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**RELATIONSHIP BETWEEN MACROECONOMIC FACTORS AND M&A
DEAL FLOW IN THE BANKING SECTOR IN KENYA.**

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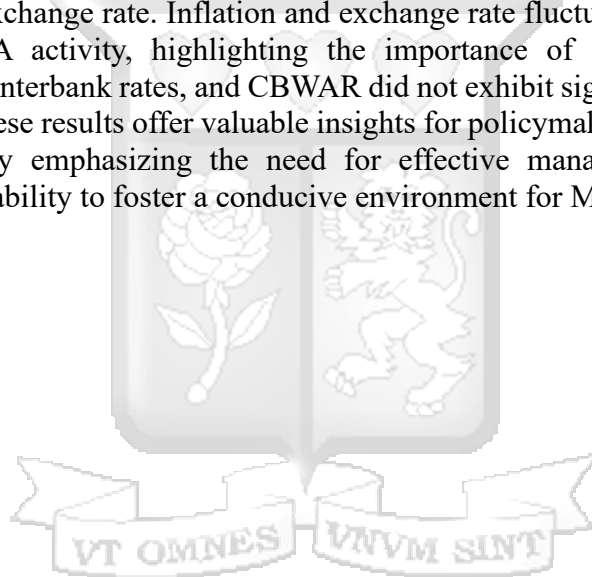
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ABSTRACT

This study investigated the influence of macroeconomic factors on mergers and acquisitions (M&A) within Kenya's banking sector from 2005 to 2023. M&A activities serve as a strategic approach for banks to enhance shareholder value and maintain market relevance, making this research pivotal in addressing gaps in existing literature on developing economies. Using an Autoregressive Distributed Lag (ARDL) model, the study examined the relationship between the number of M&A transactions (dependent variable) and macroeconomic indicators such as GDP, inflation rate, interbank rate, CBK Weighted Average Rate (CBWAR), and exchange rate (independent variables). The findings revealed significant short-term relationships, particularly with the second lag of M&A transactions, the second and third lags of the inflation rate, and the current level of the USD/KES exchange rate. Inflation and exchange rate fluctuations emerged as critical drivers of M&A activity, highlighting the importance of macroeconomic stability. However, GDP, interbank rates, and CBWAR did not exhibit significant effects during the study period. These results offer valuable insights for policymakers, financial institutions, and investors by emphasizing the need for effective management of inflation and exchange rate stability to foster a conducive environment for M&A.



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LIST OF ABBREVIATIONS

ARDL	=	Autoregressive Distributed Lag
CBWAR	=	Commercial Banks Average Weighted Rates
CBK	=	Central Bank of Kenya
GDP	=	Gross Domestic Product
M&A	=	Mergers and acquisitions
SPI	=	Stock Price Index



CHAPTER ONE

INTRODUCTION

1.0 Background information.

1.1 Mergers and Acquisitions

Mergers and acquisitions are a key strategy for firms to achieve expansion as well as productivity by creating synergies, reducing costs, acquiring assets, and expanding into new markets (Martynova & Renneborg 2006; Altunbas & Ib   ez 2004). Gaughan (2007) defines a merger as the joining of two organizations in which only one survives to become a new company on its own. According to Alistair and Mclean (2010), a merger is the combination of two legacy cultures, each of which has its own set of qualities. According to regulatory regulations, acquired companies will no longer be allowed to act independently following a merger. Whereas an acquisition is the purchase of a company's assets or shares, that can comprise all or part of the shares or just one business unit.

Snow (2011) provides a different definition, stating that a merger is the combining of two or more firms, with each company having the same number of shares as the others and playing a clear function in the new company. Meanwhile, an acquisition is described as a transaction in which one company purchases the assets of another company, business division, or other company. Scholars such as Salter and Weinhold (1980) found that mergers and acquisitions (M&A) are performed to generate additional value. This value creation effect, related to anticipated synergies between merged firms, can be financially defined as positive improvements in expected future cash flows that benefit shareholders (Campa & Hernando, 2004).

As stated by Strategic management, M&A value creation is "the increase in performance of the merged firms over what the two firms are already expected or required to achieve as individual firms" (Sirower, 1997). Hariyani, Serfianto, and Yusticia (2011) divide acquisitions into two categories depending on their fundamental motivations: strategic and financial. A strategic M&A is a long-term investment in which a company remains connected or integrated with its shareholders. Financially motivated M&As, on the other hand, are short-term transactions with the goal of profiting from the eventual resale of the

acquired assets. After 2009, M&A was frequently used to acquire new technology, develop new industries, and respond to global competition (Lee and Lieberman, 2010).

M&A is a corporate process that needs significant investment and has risks, notably in terms of market commodity price volatility (Savolainen, 2016). Before an M&A may take place, the buyer must carry out due diligence. During this process, the buyer chooses the right valuation method, which yields an enterprise value that is then presented to the seller for discussions. The buyer and seller's valuation methodologies may differ, resulting in potentially significant discrepancies in business values (Candra et al., 2021). In M&A deals, there are two types of buyers: private equity companies and retail companies, each with its own set of decision-making characteristics. Buyers from private equity groups are usually significantly more active and prepared to pay greater prices (Candra et al., 2021).

1.2 Overview of Global Mergers and Acquisitions

Mergers first emerged in the United States in the 1900s, in waves with distinct characteristics. The first wave was marked by horizontal mergers aimed at establishing monopolies, in which corporations attempted to restrict competition by consolidating their respective market shares into a single dominant entity. Vertical mergers dominated the second wave, which occurred in the United States' industrial sector. A third wave emerged in the 1960s, primarily from conglomerate mergers to diversify into new industries. This wave was more diverse than previous ones.

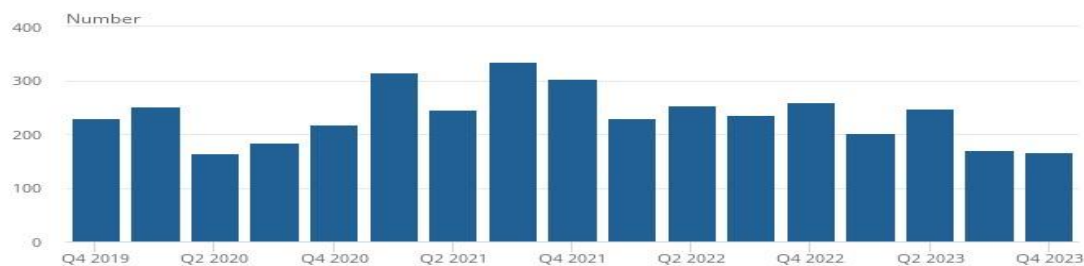
The fourth wave, which began in the 1980s, was marked by aggressive takeovers, primarily in the financial services and banking industries. This period was widely referred to as "the wave of disciplinary mergers" (Black, 2000). The fifth wave, which ran from the 1990s to 2000, focused on expanding the size of corporations. The Institute for Mergers, Acquisitions, and Alliances (IMAA) said that over 325,000 mergers and acquisitions transactions had been publicized since 1985, with a total known value of over 34,900 billion USD. According to Statista (2023), the annual volume of merger and acquisition (M&A) transactions in the United States has changed dramatically in recent years. In 2021, there were 24,412 M&A transactions, the largest total value recorded

during the period under consideration. In 2022, M&A deal volume declined to below 21,000.

European countries endured waves of mergers and acquisitions, particularly with the introduction of the single European currency and the formation of the European Union. Duso, Neven, and Roller (2007) observed cross-border mergers involving corporations from the United Kingdom and other nations, including the United States. This was helped by the United Kingdom's open economy and the removal of trade barriers (Oster, 2009). Because European countries began industrialization earlier than the United States, the United Kingdom saw its first wave of mergers in the 1800s. The driving causes stated by the Organization for Economic Cooperation and Development [OECD], (2010) for the reasons behind mergers in the United Kingdom included: deregulatory changes, technology changes, privatization, economic booms or recessions.

Figure 7: The number of quarterly domestic M&A between Quarter 3 (July to Sept) 2023 and Quarter 4 (Oct to Dec) 2023 remained relatively stable

The total number of domestic M&A between Quarter 4 2019 and Quarter 4 2023 ranged from 164 to 335



Source: Mergers and Acquisitions Survey from the Office for National Statistics

Source: Office of National Statistics

([https://www.ons.gov.uk/businessindustryandtrade/changetobusiness/mergersandacquisitions/bulletins/mergersandacquisitionsinvolvingukcompanies/octobertodecember2023#:~:text=There%20were%20an%20estimated%20166,Quarter%204%202022%20\(259\).](https://www.ons.gov.uk/businessindustryandtrade/changetobusiness/mergersandacquisitions/bulletins/mergersandacquisitionsinvolvingukcompanies/octobertodecember2023#:~:text=There%20were%20an%20estimated%20166,Quarter%204%202022%20(259).))

Figure 1: Number of Quarterly domestic M&A transactions in the US

In the fourth quarter of 2019, there were around 200 domestic M&A transactions. This figure fluctuated in future quarters, with major peaks in Quarter 4 of 2020 and Quarter 2 of 2021, totaling roughly 300 and 335 transactions, respectively. Quarters 2 and 3 of 2020 saw a considerable dip in activity, with the number of transactions falling between 150 and 200. This fall could be due to the COVID-19 epidemic, which created considerable economic disruption and uncertainty. Despite these variances, the general trend indicates a rather consistent amount of merger and acquisition transactions, notably during the third and fourth quarters of 2023.

Africa has also seen a substantial amount of merger and acquisition activity. The first quarter of 2020 saw a significant number of changes and postponements to ongoing African M&A deals, as well as the cancellation or postponement of additional proposed mergers. As a result, most African countries experienced a drop in M&A activity. South Africa's M&A transaction value declined 60% to US\$3.3 billion from US\$8.2 billion in the first half of 2020, while the number of M&A deals decreased 18% year on year. Similarly, according to the Institute for Mergers, Acquisitions, and Alliances (IMAA), the value of M&A transactions in Nigeria fell by 23%, echoing the continent's broader pattern of reduced deal activity as a result of the pandemic. Furthermore, in Egypt, the total value of M&A transactions decreased by 28% in 2020 in comparison with the previous year.

South Africa has received more merger notifications than Nigeria (Adekunle, Etti & Folosade, 2012). KPMG (2010) said that merger activity in South Africa increased by up to 133% as a result of large-cap mergers. Kenya is ranked fourth as the country with the most appealing merger environment in the IT and consumer industries, trailing only South Africa, Nigeria, and Ghana, and benefits considerably from its free-market economy.

1.3 Mergers and acquisitions in the Kenyan banking sector

Kenya's banking sector has experienced an increase in transactions over the last seven years, owing to the government's interest rate cap, which has had a significant impact on bank profitability. This political shift prompted many banks to seek strategies to preserve their profitability, resulting in a surge in M&A activity as a strategic response. The CBK continues to advocate for banking sector consolidation through mergers and acquisitions

in order to create larger and more stable institutions capable of enduring economic shocks, funding large infrastructure projects, and offering competitive interest rates. The CBK believes that by promoting such mergers and acquisitions, it would strengthen the banking system and ensure that it can continue to support Kenya's economic growth aspirations.

In recent years, numerous large M&A transactions have occurred in Kenya's banking sector. For example, in 2019, the NIC Group and Commercial Bank of Africa (CBA) amalgamated to establish the NCBA Group, a larger organization aimed at leveraging synergies and expanding market reach. This merger was one of the largest in Kenyan banking history, demonstrating the industry's growing consolidation trend. Furthermore, in the same year, KCB Group purchased National Bank of Kenya, demonstrating leading banks' strategic moves to increase market position and operational efficiency. These transactions are part of Kenyan banks' overall goal to boost their competitive standing. Statista (2023) forecasts that the transaction value in Kenya's mergers and acquisitions market will reach \$0.42 billion by 2024. Gitonga (2020) further noted that Kenya is likely to see major deal activity in the near future as a result of the enhanced regulatory capital requirements.

2.0 Problem statement.

Mergers and acquisitions include mutual agreements between the acquirer and the target. Both firms desire to maximize shareholder value, and M&A is considered as a strategic move in that direction (Maua, 2021). The Central Bank of Kenya (CBK) has dissolved some commercial banks that were having major financial problems, while others are under receivership. Other commercial banks have merged and acquired to overcome financial challenges (Dang, 2011). According to Mugo (2017), banks formed strategic relationships that addressed both financial and non-financial objectives. Kenyan banks are seeking to diversify their portfolios through mergers and acquisitions to stay competitive. Mugo (2019) emphasized that M&A in Kenya is subject to severe statutory regulations and requires approval from regulators in order to prevent small companies from being driven out of the market.

Several studies have examined how economic drivers influence inward cross-border M&A (Agyenim, Ruthira, and Moshfique, 2011; Kamal, Ismail, and Fahmi, 2013). The majority of academic research is conducted on developed countries, such as the United States (US) and the United Kingdom (UK), rather than developing ones. Kem (2015) examined both cross-border and general M&A activities in 11 developing nations (Brazil, Indonesia, Korea, Republic, Malaysia, Peru, Philippines, Thailand, Turkey, India, Vietnam, and China), while Darayseh and Alsharari (2021) investigated the variables that influenced M&A decisions in the UAE banking industry. A significant gap exists in detailed study into the impact of macroeconomic variables on M&A activities in the banking sector in emerging countries. Mugo (2017) found that mergers and acquisitions improve bank performance. Furthermore, Kithitu et al. (2012) concluded that mergers and acquisitions increase the financial performance of Kenyan commercial banking institutions. Cherono's (2016) investigation of the financial impact of mergers and acquisitions on CFC Stanbic Bank found that there was no substantial shift in the bank's profitability or price of shares after the merger.

According to the articles referenced above, no research-based study on M&A in Kenya has been done to evaluate the link between macroeconomic conditions and M&A transactions in the banking sector. As a result, the purpose of this study is to bridge this gap by investigating M&A transactions in Kenya's banking sector. Its goal is to look into how GDP, exchange rates, interbank rates, Commercial Banks Average Weighted Rates (CBWAR), and inflation affect companies' decisions to merge or acquire. Understanding these dynamics is critical for regulators, financial institutions, and investors to make sound decisions that foster a more robust and competitive banking environment. Furthermore, this study can provide significant insights for other developing nations with similar economic landscapes, adding to the worldwide debate on the relationship between macroeconomic variables and M&A activity

3.0 Research Objectives

The overall goal of this research is to look into the relationship between macroeconomic conditions and M&A activity in Kenya's banking sector. The study's particular aims are:

- i. To determine the effect of GDP on M&A deal flows in the banking sector.
- ii. To investigate the effect of exchange rates on M&A deal flows in the banking sector.
- iii. To establish the effect of Commercial Banks Average Weighted Rates (CBWAR) on M&A deal flows in the banking sector.
- iv. To determine the effect of interbank rates on M&A deal flows in the banking sector.
- v. To establish the effect of inflation rate on M&A deal flows in the banking sector.

3.1 Research questions

This study seeks to answer the following questions:

- i. What is the effect of GDP on M&A deal flows in the banking sector.
- ii. What is the effect of exchange rates on M&A deal flows in the banking sector.
- iii. What is the effect of Commercial Banks Average Weighted Rates (CBWAR) on M&A deal flows in the banking sector.
- iv. What is the effect of interbank rate on M&A deal flows in the banking sector.
- v. What is the effect of inflation rate on M&A deal flows in the banking sector.

4.0 The significance of the study

This study has major potential benefits for a variety of stakeholders, including legislators, bank executives, and future academics. For policymakers such as competition authorities and financial regulators, the findings of this research provide a platform for developing more effective regulatory regimes. Understanding the impact of GDP, exchange rates, interest rates, and inflation on M&A activities can aid in developing regulations that promote fair market practices and reduce information asymmetries during M&A transactions.

Bank managers and executives will acquire practical insights into how to optimize their merger and acquisitions strategies. Understanding how macroeconomic variables

influence M&A dynamics in the banking sector allows managers to strengthen their banks' operational strategies, increase market performance, and better navigate economic swings.

Future researchers may use the study's findings to further investigate M&A processes, particularly in developing countries such as Kenya. Future study can provide more thorough insights by broadening the scope to include additional macroeconomic elements or sectors, as well as investigating the long-term implications of M&A on bank performance and stability. This will not only improve understanding of M&A dynamics in Kenya, but it would also greatly add to the worldwide awareness of how macroeconomic conditions influence M&A deals in developing countries.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction.

This chapter reviews the relevant literature on the topic and compares the theories identified with earlier material. This part was guided by the research objectives, which centered on the impact of macroeconomic conditions on M&A transaction flow.

2.2 Theoretical Literature Review

2.2.1 Efficient Market Hypothesis.

Eugene Fama and Paul Samuelson presented this idea in 1970. In this theory, they presented a market with prices that appropriately reflect the information available. According to Fama (1970), an efficient market is one in which, given the available information, current prices at any point in time are very good estimates of intrinsic values. The Efficient Market Hypothesis (EMH) aims to present a coherent explanation for asset price fluctuations and investor behaviour in financial markets. To explain the effectiveness of market processes and the difficulty of regularly outperforming the market through stock selection or timing strategies, the theory posits that rational players in competitive markets analyse and act on key information quickly.

According to Fama (1970), the market must meet three characteristics before it can be termed efficient. For starters, it presupposes that all relevant information is quickly and completely reflected in market pricing for assets. Second, it considers that investors are rational and behave in their best interests, quickly absorbing new information into their decision-making processes. Finally, the theory presupposes that there are no market inefficiencies or frictions that could result in constant profits from trading. Although there is a possibility that the market will become inefficient, Fama (1970) contends that this does not indicate that the market is inefficient now. There are three types of market efficiency:

i) Weak form efficiency.

The weak-form efficiency is defined by a market that just reflects stock prices based on previous data. It contains no elements of future events. Thus, there are no identifiable patterns or trends in price volatility, meaning that technical analysis has minimal significance (Fama, 1970).

ii) Semi-strong efficiency.

According to Fama (1970), semi-strong efficiency means that stock prices reflect not only all publicly available information, but also all information available to insiders, such as business insiders and analysts. This indicates that even individuals with access to non-public information cannot consistently outperform the market average because the market price already includes all available information. This concept is especially important for understanding how the market perceives and prices mergers and acquisitions. If the market is semi-strong efficient, any information regarding a potential merger and acquisition deal would be promptly reflected in the stock prices of the acquiring and target companies, leaving little chance for investors to profit from trading on that information.

iii) Strong form efficiency

As stated by Fama (1970), the strong form efficiency posits that stock prices reflect not only all publicly available information, but also all private or insider information. Malkiel (2003) described how it is not possible to create any excess returns as it is not possible to affect the stock prices. In recent years, there has been increasing skepticism about the concept of efficient markets. Malkiel has recently adjusted his perspective, acknowledging the significance of human behavior within the framework of the theory. This is only applicable in the short term, when bad investments and misjudgments are made by investors, but in the long term the market will recover to be efficient (Malkiel, 2003). In essence, the efficient-market theory is based on the idea that rational investors will react quickly to the news of an M&A deal, resulting in an instantaneous impact on stock prices. Nonetheless, some time following the news, there should be no effect on stock profit (Rosen, 2006). According to the efficient-market hypothesis, the stock price of a company involved in an M&A transaction should be changed only by this event. This is because all

other information about the company is assumed to be available to everyone and has already been integrated into the market's valuation.

According to EMH, the prices of enterprises involved in future mergers or acquisitions already reflect macroeconomic expectations such as interest rates, GDP growth, and inflation. This suggests that any anticipated benefits from an M&A transaction, including potential synergies, have already been included in the stock prices of the companies involved. As a result, it provides a framework for understanding how rapidly and efficiently macroeconomic issues influence corporate valuations and, by extension, M&A activity.

2.2.2 Economic Disturbance Theory.

Gort introduced this hypothesis in 1963. This theory is primarily intended to explain how economic disturbances affect M&A activity. According to this idea, macroeconomic events might affect enterprises' future cash flow estimates. As a result, valuations may fluctuate, resulting in differences between shareholder and investor expectations. Following a macroeconomic shock, investors may value a corporation higher than its shareholders, resulting in an increase in M&A activity. Such booms typically occur when a shock hits the entire economy, generating collective shifts in economic agents' expectations. Similarly, firm- or industry-level changes may result in identical distinctions on a smaller scale. Gort (1969) and Golbe & White (1993) discovered a positive relationship between variations in economic growth and takeover frequency. Economic development in potential acquirers' home countries raises earnings and equity values, boosting the amount of cash needed to fund takeovers (Glaister and Ahammad, 2008).

Recently, a small modification to this concept has emerged in literature. Dong et al. (2006) demonstrated that, rather than directly attributing M&A patterns to valuation differences within a single company, proponents of this theory argue that market inefficiencies produced by shocks arise in circumstances where some firms are undervalued while others are overvalued. In such cases, undervalued businesses are highly sought after by their overvalued counterparts, with the intention of capitalizing on the difference between the

target's underlying value and market price, either through cash transfers or equity offerings. Their findings showed that they rely substantially on managerial incentives.

This theory explains how expected changes in economic indices like interest rates, inflation, and GDP growth influence corporate decision-making and investment strategies. If businesses expect economic conditions to strengthen, they may anticipate improved profitability and growth potential, leading in more M&A activity as firms seek to capitalise on favourable circumstances. In contrast, fears about economic downturns or rising interest rates may dampen M&A activity due to heightened uncertainty and greater financing costs.

2.2.3 Synergy Hypothesis

Bradley, Desai, and Kim (1988) were the first to formulate this hypothesis, followed by Seth (1990) and Hubbart and Palia (1990). According to the synergy hypothesis, corporations participate in M&A because there are synergy opportunities, and the value of the combined firm exceeds the value of each company alone (Seth et al., 2000). Synergy effects are typically divided into two categories: operational and financial (Berk & DeMarzo, 2007). Synergies can also be defined as the present value of the net increase in cash flows resulting from the merger of two firms that could not have been done by either company alone (Ficery, Herd, & Pursche, 2007). The above-mentioned concept can also be expressed mathematically using the following equation:

$$\text{Value (Consolidated)} = \text{Value (Acquiror)} + \text{Value (Target)} + \text{Synergy}$$

Operating synergy occurs when a merger improves any corporate function, such as administration, labour costs, manufacturing or transportation, resource acquisition and allocation, and competitive advantage (Ogden et al. 2003). It can be divided into two different groups: income enhancement and expense reduction (Sirower and Sahni, 2006; Chatterjee, 2007; Gaughan, 2007; Arnold, 2008).

Revenue-enhancing synergy can be accomplished by merging a firm with a strong distribution network with another company that has high-potential items but is struggling to introduce them to the market (Gaughan, 2007). Revenue enhancement creates synergy

benefits that increase the joined entity's growth rate when compared to two distinct enterprises. Cross-selling and cross-marketing strategies can boost revenue while also increasing competitiveness and market domination. Previous study has attempted to determine how horizontal acquisitions have helped firms gain market power, such as by increasing customer price (Kim & Singal, 1993; Sapienza, 2002). Operating synergies related to cost reductions are becoming more frequent and easier to accomplish, as they often result in staff layoffs and the removal of unnecessary resources (Berk and DeMarzo, 2007).

Financial synergy is achieved through a merger when the combined financial structure of the merged organization results in a greater market valuation than the individual enterprises' total market valuations (Ogden et al. 2003). In addition, the merged enterprises may achieve a more favorable optimal debt ratio, consistent with the traditional trade-off theory of optimal capital structure. The merger can reduce the probability of bankruptcy for the two organizations, as long as their cash flows are not fully intertwined. Furthermore, increased debt capacity increases tax benefits from interest deductibility, resulting in an increase in overall market value (Ogden et al., 2003).

This concept is critical for explaining why corporations engage in M&A during favorable economic situations, such as periods of economic growth or robust financial markets, when the expected synergies from increasing demand and lower financing costs are greater. The premise is that managers of targets and acquirers want to maximize shareholder wealth, and that a merger or acquisition would only take place if shareholders from both firms benefit (Ostlund and Bramell 2022).

2.3 An empirical overview of studies on the impact of macroeconomic conditions on M&A transactions.

Kem (2015) examined the impact of five macroeconomic variables on cross-border M&A transactions in 11 developing countries (Brazil, Indonesia, Korea, Republic, Malaysia, Peru, Philippines, Thailand, Turkey, India, Vietnam, and China) between 2001 and 2015. The relationships were established using secondary data from DataStream, World Bank indicators, and the United Nations Conference on Trade and Development, as well as the

panel unit root test, correlation test, and panel least squares approach. There was a strong link between GDP and inbound cross-border M&A. A higher GDP indicates a greater aggregate income and a larger market size inside a country. This increased market potential creates an opportunity for companies to expand their inward cross-border M&A transactions. This supported the first hypothesis, which proposed a substantial link between inbound cross-border M&A and GDP. The negative association between inflation and inward cross-border M&A suggests that a lower inflation rate in the home nation is a strong predictor of the expansion of inward cross-border M&A activity. Furthermore, the findings revealed a substantial negative association between M&A and real interest rates, implying that lower interest rates can enhance M&A transactions. The hypothesis of a significant link between inward cross-border M&A and Stock Price Index (SPI) was not supported. SPI showed no meaningful link with inward cross-border M&A.

Antunes (2017) examined the short and long-run effects of macroeconomic variables such as GDP, FTSE100, and 3-month LIBOR on aggregated UK M&A activity across a 30-year period from 1985 to 2015. The study discovered that interest rates have a greater short-term effect on M&A than stock market performance, which is consistent with Kem's (2015) findings in developing nations. Both studies conclude that stock market indicators, such as the FTSE100 in Antunes' study and the SPI in Kem's, have little short-term forecasting potential for M&A activity. This is due to the differences in responsibility for capital market funding in Europe and the United States, and it is consistent with Handstad and Solboe's (2021) research of similar links in Norway from 2008 to 2019.

Handstad and Solboe (2021) used the OSEBX index, GDP, and 3-month NIBOR to evaluate the domestic stock market's performance, economic growth, and interest rates. Their data revealed a positive but insignificant link between takeover activity, stock market performance, and economic growth. This supports Antunes and Kem's findings, which showed that GDP has a long-term impact on M&A activity. Handstad and Solboe (2021) identified interest rates as the only significant predictor of M&A activity, supporting Antunes' conclusion.

Additionally, Antunes (2017) found that GDP shocks have long-term implications on M&A, which supports Kem's finding about GDP's crucial significance. The study also discovered that the FTSE100 is cointegrated with M&A activity in the long run, despite its lack of short-term impact, giving a temporal dimension to the relationship between macroeconomic factors and M&A. Handstad and Solboe's robustness tests, which included changing the frequency of data and deleting independent variables, reaffirmed the significance of interest rates, which is consistent with Antunes (2017) and Kem's (2015) emphasis on this variable's crucial role in driving M&A activity across diverse settings.

Darayseh and Alsharari's (2021) research into the factors that influenced M&A decisions in the UAE banking sector, as well as identifying elements that encourage M&A operations in the banking sector, differed greatly from Kem's (2015) and Antunes' (2017) studies in terms of independent variables and methodology. In this study, 500 bankers were given a survey to obtain data on the factors that drive banking mergers and acquisitions. The findings strongly suggested that the factors identified through the analysis of factors (income, expansion, costs, survival, diversification, safety and risk, and legal) are important in affecting the efficacy of M&A procedures in the banking industry.

Johnson and Schersten (2022) investigated the impact of monetary policy, specifically the repo rate and the growth of QE programs, on M&A activity among publicly traded companies on the Swedish Stock Exchange. In addition, they investigated whether there are any significant links between a company's purchase activity and its solvency or liquidity ratio. The findings showed that from 1994 to 2021, the repo rate exhibited a negative connection with M&A activity, which was consistent with expectations. Furthermore, QE initiatives showed a positive correlation with M&A activity. A second model, which covered the period from 2013 to 2021, found a positive association between the repo rate and M&As. This movement was attributed to the repo rate's extremely low levels at the beginning of this period.

According to the findings, liquidity was determined by comparing the acquiring company's total cash to its entire assets. The Poisson regression model results revealed a

substantial negative association between liquidity and the number of M&A transactions, meaning that increased liquidity resulted in fewer acquisitions. Furthermore, the coefficient for solvency was negative, implying that poorer solvency associated with increased M&A activity.

These findings are consistent with those of Ostlund and Bramell (2022), who looked at the association between aggregate M&A activity and macroeconomic factors that reflect the status of the US economy. Analyzing 73,137 transactions from January 1, 1980, to January 1, 2020, their regression results revealed a significant but negative relationship between GDP and aggregate M&A activity, implying that an increase in economic activity as measured by GDP corresponds to a decrease in the number of M&A transactions. This association, however, lost significance in a more detailed model, implying that GDP's impact may be dependent on other macroeconomic factors.

Furthermore, Ostlund and Bramell (2022) observed a statistically significant relationship between multiple lagged unemployment rate values and the number of M&A transactions, although the direction of this relationship was unclear due to inconsistencies in the lagged data. They also discovered that the performance of the S&P 500 index and its P/E ratio had no statistically significant relationship with the number of M&A transactions, which supports Johnson and Schersten's (2022) findings concerning the limited importance of certain financial statistics. Similarly, there was no substantial relationship between the Federal Funds Effective Rate and M&A transactions; instead, debt and M&A activity were found to be negatively connected.

2.4 Research Gap

The majority of studies (Kem (2015) and Antunes (2017)) concentrates on developed countries like the United States and the United Kingdom rather than developing nations (Agyenim, Ruthira, and Moshfique, 2011). Several studies, including Kem (2015), investigated cross-border and total M&A activity, whilst only one (Darayseh & Alsharari 2021) looked at the banking industry. Kamwaro (2015) investigated the factors that contributed to ICEA LION's successful merger and outlined the challenges and rewards that the firm faced after the merger. The investigation concluded that the merger's success

was due to people resources, a successful communication strategy, and strategic fit. It also stated that the firm faced several significant challenges, including crucial worker loss, preserving the new realism, and meeting the merger targets set.

Maua (2021) explored variables influencing payment techniques in African mergers and acquisitions. It concentrated on African M&A transactions disclosed after the financial crisis (2009–2019). The study's findings revealed that funding sources, shareholder profiles, and transaction characteristics, including deal value and initial stake cross-border transactions, all influence the manner of payment for M&A activities in Africa. Maua (2021) also stated that as the purchase value in Euros rises, purchasing firms may choose to increase their cash consumption.

In contrast to Kamwaro (2015) study of success factors and challenges in the ICEA LION merger and Maua's (2021) analysis of payment method determinants in African M&A deals, there is a significant gap in comprehensive research into the impact of macroeconomic variables on M&A activities in the banking sector. This gap emphasizes the necessity for research to investigate how larger economic factors influence M&A transactions in this industry. This study's investigation aims to fill this gap by giving significant insights into the relationship between macroeconomic variables and M&A transaction flow in the banking industry. As a result, the purpose of this study is to fill the gap by focusing on Kenya M&A transactions in the banking sector and understanding how GDP, exchange rates, interest rates, and inflation rates have influenced companies to engage in mergers and acquisitions, as well as to see if the results are consistent with previous research.

2.5 Conceptual framework

Independent variables

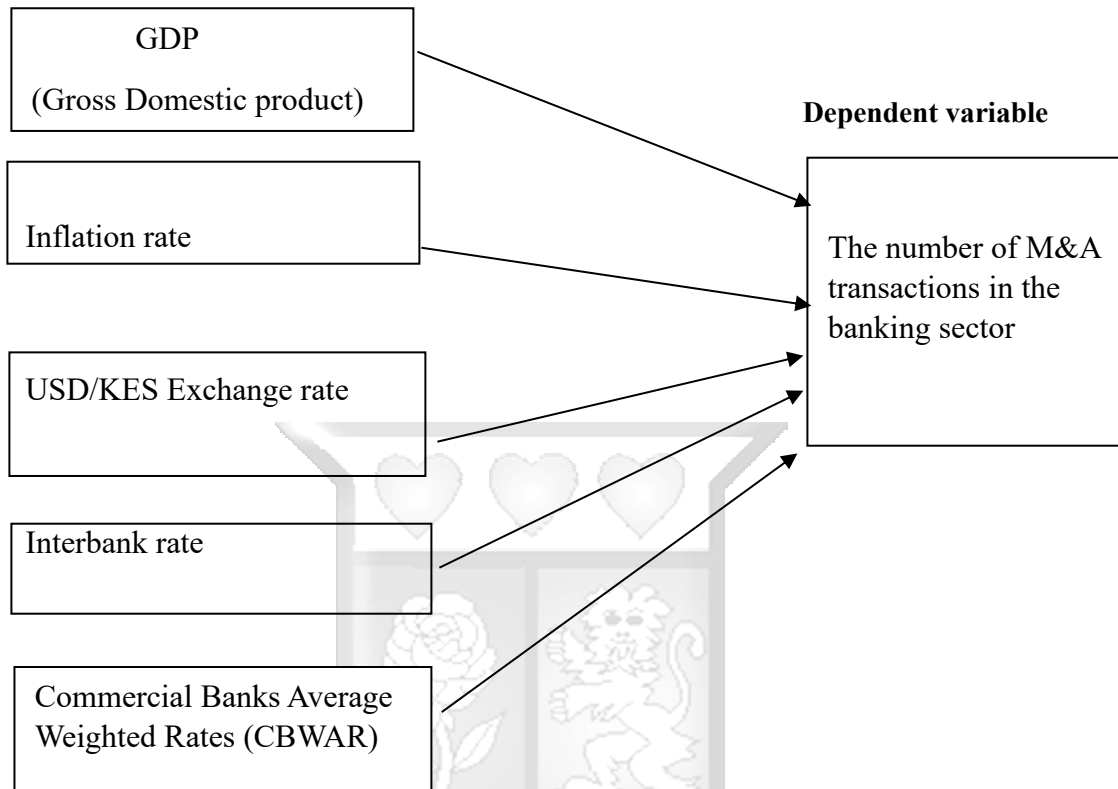


Figure 2: Conceptual framework

The dependent variable, the number of M&A transactions, measures the level of merger and acquisition activity in the banking business. The independent variables include GDP, inflation rate, exchange rate, interbank rate, and CBWAR. GDP is a measure of total economic performance, reflecting the country's economic output. The exchange rate and inflation rate are significant macroeconomic variables that influence investment decisions. CBWAR represents the average cost of borrowing across commercial banks, whereas the interbank rate is the interest rate at which banks lend and borrow from one another. This study aims to understand the macroeconomic determinants that shape M&A activity in the banking industry by examining the impact of these independent variables on the dependent variable.

In this study, it is projected that GDP, and the USD/KES exchange rate will have a positive association, while the inflation rate will have a negative link with the number of M&A

transactions in the banking sector. This is related to Kem's (2015) discovery that GDP represents a greater market size in the country, leading in more cross-border M&A deals, and that a lower inflation rate in the home country is an accurate indicator of the increase of inward cross-border M&A activity. Furthermore, Kem (2015) found a significant negative relationship between M&A and real interest rates, indicating that there may be a negative relationship between CBWAR, interbank rates, and M&A transactions.



CHAPTER THREE

RESEARCH METHODOLOGY.

3.1 Introduction.

This chapter describes the overall technique employed in the project. It discusses the research design, target population, data collection methods, and data analysis for the impact of macroeconomic conditions on M&A transactions in the banking sector.

3.2 Research Design

According to Kothari (2014), research design is the arrangement of settings for data collection and analysis in an attempt to balance relevance to the study purpose with procedural efficiency. The study employed a causal research design to quantitatively assess the relationship between macroeconomic variables and mergers and acquisitions (M&A) activity in Kenya's banking industry. This design seeks to examine if there is a relationship between variables and to evaluate cause-and-effect relationships. Since the study seeks to establish a causal relationship between economic indicators—such as GDP, inflation, exchange rate, interbank rate, and the Commercial Banks Average Weighted Rate (CBWAR)—and the number of M&A transactions in the sector, a causal design is appropriate.

3.3 Population and Samples

3.3.1 Population

A population is a clearly defined set of individuals, services, factors, events, and groups of organizations or houses being investigated (Kothari & Garg, 2014). The elements that respond to the study objectives are often referred to as the target population (Cooper & Schindler, 2013). The population for this study covers all M&A transactions in Kenya's banking sector from 1994.

3.3.2 Sampling

This strategy involves selecting a subset of a group to represent the entire group or population of interest. It shortens the time needed to conduct the investigation (Mugenda & Mugenda, 1999).

3.3.3 Sampling Technique and Procedure

Cooper and Schindler (2008) described a sampling methodology as a strategy for selecting a representative portion of the population from which to conduct a test. This study used a purposive sampling strategy. This method enables researchers to focus on certain population features that are of interest. It is frequently employed in studies involving secondary data because it enables the selection of data sources that are most relevant and significant to the research issue.

3.3.4 Representativeness of the sample

The sample's representativeness ensures that the selected data appropriately reflects the larger population being studied. The original sample included all 57 announced deals accessible from the Central Bank of Kenya. The study focused on deals from 2005 to 2023 and resulted in a final sample of 29 deals. This timeframe was determined by the availability of macroeconomic variable data.

3.4 Data Collection

Data collection is the gathering of empirical information with the objective of gaining new insights into the situation and addressing the challenges that sparked the study (Flick 2009). The study relied on secondary data from the Central Bank of Kenya and Kenya National Bureau of Statistics on GDP, inflation, CBWAR, interbank rates, currency rates, and M&A transactions. The study employed secondary quarterly time series data collected over a 19-year period, from January 2005 to December 2023.

Table 1 : Variables

Variable	Definition	Source
GDP	GDP is an estimate of the net monetary worth of all final goods and services generated within a country's borders during a specific time period. This measurement is usually expressed in Kenyan shillings (KES)	Kenya National Bureau of Statistics (KNBS)
Inflation rate	The inflation rate is the percentage change in the overall price level of goods and services in the economy over a certain period. It is Measured by the Consumer Price Index (CPI)	Central Bank of Kenya (CBK)
Commercial Banks Weighted Average Rate (CBWAR)	The (CBWAR) represents an average interest rate for which commercial banks lend to their most creditworthy clients. It is measured in percentage.	CBK
Interbank rate	It is the interest rate at which banks lend to each other overnight to manage liquidity. This rate affects short-term interest rates throughout the banking industry.	CBK
Exchange rate	It is the value of the Kenyan shilling (KES) relative to other currencies. Measured in units of KES per foreign currency	CBK

3.5 Data analysis.

The study was carried out using a multiple linear regression model. This regression model effectively described the link between macroeconomic variables by utilizing factors such as correlation, coefficient of determination, and degree of significance.

The regression function was expressed as follows:

$$Y_t = b_0 + b_1X_{1,t} + b_2X_{2,t} + b_3X_{3,t} + b_4X_{4,t} + b_5X_{5,t} + \varepsilon_t$$

Where:

Y = Number of M&A transactions in the banking sector

X_1 = Natural log of GDP

X_2 = Inflation Rate

X_3 = CBWAR (Central Bank Weighted Average Rate)

X_4 = Interbank Rate

X_5 = Exchange Rate

ε = Residual Error

3.5.1 Descriptive statistics

Descriptive statistics are necessary for presenting a clear overview of a dataset's properties. They assist in presenting data in a straightforward, clear, and comprehensible manner by presenting measurements such as the mean, median, maximum, minimum, and standard deviation of the variables.

3.5.2 Unit root Test

The unit root test was used to check whether the time series data was stationary, which was crucial for avoiding false and incorrect conclusions during analysis. The hypothesis for the unit root test is given below: The null hypothesis (H0) asserts that there is a unit root, meaning that the data is non-stationary, while the alternative hypothesis (H1) states

that the data is stationary. The decision rule stipulates rejecting the null hypothesis if the p-value is less than the significance level; else, it is not rejected.

To investigate the stationarity of the time series data in this study, the Augmented Dickey-Fuller (ADF) test was performed. This test established whether the data is stationary or non-stationary, which was critical for the validity of subsequent analysis and interpretations.

3.5.3 Autoregressive Distributed Lag (ARDL) Model

This study employed the Autoregressive Distributed Lag Model (ARDL) since the dependent variable was stationary while the independent variables were non-stationary. This model used 5 lags to explain the data creation process in a general-to-specific modelling method. The ARDL approach is suitable for creating short-run and long-run elasticities with a small sample size, and it employs the ordinary least squares (OLS) method for variable cointegration (Duasa, 2007). It works for independent variables in a model that are $I(0)$, $I(1)$, or mutually cointegrated (Frimpong & Oteng 2006), but it fails if any of the variables contain $I(2)$.

3.5.4 Diagnostic Checks

Normality and heteroskedasticity tests were performed to check that the regression model was robust and valid. The normality test is critical for determining if the model's residuals follow a normal distribution, which is a key assumption in regression. Deviations from normalcy might result in inaccurate parameter estimates and unreliable inferences. Furthermore, heteroskedasticity tests serve to determine if the variance of the error terms is constant across all levels of the independent variables.

CHAPTER FOUR

DATA ANALYSIS RESULTS AND DISCUSSION

4.1 Introduction

The data in this chapter was analysed and used to interpret how inflation rates, GDP, exchange rates, interbank rates, and Commercial Bank Weighted Average (CBWAR) affect the number of M&A transactions in Kenya's banking sector, using Autoregressive Distributed Lag Model (ARDL). This chapter begins by exploring trends in the data through descriptive statistics, including measures such as mean, standard deviation, and range, to provide a comprehensive overview of the variables. It then delves into diagnostic tests such as unit root tests to check for stationarity, the ARDL model to examine the relationship between the number of transactions and key macroeconomic factors, and the bounds test to assess the existence of a long-term cointegration relationship among the variables. Lastly, diagnostic checks, including normality and heteroskedasticity tests, were performed to ensure the robustness and reliability of the model's results.

4.2 Descriptive statistics

This section presents the clear outcomes for the components. Measurements used included mean, minimum, maximum, and standard deviation. The results are displayed below.

Table 2: Descriptive statistics

Variables	Number of observations	Min	Max	Mean	Std
Number of transactions	76	0.000	3.000	0.382	0.711
lnGDP	76	19.450	21.700	20.550	0.836
Inflation rate(%)	76	2.627	19.187	7.492	3.835
USD/KES exchange rate	76	62.950	153.390	93.250	18.691
Interbank rate(%)	76	1.074	22.075	6.842	3.761
CBWAR(%)	76	11.880	20.210	14.390	2.112

The Number of transactions variable has a minimum value of 0, a maximum of 3, with an average of 0.382 and a standard deviation of 0.711, indicating relatively low variability in the number of M&A deals during the period under review. GDP ranges from approximately 276.2 million to 3.627 billion, with a mean of 830.5 million, based on exponentiating the logged values, and moderate fluctuations indicated by a logged standard deviation of 0.836 over time. The Inflation rate varied between 2.637% and 19.187%, with an average of 7.492% and a standard deviation of 3.835%, indicating significant variability in inflation levels.

The USD/KES exchange rate fluctuated widely from 62.950 to 153.390, with a mean of 93.250 and a standard deviation of 18.691, reflecting considerable exchange rate movements from 2005 to 2023. The Interbank rate ranged from 1.074% to 22.075%, with an average of 6.842% and a standard deviation of 3.761%, showing moderate variability in short-term lending between banks. Lastly, CBWAR ranged from 11.880% to 20.210%, with a mean of 14.390% and a standard deviation of 2.112%, indicating relatively stable lending rates over the period.

4.3 Correlation matrix

Table 3: Correlation matrix results

Variable	Number of Transactions	InGDP	Inflation Rate	USD/KES Exchange Rate	Interbank Rate	CBWAR
Number of Transactions	1.000	0.191	0.000	0.169	-0.137	-0.209
InGDP	0.191	1.000	-0.322	0.867	-0.185	-0.334
Inflation Rate	0.000	-0.322	1.000	-0.147	0.436	0.192
USD/KES Exchange Rate	0.169	0.867	-0.147	1.000	0.011	-0.227
Interbank Rate	-0.137	-0.185	0.436	0.011	1.000	0.546
CBWAR	-0.209	-0.334	0.192	-0.227	0.546	1.000

The Number of Transactions shows a weak positive correlation with InGDP (0.191) and USD/KES Exchange Rate (0.169), suggesting that higher economic output and stable exchange rates may slightly align with increased M&A activity. However, it exhibits a

weak negative correlation with CBWAR (-0.209) and Interbank Rate (-0.137), indicating that higher borrowing costs may slightly discourage M&A transactions. It also exhibits a negligible positive correlation with Inflation Rate (0.000), suggesting that inflationary pressures have minimal alignment with M&A activity. This weak relationship indicates that inflation may not significantly influence the frequency of M&A transactions in Kenya's banking sector. Notably, InGDP strongly correlates with the USD/KES Exchange Rate (0.867), highlighting their interconnectedness in the Kenyan economy. Overall, the correlations are mostly weak to moderate, implying that these variables interact but with varying degrees of influence.

4.4 Unit root test

The unit root test checks for stationarity in a collection of series to avoid invalid results. It was conducted using the Augmented Dickey-Fuller (ADF) test.

Hypothesis statements:

H_0 : There is a unit root (non-stationary).

H_1 : There is no unit root (stationary).

Decision rule: Reject null hypothesis if p-value is less than the significance level of 5%. Otherwise, do not reject null hypothesis.

Table 4: Unit root test results

Variable	ADF P-value	Test statistic	Stationarity
Number of transactions	0.010	-4.304	Stationary
InGDP	0.315	-2.638	Non-stationary
Inflation rate	0.138	-3.073	Non-stationary
USD/KES exchange	0.987	-0.338	Non-stationary
Interbank rate	0.109	-3.143	Non-stationary
CBWAR	0.664	-1.782	Non-stationary

The results of the unit root test indicate that the number of transactions is stationary, while the other variables, including InGDP, inflation rate, USD/KES exchange rate, interbank

rate, and CBWAR, are non-stationary, as their p-values are greater than the 0.05 threshold, suggesting they contain unit roots.

4.5 ARDL Model

4.5.1 Lag selection

In this study, the selection of a lag length of 5 for the ARDL model was guided by the need to capture the potential delayed effects of the independent variables on the dependent variable. The optimal lag length was determined using the Akaike Information Criterion (AIC), which suggested that a lag structure of 5 provides the best fit for all the variables. By including multiple lags, the model captures the influence of past values of GDP, inflation rate, exchange rate, interbank rate, and CBWAR, thus providing a robust framework for examining the factors affecting M&A transactions in Kenya's banking sector.

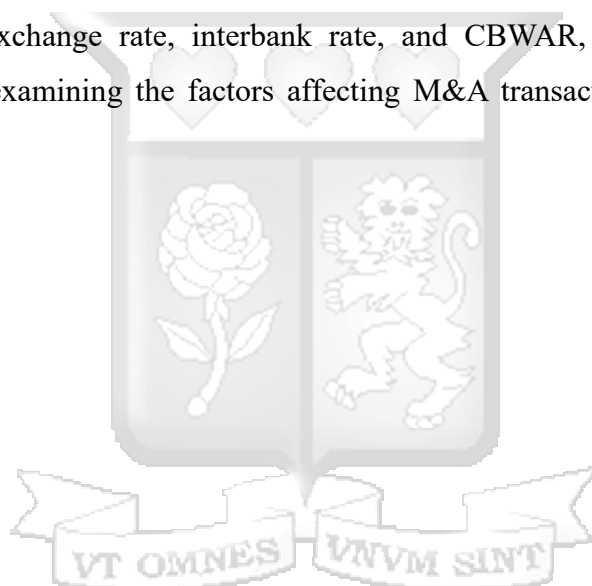


Table 5: ARDL results

Variable	Estimate	Std. Error	t-value	p-value
(Intercept)	-4.290	7.217	-0.595	0.556
L(Number_of_transactions, 1)	0.098	0.157	0.622	0.538
L(Number_of_transactions, 2)	-0.382	0.158	-2.417	0.021**
L(Number_of_transactions, 3)	-0.279	0.167	-1.669	0.104
L(Number_of_transactions, 4)	0.314	0.188	1.671	0.104
L(Number_of_transactions, 5)	-0.372	0.198	-1.882	0.068*
lnGDP	-0.972	0.946	-1.027	0.312
L(lnGDP, 1)	-0.286	1.095	-0.262	0.795
L(lnGDP, 2)	0.375	0.999	0.375	0.710
L(lnGDP, 3)	0.714	0.983	0.726	0.473
L(lnGDP, 4)	-0.298	0.988	-0.302	0.765
L(lnGDP, 5)	0.638	0.758	0.843	0.405
Inflation_rate	-0.058	0.068	-0.853	0.400
L(Inflation_rate, 1)	0.186	0.106	1.764	0.086*
L(Inflation_rate, 2)	-0.216	0.087	-2.485	0.018**
L(Inflation_rate, 3)	0.180	0.082	2.195	0.035**
L(Inflation_rate, 4)	-0.120	0.084	-1.427	0.162
L(Inflation_rate, 5)	0.101	0.064	1.589	0.121
USD_KES_exchange_rate	0.079	0.039	2.056	0.047**
L(USD_KES_exchange_rate, 1)	-0.087	0.066	-1.322	0.195
L(USD_KES_exchange_rate, 2)	-0.053	0.064	-0.838	0.408
L(USD_KES_exchange_rate, 3)	0.091	0.065	1.410	0.167
L(USD_KES_exchange_rate, 4)	-0.110	0.065	-1.692	0.100
L(USD_KES_exchange_rate, 5)	0.093	0.047	1.998	0.054*
Interbank_rate	0.003	0.060	0.044	0.966
L(Interbank_rate, 1)	-0.054	0.081	-0.668	0.508
L(Interbank_rate, 2)	0.027	0.076	0.354	0.725
L(Interbank_rate, 3)	-0.003	0.068	-0.048	0.962
L(Interbank_rate, 4)	-0.007	0.069	-0.096	0.924
L(Interbank_rate, 5)	0.013	0.062	0.208	0.837
CBWAR	0.157	0.307	0.510	0.613
L(CBWAR, 1)	0.048	0.430	0.112	0.912
L(CBWAR, 2)	-0.450	0.463	-0.972	0.338
L(CBWAR, 3)	0.388	0.457	0.848	0.402
L(CBWAR, 4)	-0.403	0.409	-0.987	0.331
L(CBWAR, 5)	0.257	0.220	1.170	0.250

*** Statistical significance at 1% level (p-value < 0.01); ** Statistical significance at 5% level (p-value < 0.05); * Statistical significance at 10% level (p-value < 0.1)

Table 6: Model fitness results

Model summary	
R-squared	0.543
Adjusted R-squared	0.086

The R-squared value of 0.543 indicates that approximately 54.30% of the variation in the number of M&A transactions is explained by the independent variables included in the ARDL model. However, the Adjusted R-squared value of 0.086 suggests that after adjusting for the number of predictors and sample size, only about 8.60% of the variation is effectively explained.

The results from the ARDL model primarily capture the short-term relationships between M&A transactions and the lagged values of M&A transactions, inflation, GDP, exchange rates, interbank rates, and CBWAR at the 5% level of significance. Specifically, the significant second lag of M&A transactions indicates that past activity negatively influences current transactions, suggesting a cyclical pattern in M&A activities. Similarly, the significant second and third lags of inflation demonstrate the delayed impact of inflationary pressures on M&A activity, likely through their effect on borrowing costs. The current and fifth lag of the USD/KES exchange rate also show significance, highlighting both immediate and delayed impacts of currency fluctuations on M&A dynamics, particularly in cross-border transactions. Coefficients of GDP, interbank rates, and CBWAR were not statistically significant, implying no measurable short-term influence during the study period.

The second lag of the number of transactions is significant ($p = 0.021$), showing a negative relationship with current M&A transactions, indicating that past M&A activity exerts an inverse effect on subsequent periods. The statistically significant coefficient of -0.382 indicates that for every additional M&A transaction that occurred two periods ago, the current number of M&A transactions decreases by approximately 0.382, holding all other factors constant. This suggests that previous M&A activity may lead to short-term slowdowns in new transactions, reflecting an underlying cyclical pattern in M&A within Kenya's banking sector.

Similarly, the inflation rate exhibits significant impacts at both the second ($p = 0.018$) and third lags ($p = 0.035$). The second lag has a statistically significant coefficient of -0.216 , indicating that for every 1% increase in the inflation rate two periods ago, the number of current M&A transactions decreases by approximately 0.216, holding other factors constant. The third lag of the inflation rate has a statistically significant coefficient of 0.180 , meaning that for every 1% increase in inflation three periods ago, the number of current M&A transactions increases by approximately 0.180, all else being equal.

Lastly, the current level of the USD/KES exchange rate also shows a statistically significant relationship ($p = 0.047$), indicating an immediate impact of currency stability on M&A transactions. It has a statistically significant coefficient of 0.079 . This indicates that for every 1-unit increase in the USD/KES exchange rate, the number of M&A transactions increases by approximately 0.079, holding other factors constant. This positive relationship suggests that a higher exchange rate, reflecting a depreciation of the Kenyan Shilling, may make Kenyan assets more attractive to foreign investors, thereby increasing the volume of M&A transactions. InGDP, interbank rate and CBWAR do not exhibit statistically significant relationships with the number of M&A transactions in this analysis since their p-values are greater than the threshold of 5%.

4.6 Bounds Test

It is used to examine the existence of a long-term cointegration relationship between the dependent variable and independent variables.

Hypothesis statements:

H_0 : There is no cointegration among the variables.

H_1 : There is cointegration among the variables, indicating a long-term equilibrium relationship.

Decision rule: Reject null hypothesis if p-value is less than the significance level of 5%.

Otherwise, do not reject null hypothesis.

Table 7: Bounds test results

Statistic	Value
F-statistic	3.082
p-value	0.149
Number of regressors (k)	5
Sample size (T)	1000

Since the p-value is higher than the significance level 0.05, it suggests no strong evidence of cointegration in the model. This suggests there is no long-term equilibrium relationship among the variables

4.7 Diagnostic checks

4.7.1 Normality test

The Jarque-Bera test evaluates whether the residuals from the ARDL model are normally distributed.

H_0 : The residuals are normally distributed

H_1 : The residuals are not normally distributed.

Decision rule: Reject null hypothesis if p-value is less than the significance level of 5%. Otherwise, do not reject null hypothesis.

Table 8: Normality test results

Test	X-Squared	df	p-value
Jarque-Bera Test	2.809	2	0.246

The p-value of 0.246 is greater than the significance level of 0.05, indicating that the residuals do not significantly deviate from normality.

4.7.2 Heteroskedasticity

The Breusch-Pagan test was used to check for heteroskedasticity in the residuals of the ARDL model.

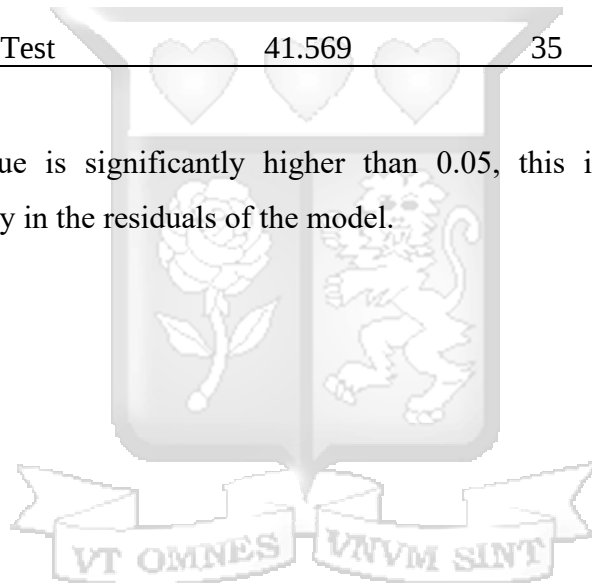
H_0 : The residuals are homoscedastic

H_1 : The residuals are heteroskedastic

Table 9: Heteroskedasticity results

Test	Test Statistic (BP)	Degrees of Freedom	p-value
Breusch-Pagan Test	41.569	35	0.206

Since the p-value is significantly higher than 0.05, this indicates no evidence of heteroskedasticity in the residuals of the model.



CHAPTER FIVE

DISCUSSIONS AND CONCLUSION

5.1 Introduction

This chapter provides a summary of the study's findings, conclusions, and recommendations based on the analysis of the impact of macroeconomic factors on mergers and acquisitions (M&A) within Kenya's banking sector. It also outlines the limitations encountered during the research process and proposes areas for further investigation.

5.2 Discussions

The findings of this study align with several aspects of existing research and theoretical frameworks outlined in chapter two. The significant relationships observed in this study offer critical insights into the role of macroeconomic factors in shaping M&A activity within Kenya's banking sector.

5.2.1 Link to theoretical framework

This study's findings support the Efficient Market Hypothesis (EMH), particularly its semi-strong form. The significance of the current USD/KES exchange rate in the ARDL model suggests that market participants quickly incorporate macroeconomic information, such as currency stability, into M&A decisions. This aligns with Fama (1970) assertion that publicly available information is rapidly reflected in asset prices. The cyclical nature of M&A activity, as highlighted by the negative coefficient of the second lag of the number of transactions, complements the idea in EMH that markets adjust to prior events but reach an equilibrium in the long run.

The results also resonate with the Economic Disturbance Theory. Significant lags in inflation and exchange rates reflect how macroeconomic shocks, such as currency fluctuations or inflationary pressures, influence firm valuations and create conditions conducive to M&A activity. As highlighted by Gort (1969), macroeconomic disturbances create valuation disparities that drive M&A activity, with firms seeking to leverage undervalued assets or capitalize on favourable conditions. The positive and significant

coefficients of lagged inflation further underscore the indirect impact of inflation on transaction volumes by shaping borrowing costs and investor sentiment.

Additionally, the Synergy Hypothesis offers a robust explanation for the observed relationships. The influence of macroeconomic factors such as GDP and exchange rates emphasizes the importance of favourable economic conditions for realizing synergies in M&A transactions. As Bradley et al. (1988) proposed, firms engage in M&A to capitalize on operational and financial synergies, which are likely enhanced during stable economic periods.

5.2.2 Link to empirical framework

The findings of this study align with existing empirical research. For instance, the significant negative relationship between lagged M&A transactions and current activity reflects cyclical patterns in M&A transactions identified by Ostlund and Bramell (2022). They analysed 73,137 transactions from January 1980 to January 2020 in the United States and found a negative relationship between GDP and aggregate M&A activity. They suggested that during periods of high economic growth, firms may be less motivated to engage in M&A due to sufficient organic growth opportunities. Conversely, during economic slowdowns, firms might increase M&A activity to offset declining internal growth, creating a cyclical pattern in M&A transactions. This aligns with the current study's observation of lagged M&A activity exerting an inverse effect on subsequent periods, emphasizing the cyclical nature of M&A within Kenya's banking sector.

Similarly, the importance of inflation rate in this study resonates with the conclusions of Kem (2015). They examined the influence of macroeconomic variables on cross-border M&A activity in 11 developing markets, including Brazil, Indonesia, and India, between 2001 and 2015. The study revealed a negative relationship between inflation and cross-border M&A, suggesting that high inflation deters investment by increasing uncertainty and reducing purchasing power. These findings align with this study's results, which highlight the delayed yet persistent influence of inflation on M&A activity in Kenya's banking sector.

Antunes (2017) investigated the impact of macroeconomic variables on aggregated M&A activity in the UK over a 30-year period (1985–2015), focusing on factors such as GDP, 3-month LIBOR, and the FTSE100 index. The study found that interest rates had a significant short-term impact on M&A activity, with lower borrowing costs incentivizing firms to pursue acquisitions. This finding parallels the results of this study, where the interbank rate, though statistically insignificant, demonstrated some influence on M&A transactions. This suggests that financing conditions, while not a dominant factor in Kenya's banking sector during the study period, still play a role in shaping M&A decisions.

This study extends the scope of existing literature, such as the works of Kem (2015) and Ostlund and Bramell (2022), by situating these findings within Kenya's banking sector. Kem (2015) research in developing markets highlighted the importance of macroeconomic factors like inflation rate in influencing cross-border M&A activity, while Ostlund and Bramell identified cyclical patterns in M&A transactions and their relationship with GDP in the U.S. By focusing on Kenya, this study emphasizes the sector-specific dynamics of macroeconomic variables, such as inflation, exchange rates, and lagged M&A activity, in shaping M&A activity in an emerging market context.

5.3 Conclusions

The findings of the study revealed that the second lag of the number of transactions had a statistically significant negative effect on the current M&A transactions in Kenya's banking sector. This indicates that past M&A activity exerts an inverse effect on subsequent periods, reflecting a cyclical pattern in M&A activity. Specifically, this cyclical nature implies that periods of heightened M&A activity are typically followed by slowdowns as the market absorbs the effects of previous deals. These slowdowns may result from several factors, such as reduced availability of suitable targets, post-merger integration challenges, or market saturation.

In Kenya's banking sector, this cyclical trend may also reflect regulatory adjustments, shifts in macroeconomic conditions, or changing investor sentiment, all of which can influence the timing and frequency of M&A transactions. Additionally, the research findings demonstrated that inflation had a statistically significant effects on M&A activity,

particularly at the second and third lags. These findings highlight inflation's delayed yet persistent impact on M&A transactions.

The study also revealed that the current level of the USD/KES exchange rate had a significant and positive effect on M&A transactions. This suggests that currency movements play a critical role in cross-border M&A transactions by influencing transaction costs and asset valuation. Conversely, variables such as GDP, interbank rates, and CBWAR were not found to have a statistically significant effect on M&A transactions during the study period. Overall, the research findings conclude that the second lag of the number of transactions, lagged inflation rates, and the current USD/KES exchange rate are critical macroeconomic factors influencing M&A activity in Kenya's banking sector.

5.4 Recommendations

The significant relationship between the USD/KES exchange rate and M&A transactions underscores the critical need to manage exchange rate volatility. In addition to maintaining adequate foreign exchange reserves and monitoring capital flows, the Central Bank of Kenya (CBK) could explore implementing policies such as targeted currency interventions during periods of excessive volatility and establishing currency swap agreements with trading partners. Effective exchange rate risk management tools for businesses, such as forward contracts or hedging instruments, should also be promoted to stabilize transaction costs and encourage cross-border M&A activity (Lindskog, A., & Pettersson, L., 2024). Stable currency conditions foster confidence among foreign and local investors, making Kenya's banking sector an attractive destination for M&A deals.

The study further revealed that lagged inflation rates significantly influence M&A transactions. Gichuru (2021) implied that to create a conducive environment for investment, the CBK should prioritize transparent communication of its inflation targets and monetary policies, helping to anchor market expectations. Predictable inflation levels enable better financial planning for businesses, which is essential for structuring M&A transactions. The government should also enhance fiscal discipline and monitor inflationary pressures stemming from global commodity price fluctuations to maintain stability.

Although GDP was not statistically significant in this study, fostering long-term economic growth remains crucial for creating a favourable environment for M&A. Policymakers should focus on infrastructure development, improving the ease of doing business, and fostering innovation to stimulate sustainable growth. Moreover, maintaining adequate liquidity in the banking sector is essential to facilitate M&A financing. Choi, C., & Jeon, B. N. (2011) stated that policymakers could consider providing incentives, such as tax reliefs for M&A financing, reducing regulatory barriers, and promoting access to credit for investors.

Finally, the finding that the lag of the number of transactions has a significant relationship with current M&A activity suggests a cyclical pattern. Policymakers and stakeholders in the banking sector should consider the timing and sequencing of M&A deals. Encouraging diversification of M&A activity across different industries and timeframes can help stabilize transaction volumes and minimize the adverse effects of cyclical downturns. Furthermore, developing platforms to share information on recent M&A trends and expected future opportunities could help align investor decisions with broader economic goals.

5.5 Limitations of the study

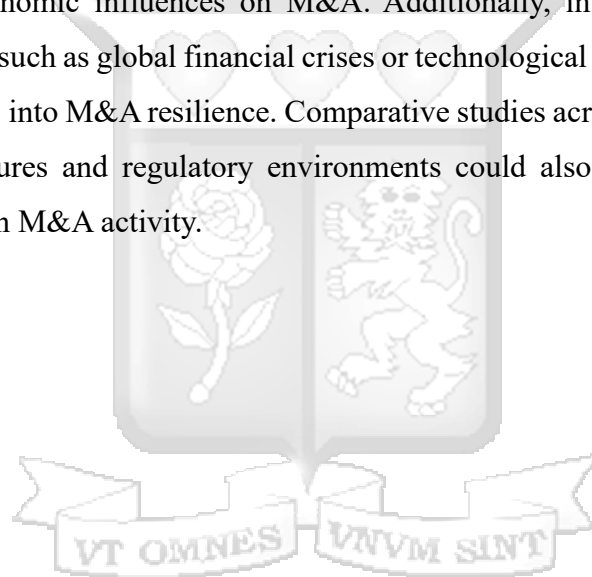
The study period did not fully capture the effects of long-term structural changes or economic shocks, such as the Financial Crisis of 1997, which significantly impacted global financial markets and economies. This event was not included due to the unavailability of consistent macroeconomic data for Kenya during that time. The results, therefore, reflected short-term relationships that may not generalize to other timeframes or conditions.

While the ARDL model and associated diagnostic tests provided robust statistical insights, the study was limited by its reliance on aggregate macroeconomic indicators. This approach may have overlooked firm-level factors, such as management strategies or industry-specific dynamics, which also played significant roles in M&A decisions. The exclusion of firm-level variables was due to the extensive amount of time it would have taken to collect primary data from individual banks.

Finally, the study focused on Kenya's banking sector, which may have limited the applicability of the findings to other sectors or countries with different economic structures, regulatory environments, or market conditions.

5.6 Areas for further research

Future research could extend this study to other sectors beyond banking, such as the energy and petroleum sector, where significant M&A activity has occurred in recent years. Examining this sector would help assess the broader applicability of the findings and provide insights into industry-specific drivers of M&A. Incorporating firm-level factors like management strategies and industry dynamics could further enhance understanding of the microeconomic influences on M&A. Additionally, investigating the impact of external shocks, such as global financial crises or technological disruptions, could provide valuable insights into M&A resilience. Comparative studies across countries with varying economic structures and regulatory environments could also help identify global and regional trends in M&A activity.



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