks. As per CBK (2020) there were 42 banks in Kenya as at the end of 2020. This research involved all the banks in Kenya between 2019 and 2020. There were 42 banks that existed between 2019 and 2020; they were involved in the research.

3.4 Data Collection

The researcher collected secondary data. The data was collected form individual financial reports from the banking sector. The individual annual reports were sourced from CBK. The data was collected using data collection sheet. The data collection sheet contained questions relating to financial performance of commercial banks. This included total assets and profit after tax. It also contained data relating to determinants of financial performance like leverage (current assets and current liabilities), liquidity (total debt and total equity) and tangibility of assets (tangible assets). The data collected was filled in the data collection sheet based on specific firms and indicators (Appendix II). The data was collected for a period of two years (April 2019 to March 2021). This gave the picture on how performance of banks has changed with Covid-19. Panel data was used in the analysis.

The researcher adopted an event study methodology in collecting data. The event window was two years from 2019 to 2020. This was done one year before the event (COVID 19) and one year during COVID 19. This created data on the performance of commercial banks that enabled the researcher to establish the impact of Covid 19 on performance of commercial banks. Quarterly data was collected for the variables. This gave enough data points.

3.5 Data Analysis

The data collected was cleaned, coded and entered into SPSS version 25. 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 performance of Kenyan banks was based on the occurrence of an event (COVID-19). The researcher checked the performance ratios before and during COVID-19.

3.5.1 Analytical model

The regression was;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where;

Y_{it}; is the performance of commercial banks in Kenya as measured by ROA of firm i at time t

β_0; is the constant term

β_1, β_2, and β_3; are the beta coefficients of the variables

X_{1it} is liquidity as measured by current ratio of firm i at time t X_{2it} is leverage as measured by leverage ratio of firm i at time t

X_{3it} is assets tangibility as measured by asset tangibility ratio of firm i at time t t is year

ε is the error term

3.5.2 Diagnostic tests

To check the assumptions of the regression model, diagnostic tests was done. They included normality; checked whether the data was normally distributed. Shapiro Wilk Test was used. Multicollinearity and serial correlation was done to check whether the predictor variables had linear relationship. Variance inflation factor was used. Heteroscedasticity test was done to

check whether the error term has remained constant over time. The Breusch Pagan test was used.

3.5.3 Significance Tests

Significance of the model was tested using F-statistics to check on the significance of the model. The research was undertaken with a 5% level of significance.

3.5.4 Measurement of Variables

Table 4.1: Measurement of Variables

Variable Type	Variable	Indicators	Measurement
Dependent	Financial performance	Return on assets	Profit after Tax/Total Assets
Control	Liquidity	Current ratio	Current assets/Current liabilities
	Leverage	Leverage ratio	Total Debt/Total Equity
	Asset tangibility	Asset tangibility ratio	Tangible assets/Total Assets

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 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.

4.2 Descriptive Statistics

This section describes the data in form of mean, minimum, maximum and standard deviation. The statistics are compared the financial performance of Kenyan banks before and during COVID-19 to check whether COVID-19 had an impact on the financial performance of Kenyan banks. The statistics were based on 1 year before and 1 year during COVID-19. The data analysis was based on quarters.

4.2.1 Pre-Covid Descriptive Analysis

The study sought to establish the nature of the variables before COVID-19. The mean and standard deviation were used in the analysis.

Table 4.2: Pre-Covid Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Return on Assets	148	-13.32	7.40	.7705	4.20319
Liquidity	148	2.35	77.36	21.8297	21.10333
Leverage	148	4.56	177.27	74.0906	37.77667
Asset tangibility	148	-8.25	15.77	5.5184	3.34029
Loans advance	148	384.10	187303.20	16457.7703	28756.04370
Deposits	148	455.30	214732.00	22072.6419	35004.33501
Profitability	148	-816.30	7497.50	645.4562	1367.68150

The researcher sought to establish the status of the variable data used in the period before Covid-19. From the findings, the commercial banks showed a mean return on assets as a measure of financial performance of 0.7705 with a standard deviation of 4.2032. This indicates that in the period before Covid-19, the Kenyan banks showed a low return on assets. The banks showed a pre-Covid ROA ranging from -13.32 and 7.4. The findings showed that liquidity of the Kenyan banks before Covid-19 averaged at 21.8297 with a standard deviation of 21.

10333.The liquidity among the banks ranged from 2.35 and 77.36 in the period before the Covid-19. Leverage, on the other hand showed a mean value of 74.0906 with a standard deviation of 37.77667. The leverage ranged from 4.56 and 177.27 within the period.

The mean asset tangibility of the Kenyan banks was 5.5184 with a standard deviation of 3.34029. Asset tangibility showed a range from -8.25 and 15.77. On financial performance in the period before Covid-19, loans advances averaged at 16457.7703 with a standard deviation of 28756.04370. The loan advances ranged from 384.10 and 187303.20 in the period. The customer deposits in the period showed a mean of 22072.6419 and standard deviation of 35004.33501. The customer deposits ranged between 455.30 and 214732.00 within the period. The banks, in the period before Covid-19, showed an average profitability of 645.4562 with a standard deviation of 1367.68150. The banks showed a minimum profitability of -816.30 with a maximum of 7497.50.

4.2.2 Post-Covid Descriptive Analysis

Table 4.3: Post-Covid Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Return on Assets	148	-19.81	5.15	.3662	3.88879
Liquidity	148	1.89	73.10	24.0695	22.12411
Leverage	148	.01	35.05	2.4679	6.02930
Asset tangibility	148	6.36	900.28	104.7188	151.31382
Loans advance	148	317.80	217934.80	18496.6149	32999.27947
Customer Deposits	148	479.30	236426.80	25152.7770	40157.05217
Profitability	148	-832.69	5601.63	559.3124	1123.34456

The researcher sought to establish the status of the variable data used during Covid-19. From the findings, the commercial banks showed a mean return on assets as a measure of financial performance of 0.3662 with a standard deviation of 3.8879. This indicates that during Covid-19, the Kenyan banks showed a low return on assets. The banks showed a Covid-19 ROA ranging from -19.81 and 5.15. The findings showed that liquidity of the Kenyan banks during Covid-19 averaged at 24.0695 with a standard deviation of 22.12411. The liquidity among the banks ranged from 1.89 and 73.10 in the COVID-19 period. Leverage, on the other hand, showed a mean value of 2.4679 with a standard deviation of 6.02930. The leverage ranged from 0.01 and 35.05 within the period.

The mean asset tangibility of the Kenyan banks was 104.7188 with a standard deviation of 151.31382. Asset tangibility showed a range from 6.36 and 900.28. On financial performance during Covid-19, loans advances averaged at 18496.6149 with a mean of 32999.27947. The loan advances ranged from 317.80 and 217934.80 in the period. The customer deposits in the Covid-19 period showed a mean of 25152.7770 with a standard deviation of 40157.05217. The customer deposits ranged between 479.30 and 236426.80 within the period. The banks, in the Covid-19 period, showed an average profitability of 559.3124 with a standard deviation of 1123.34456. The banks showed a minimum profitability of -832.69 with a maximum of 5601.63.

The descriptive analysis showed that Covid-19 had a positive effect on loans advanced by commercial banks. This is because the mean loans advances increased from 16457.7703 in the pre-Covid period to 18496.6149 in the Covid-19 period. The findings, the customer deposits increased with Covid-19 since the mean deposits increased from 22072.6419 in the pre-Covid period to 25152.777 in the Covid-19 period. However, Covid 19 had a negative impact on profitability since the profits increased from 1367.6815 in the pre-Covid period to 559.3124 in the Covid-19.

4.3 Diagnostic tests

Table 4.4: Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Return on Assets	.251	296	.000	.769	296	.000
Liquidity	.257	296	.000	.807	296	.000
Leverage	.238	296	.000	.816	296	.000
Asset tangibility	.311	296	.000	.428	296	.000

a. Lilliefors Significance Correction

The researcher sought to establish the normality of data. The researcher used Shapiro-Wilk to check on the normality of the data. The null hypothesis is that the data follows a normal distribution. From the results, the Shapiro Wilk statistics showed significance values below the alpha value of 0.05. This shows that the data does not follow a normal distribution.

Table 4.5: Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Liquidity	.992	1.008
	Leverage	.880	1.137
	Asset tangibility	.881	1.134

The regression model assumes that there is no linear relationship between predictor variables. The test is checked using a multicollinearity test. This was tested based on Variance Inflation Factor (VIF). Variance Inflation Factor checks on the level at which the variance in the data is inflated. From the results, the VIF values were less than 10 with the tolerance statistics below 2. This stipulates that the variance was inflated at a very low level. Hence, the researcher assumes that there is no linear relationship between predictor variables in the data.

Table 4.6: Heteroskedasticity

```
------- ANOVA TABLE  --------
              SS         df         MS          F         Sig
Model      29.819      3.000      9.940       .866        .190
Residual  3352.371   292.000     11.481    -999.000    -999.000

------- Breusch-Pagan and Koenker test statistics and sig-values --------
            LM         Sig
BP         4.909       .342
Koenker    2.610       .456

Null hypothesis: heteroskedasticity not present (homoskedasticity)

if sig-value less than 0.05, reject the null hypothesis
```

The researcher sought to establish whether the error term is constant over time. This was done based on heteroskedasticity test based on Breusch–Pagan statistics. The test assumes that the error term is constant over time. When the significance value is below 5% then the error term is not constant over time. When the significance value is above 5%, the error term is assumed to be constant over time. From results, the Breusch–Pagan statistics shows a significance value

of above 5%. The researcher assumes that the error term is constant over time, hence, no heteroskedasticity in the data.

4.4 Regression analysis

Regression analysis was done to check the impact of COVID-19 pandemic on performance of Kenyan banks. The analysis was done based on the quarterly data before COVID-19 and during COVID-19. Liquidity, leverage and asset tangibility were used as the predictor variables and their impact on return on assets tested in the regression.

4.4.1 Pre-Covid Regression analysis

Table 4.7: Pre-Covid Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.357[a]	.128	.109	3.96676

a. Predictors: (Constant), Asset tangibility, Liquidity, Leverage

From the model summary, the pre-Covid 19 correlation coefficient (R) was 0.357. This indicates that liquidity, leverage and asset tangibility had a weak relationship with return on assets in the period before COVID-19. The model summary shows that the regression had an R squared of 0.128. This shows that in the period before COVID-19, liquidity, leverage and asset tangibility contributed 12.8% to the change in return on assets. This shows that their contribution to return on assets was very small in the pre-COVID period.

Table 4.8: pre-Covid ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	331.163	3	110.388	7.015	.000[a]
	Residual	2265.862	144	15.735		
	Total	2597.025	147			

a. Predictors: (Constant), Asset tangibility, Liquidity, Leverage

b. Dependent Variable: Return on Assets

From the analysis of variance, the calculated F-statistics (7.015) was greater than the critical F-statistic (2.667). This shows that the regression model fits the data used in the research. The ANOVA statistics showed that the F-statistics showed a significant value of 0.000. This shows that the regression model is the best model for the data.

Table 4.9: Pre-Covid Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.309	.941		-2.453	.015
	Liquidity	.035	.016	.176	2.247	.026
	Leverage	.036	.009	.324	4.085	.000
	Asset tangibility	-.064	.100	-.051	-.641	.523

a. Dependent Variable: Return on Assets

The regression analysis showed that if liquidity, leverage and asset tangibility are held constant, the return on assets of commercial banks in Kenya would stand at -2.309 in the period before Covid-19. The analysis showed that unit increase in liquidity would increase return on assets by 0.035. A unit increase in leverage would increase return on assets by 0.036 while unit increase in asset tangibility would reduce return on assets by 0.064. Liquidity and leverage showed significance of less than 5% which indicates that liquidity and leverage had significant effect on return on assets in the period before Covid-19. However, asset tangibility showed an insignificant impact on return on assets.

4.4.2 Post-Covid Regression Analysis

Table 4.10: Post-Covid model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.864[a]	.746	.741	1.97951

a. Predictors: (Constant), Asset tangibility, Leverage, Liquidity

From the model summary, the correlation coefficient (R) was 0.864 in the Covid-19 period. This indicates that liquidity, leverage and asset tangibility had a weak relationship with return on assets. The model summary shows that the regression had an R squared of 0.746. This shows that in the COVID-19 period, liquidity, leverage and asset tangibility contributed 74.6% to the change in return on assets. This shows that their contribution to return on assets increased in the COVID period.

Table 4.11: post-Covid ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1658.780	3	552.927	141.108	.000[a]
	Residual	564.260	144	3.918		
	Total	2223.040	147			

a. Predictors: (Constant), Asset tangibility, Leverage, Liquidity

b. Dependent Variable: Return on Assets

From the analysis of variance, the calculated F-statistics (141.108) was greater than the critical F-statistic (2.667). This shows that the regression model fits the Covid-19 data used in the research. The ANOVA statistics showed that the F-statistics showed a significant value of 0.000. This shows that the regression model is the best model for the data during Covid-19.

Table 4.12: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.959	.280		6.988	.000
	Liquidity	-.005	.007	-.026	-.620	.536
	Leverage	-.556	.027	-.862	-20.476	.000
	Asset tangibility	-.001	.001	-.041	-.962	.337

a. Dependent Variable: Financial performance

The Covid-19 regression analysis showed that where liquidity, leverage and asset tangibility are held constant, the return on assets of commercial banks in Kenya would stand at 1.959 in the Covid-19. The analysis showed that unit increase in liquidity would reduce return on assets by 0.005 with a significance level of 0.536. A unit increase in leverage was found to reduce return on assets by 0.556 with a significance value 0.000 while unit increase in asset tangibility would reduce return on assets by 0.001 with a significance of 0.337. Only leverage showed a significant effect on return on assets in the Covid-19 period. However, liquidity and asset tangibility showed an insignificant impact on return on assets in the Covid-19 period.

From the regression analysis, the findings showed that the impact of liquidity on return on assets turned from positive and significant in the period before Covid-19 to negative and insignificant during Covid-19. This shows that Covid-19 had a negative effect on the relationship between liquidity and return on assets. The impact of leverage on return on assets turned negative during Covid-19.

4.5 Discussion of Findings

The descriptive analysis showed that Covid-19 had a positive effect on loans advanced by commercial banks. This is because the mean loans advances in the pre-Covid period was less than the mean loan advances in the Covid-19 period. This shows that Covid-19 leads to increased loan advanced among the Kenyan commercial banks. The findings differ with Wardhani, Rosalina, Elvany and Awaluddin (2021) found that financial performance showed no difference before and during Covid-19.

The customer deposits also increased with Covid-19 since the mean deposits in the Covid-19 period was higher than the mean in the pre-Covid period. This shows that Kenyan banks experienced increased customer deposits after the onset of Covid-19. The findings differed with those of Nurdiansari, Susilawati, Sriwahyuni and Paulina (2021) who found that deposits decreased with Covid-19. The findings also differed with those of Wardhani, Rosalina, Elvany and Awaluddin (2021) who found that financial performance showed no difference before and during Covid-19.

The findings showed that Covid 19 reduced the profitability of Kenyan banks since the profits in the Covid-19 period was lower than that in the pre-Covid period. The findings concur with those of Obeidat, Tarawneh, Khataibeh and Ghassan (2021) who found that the profits of banks (return on assets) decreased with Covid-19. The findings also concurred with those of

Nurdiansari, Susilawati, Sriwahyuni and Paulina (2021) noted that profitability decreased with Covid-19. The findings differ with those of Wardhani, Rosalina, Elvany and Awaluddin (2021) who found that financial performance showed no difference before and during Covid-19.

From the regression analysis, the findings showed that the impact of liquidity on return on assets turned was negative and insignificant during Covid-19. This shows that liquidity has no significant impact on financial performance of Kenyan banks. The findings differ with those of Waswa, Mukras and Oima (2018) established that a negative relationship existed between liquidity and performance. The findings also differed with those of Chen et al (2018) and Charmler et al (2018) who found that liquidity related positively with performance.

The study showed that leverage had a negative impact on return on assets during Covid-19. The findings concurred with those of Ibhagui and Olokoyo (2018) who that leverage is negatively associated with firm performance. This also concurs with the findings of Iqbal and Usman (2018) who found that financial leverage depicted a negative relationship with performance. However, the findings differed with those of Ojo (2012) who found that leverage had a positive effect on performance and Widyastuti (2019) who found no relationship between leverage and performance.

The study found that in the era of Covid-19, asset tangibility showed an insignificant impact on return on assets. This shows that asset tangibility has no effect on financial performance of Kenyan banks. The findings differed with those of Adarov and Stehrer (2019) found a positive relationship and Miloş and Miloş (2015) who found that tangibility of assets relates negatively with performance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section of the paper, summarizes the findings of the study. The section also presents the conclusions and recommendations of the research. This section is based on the findings of the research.

5.2 Summary of Findings

This section summarizes the findings based on the objectives and variables of the study. In the period before Covid-19, the commercial banks showed a mean return on assets as a measure of financial performance of 0.7705. Liquidity of the Kenyan banks before Covid-19 averaged at 21.8297 with leverage showing a mean value of 74.0906. On the other end, the mean asset tangibility of the Kenyan banks was 5.5184. On financial performance in the period before Covid-19, loans advances averaged at 16457.7703. The customer deposits in the period showed a mean of 22072.64. The banks, in the period before Covid-19, showed an average profitability of 645.4562.

The researcher sought to establish the status of the variable data used during Covid-19. From the findings, the commercial banks showed a mean return on assets as a measure of financial performance of 0.3662. The findings showed that liquidity of the Kenyan banks during Covid-19 averaged at 24.0695. Leverage, on the other hand, showed a mean value of 2.4679. The mean asset tangibility of the Kenyan banks was 104.7188. On financial performance during Covid-19, loans advances averaged at 18496.6149. The customer deposits in the Covid-19 period showed a mean of 25152.777. The banks, in the Covid-19 period, showed an average profitability of 559.3124.

The descriptive analysis showed that Covid-19 had a positive effect on loans advanced by commercial banks. This is because the mean loans advances increased in the Covid-19 period. The findings, the customer deposits increased with Covid-19 since the mean deposits increased in the Covid-19 period. However, Covid 19 had a negative impact on profitability since the profits increased in the Covid-19.

Liquidity, leverage and asset tangibility had a weak relationship with return on assets in the period before COVID-19. However, in the COVID-19 period they had a strong relationship

with return on assets. From the regression analysis, the findings showed that the impact of liquidity on return on assets turned from positive and significant in the period before Covid-19 to negative and insignificant during Covid-19. This shows that Covid-19 had a negative effect on the relationship between liquidity and return on assets. The impact of leverage on return on assets turned negative during Covid-19. This indicates that that Covid-19 had a negative effect on leverage of Kenyan commercial banks.

5.3 Conclusion

The findings showed that the mean loans advances in the pre-Covid period was less than the mean loan advances in the Covid-19 period. This shows that loans advances increased with the onset of Covid-19. The study concludes that Covid-19 has a positive effect on loans advanced by Kenyan commercial banks. This shows that the Kenyan commercial banks have experienced increased level of loans advanced in the Covid-19 period.

From the descriptive statistics, the mean deposits in the Covid-19 period was higher than the mean in the pre-Covid period. This shows that customer deposits increased with Covid-19. This leads to the conclusion that Covid-19 has a positive effect on deposit levels in Kenyan commercial banks. This shows that Covid-19 increased the level of deposits across the Kenyan commercial banks.

The findings showed that Covid 19 reduced the profitability of Kenyan banks since the profits in the pre-Covid period was higher than that in the Covid-19 period. The study, concluded that Covid-19 has a negative impact on the profitability of Kenyan commercial banks. This shows that the banks experienced reduction in their profitability levels during Covid-19.

From the regression analysis, the findings showed that liquidity has a negative and insignificant on return on assets in the era of Covid-19. This shows that liquidity has no effect on return on assets as a measure of financial performance of Kenyan banks. The study concludes that liquidity has no effect on financial performance of Kenyan commercial banks. The findings also showed that leverage had a negative impact on return on assets in the era of during Covid-19. Hence, the study concludes that leverage has a negative effect on financial performance of Kenyan commercial banks. The findings showed that asset tangibility had an insignificant regression coefficient with return on assets. This leads to the conclusion that asset tangibility has no effect on the financial performance of Kenyan commercial banks.

5.4 Recommendations of the study

The study found that loans advances increased when Covid-19 came in. The study concludes that Covid-19 has a positive effect on loans advanced by Kenyan commercial banks. Hence the study recommends that Kenyan commercial banks come up with relevant strategies that would ensure that they manage covid-19. This will ensure that they experience increased loan advances to customers which reflects improved financial performance.

From the descriptive statistics, the mean deposits in the Covid-19 period was higher than the mean in the pre-Covid period. The banks experienced increased customer deposits due to Covid-19. It is recommended that the commercial banks in Kenya come up with strategies that would reduce Covid-19 but not eradicate it. This would ensure that they benefit from the increased deposits.

The findings showed that Covid 19 reduced the profitability of Kenyan banks. The study, concluded that Covid-19 has a negative impact on the profitability of Kenyan commercial banks. This study recommends that the commercial banks come up with programs that would support the fight against Covid-19. This will reduce the time taken for Covid-19 to reduce to very low levels which will take the banks to the profit-making times.

5.5 Limitations of the Study

This study focused on impact of covid-19 on performance of Kenyan banks. This shows that the study was limited to the variables of the study. If other variables were adopted the researcher may have got different outcomes. The study was also limited by the context of the research. The study was limited to Kenyan commercial banks. The banks may be affected differently by Covid-19 compared to other financial institutions. This limits the generalization of the findings.

The study was based on secondary data. It was hard to verify the authenticity of the data. The data also had a historical nature which limited the research. The research adopted the most current data for the research to overcome the historical nature of the data. The study was based on an event study methodology which may give a different outcome where a different methodology is adopted.

5.6 Recommendations for Future Studies

This study was limited to the variables of the study. If other variables were adopted the researcher may have got different outcomes. Other researchers should undertake a similar research based on other variables influencing performance of Kenyan banks. The study was also limited by the context of the research. Other researchers should focus on other financial institutions other than commercial banks to compare outcomes.

The study was based on secondary data. This study recommends that other researchers adopt primary or mixed data for analysis. The study was based on an event study methodology which may give a different outcome where a different methodology is adopted. Other researchers can do a similar research based on a different methodology to compare the outcomes.

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APPENDICES

Appendix I: List of commercial banks in Kenya

1. ABC Bank
2. African Banking Corporation
3. African Development Bank Group
4. Afrika Investment Bank
5. Bank of Africa Kenya Ltd
6. Bank Of Baroda (Kenya) Ltd.
7. CFC Stanbic Bank Limited
8. Chase Bank
9. Citibank N A
10. Commercial Bank of Africa
11. Consolidated Bank
12. Co-operative Bank
13. Development Bank Of Kenya Ltd
14. Dry Associates Limited
15. Dubai Bank Kenya Ltd
16. Dyer & Blair Investment Bank
17. Equatorial Commercial Bank Limited
18. Equatorial Investment Bank
19. Equity Bank
20. Faida Investment Bank – FIB
21. Fidelity Bank
22. Fina Bank

23. Giro Commercial Bank Ltd

24. Guardian Bank Ltd.

25. Housing Finance

26. Imperial Bank Limited

27. Investments & Mortgages Bank Limited – I&M Bank

28. KCB Bank

29. Kenya Post Office Savings Bank

30. K-Rep Bank

31. National Bank

32. NCBA Bank

33. Oriental Commercial Bank Ltd.

34. Paramount Bank

35. Prime Bank

36. Standard Chartered

37. Standard Investment Bank

38. Sterling Investment Bank

39. Suntra Investment Bank Ltd

40. The Co-operative Bank

41. Transnational Bank

42. UBA Kenya Bank Ltd

Appendix II: Data Collection Sheet

Year		Total assets	Current assets	Tangible assets	Current liabilities	Total Equity	Total debt	Profit after tax	Loans advanced
	Q1								
	Q2								
	Q3								
	Q4								