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Influence of mergers and acquisitions on financial performance of firms listed in Nairobi securities exchange

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INFLUENCE OF MERGERS AND ACQUISITIONS ON FINANCIAL PERFORMANCE OF FIRMS LISTED IN NAIROBI SECURITIES EXCHANGE

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DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Kimotho Terry Ndunyu

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DEDICATION

To my parents Japheth Kimotho and Veronica Kimotho for always believing in me.

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I thank God for taking me through the master's programme, nothing was impossible, and it was all because of him. Even when the road got tough he always gave me the strength to push through.

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ABSTRACT

The objective of this study was to investigate the influence of Mergers and Acquisitions on financial performance of firms listed in the NSE. The study was guided by three specific objectives; to compare financial performance of NSE listed companies during Mergers and Acquisitions; to compare financial performance, synergy effects, risk diversification and market share of companies listed in the NSE during Mergers and Acquisitions; and to assess managerial perspectives regarding determinants of Mergers and Acquisitions of NSE listed companies. The study adopted the synergy theory and behavioural theories to guide the study. The study adopted positivist approach to research and utilised a descriptive research design. The study targets managers and heads of finance, risk and compliance, credit, internal audit, and operations departments of the 19 sampled firms. The target population of the study was 190 respondents. The established sample size was 129 respondents but the actual sample size was 102 participants. The study incorporated both primary and secondary data. A questionnaire was used to collect the primary data and secondary data was collected from financial statements of the sampled firms. The first stage of analysis was conducted using descriptive analysis of primary data which showed that market share had a higher overall mean score, followed by risks diversification, and synergy. The secondary analysis findings show a positive and statistically significant relationships between the synergy, risk diversification, market share and financial performance. The findings show that market share had the greatest effect on financial performance of the firms. The findings also show that there was a statistically significant difference between financial performance of sectors listed in the NSE pre-merger and post-merger. This difference was experienced in terms of their market share post-merger. This finding suggests that different sectors experienced changes in their financial performance before and after undergoing M&As. The study concludes that financial performance of firms increased in the post-merger era; that market share determined financial performance of NSE firms post-merger; and that market share was the greatest motivation for firms’ to merge and acquire. The study recommends that companies with little market share should engage in M&As to improve their performance and maximize the shareholders wealth; that companies on different lines of production and different industries should engage in M&As to take diversify their risks; and that companies should therefor adopt this as part of their strategy to improve performance. The findings revealed that there was a statistically significance difference in the market share of firms post-merger. The study therefore suggests for further study to determine the difference of each sector in terms of market share after merger and acquisitions.

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ABBREVIATIONS AND ACRONYMS

BAT	Banks Association of Turkey
BRSA	Banking Regulation and Supervision Agency
EPS	Earnings Per Share
ISE	Istanbul Stock Exchange
M&As	Mergers and Acquisitions
NSE	Nairobi Securities Exchange
ROA	Return On Assets
ROE	Return On Equity
SPSS	Statistical Package for Social Sciences

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Businesses are constantly evolving with only the innovative once surviving. Those losing out to competition are often eliminated either through mergers, acquisitions, takeover or any other form of restructuring. Mergers and Acquisitions (M&As) are considered to be the most common ways businesses can restructure themselves and have played significant roles in the external development a good number of global firms. M&As form an important change agent (Depamphilis, 2010).

Mergers and Acquisitions have been very popular event since the 20th century. The main reason for Mergers and Acquisitions is that they are used in creating value to shareholders of the target and acquiring firms. Therefore, Mergers and Acquisitions are an essential tool for growth in the corporate world with most companies engaging in it as a growth strategy. According to Chatarjee and Banerjee (2013) growth can be best achieved through Mergers and Acquisitions. It can however be noted that various companies are motivated by different factors other than just growth.

Some Mergers and Acquisitions are simply motivated by the need to gain monopoly in a certain market or simply gain operational efficiency. It should however be noted that the determinants of Mergers and Acquisitions are not mutually exclusive, and a company may engage in one for various reasons. In developed nations, the number of Mergers and Acquisitions is higher compared to those developing including Kenya. However, Kimani (2012) noted that in the first seven months of 2012, the Kenya recorded a sharp rise in the number of Mergers and Acquisitions deals. This trend has continued to be witnessed as more and more companies get involved in M&As

In Kenya changes in the operating environment has resulted in firms listed in the Nairobi Securities Exchange, having to merge or acquire other firms in the industry. Firms in particular sectors have been seen to merger more than firms in other sectors. Reasons for their adopting Mergers and Acquisitions vary and theoretically it is assumed that Mergers and Acquisitions are motivated by the need for firms to meet the increased levels of share capital, to acquire synergies, increased market power through expansion of distribution network and market share, enhanced profitability, risk diversification and to benefit from best global practices among others (Kiarie, 2014).

It is interesting to find out which sectors in the Nairobi Securities Exchange are frequented by Mergers and Acquisitions. It will also be interesting to find out the drive to Mergers and Acquisitions for firms in the respective sectors. Are the motives the same across all the sectors, Why does one sector have more Mergers and Acquisitions than another one, and how do these motives affect the performance of the sectors after a merger (Mugo, 2017).

1.1.1 Mergers and Acquisitions

Mergers and Acquisitions are techniques which can be used to establish inter-firm linkages whereby firms purchase either a section or control interest of a different firm. A merger refers the joining of two or more firms into one while an acquisition is the act of an organization buying another with the aim of maintaining control (Hitt, Harrison, & Ireland, 2001). Similarly, Lee and Lieberman (2010) define acquisition as an act of taking over which is characterised by a change of control of an organization from a specific group of shareholders to another. The organization which makes the move to acquire or merge with another is termed as an acquiring company while the one being solicited by the acquiring company is known as target company (Machiraju, 2007).

The banking sector has has witnessed numerous Mergers and Acquisitions currently. Different studies show that M&As activities have mainly been observed in the the banking and insurance, oil, gas and electricity among others. Brealey (2006) argues that the year 2000 saw corporations within America experience more than 1.7 trillion dollars only on M&As. Therefore, it can be acknowledged that M&As can be used as means that lead to growth through progressing possessed organizational strengths and acquisition of a competitive edge that is enjoyed by a different firm.

Forcello et al. (2002) are in support of the theory that Mergers and Acquisitions act as ways to which reinforcement can be applied on the existing capabilities as well as having access to new set of valuable capabilities, considered to be difficult to imitate but can be integrated within an invisible section of a different firm. According to Luypaert (2008) Mergers and Acquisitions are perhaps the most common way in which corporate restructuring or business combination, which have played an important role in the external growth of a number of leading firms in the world and it is the fastest way to grow as value chains of the target firm already exist and operational.

Other than growth, different authors have concluded different motives behind Mergers and Acquisitions. The main reason why mergers and acquisition is popular nowadays is for the purpose of increasing the shareholder’s value. This argument was supported by

Sharma (2009) who argued that the overall performance of firms that have merged increases since the shareholder's value is usually increased. On the other hand, Weston et al. (2005) noted that corporate and financial buyers were at a position to obtain superior performance.

Weber et al. (1996) was in support of this idea through his argument that the sole purpose why merging and acquiring was advisable was because it improved the overall performance through attaining synergy, between different business units that bring about a competitive advantage. Mergers and acquisition continue to be popular across the world since they bring about a competitive advantage by acquiring a larger market share and reduce the risks facing the business (Kemal, 2011).

Mergers and Acquisitions have not had the same success story in Kenya after numerous cases being witnessed of failures especially in the banking sector. As much as this has been the case, there are also reported incidents of Mergers and Acquisitions giving positive performances. As a result, most stakeholders have been left confused on whether to agree to Mergers and Acquisitions or not (Muniu, 2012).

The successful mergers can be attributed to the fact that carefully thought out post-merger policies have been adopted after a significant amount of time being dedicated to courtship (Very & Schweiger, 2001). The study is built on the premise that the success of M&As depends on the extent to which the motives are achieved. The performance of the Mergers and Acquisitions are measured in terms of the motives or the theories behind the formation of mergers and the level of achievability post-merger.

1.1.2 Mergers and Acquisitions in the Nairobi Securities Exchange

The Nairobi Securities Stock Exchange (NSE), founded in 1954, is considered to be amongst the leading African Exchange and maintains sixty years of heritage in listing equity and debt securities. The NSE is known to be a global trading facility for investors who seek the opportunity to gain exposure not only Kenya's but also Africa's economic growth.

The NSE has 65 listed companies from 13 different sectors according to the latest NSE daily report. Mergers and Acquisitions activities in Nairobi Securities exchange have been on the rise over the years, Access Kenya was acquired by Dimension Data Holdings, a premium provider of IT solutions and services in May 2013. Total Kenya acquired Chevron Kenya in 2009, CMC Motors Limited was acquired by Al Futtaim which was closed during year 2014, TransCentury acquired Rift Valley Railways during the year 2006 just to mention a few of acquisitions deals (Standard Digital, 2013).

Mergers and Acquisitions activities in the financial sector are quite popular with several banks engaging in the activity. There are a number of mergers of commercial banks dating back in 1989 where 9 financial institutions merged together to form Consolidated Bank of Kenya Ltd. There have been a total of 33 mergers and 9 acquisitions in the Kenyan Banking Industry. Recent mergers are, Equatorial Commercial Bank and Southern Credit Bank to form Equatorial Commercial Bank Ltd (now Spire Bank) in 2010, which was later acquired by Mwalimu Sacco Society Ltd in 2014 and maintained the name, City Finance Bank Ltd and Jamii Bora Kenya Ltd to form Jamii Bora Bank 2010 and Savings and Loan (K) Limited and Kenya Commercial Bank Limited to form Kenya Commercial Bank Limited in 2010. Recent acquisitions are Giro Commercial Bank Ltd by I&M Bank Ltd, Fidelity Commercial Bank Ltd by SBM Bank Kenya Ltd and Habib Bank Kenya Ltd by Diamond Trust Bank Kenya Ltd all in 2017.

Table 1.1: Listed Firms in Mergers and Acquisitions by Sector

No.	Sector	Number of M & A
1	Banking	8
2	Commercial and Services	3
3	Insurance	2
4	Energy and Petroleum	2
5	Manufacturing and Allied	2
6	Investment	2
	Total	**19**

Source: Author

1.2 Research Problem

Mergers and Acquisitions became a strategy of choice for organizations attempting to maintain a competitive advantage (Wullaerts, 2002) and also enhance growth potential. Mergers and Acquisitions have also been used by firms as a way of survival and to keep up with the evolving business industry. In 1989, financial institutions merged to form Consolidated Bank of Kenya Ltd. These banks were forced to merge in order to continue operations as they had fallen short of the minimum capital regulatory requirements set by the Central Bank of Kenya. The lack of a restructure would have forced the firms out of business.

The motivation for Mergers and Acquisitions has been well documented in the literature. Synergy, risk diversification, and market share are some of the most cited benefits or motives behind firms opting for Mergers and Acquisitions. Weston et al., (2005) argued that Mergers and Acquisitions create efficiency that is beneficial to both the acquirer and the client. Kenya has seen an increase in the number and frequency with which M&As are occurring and this has been experienced more in the financial sector, but trends show that more and more M&As are going to spill over to other sectors.

Various studies have been carried out in Kenya to establish the purpose for Mergers and Acquisitions in specific firms and sectors. A study by Njoroge (2007) was aimed at mergers and acquisition experiences by commercial banks within Kenya while Muthiani (2008) conducted another on cross cultural perspective Mergers and Acquisitions with a case of Glaxosmithkline Kenya Limited. A study on what effects Mergers and Acquisitions had on the financial performance of firms listed on the NSE was done by Kiplagat (2006) while perceptions of doctors on Mergers and Acquisitions in the pharmaceutical industry in Kenya was conducted by Nyagah (2007). The existing studies report only the determinants in one dimension. They do not do any comparison but give a report on the determinants for a particular firm or sector.

There is less evidence of studies that have been conducted on the effects of M&As on the financial performance of firms in different sectors. There is also little evidence, of studies that have been conducted to determine the motives of M&As on financial performance among sectors listed in the NSE.

The study gives a different perspective to the existing research and increases the knowledge of the investors of the NSE who can be able to form an informed decision on which sector to invest in based on the financial performance of Mergers and Acquisitions in the sector. The managers of the firms will also be informed of the motive which should be their anchor depending on the sector in which their firm belongs to. Most managers are known to make wrong decisions which later leads to failure of the Mergers and Acquisitions. This study aims to fill this gap by conducting an investigation on the influence of M&As on the financial performance of sectors and industries listed on the NSE. This study focussed on three motives for firms to go into M&A; that is, synergy, market share, and risk diversification and the impact of these factors on the financial performance of sectors listed in the NSE.

1.3 Research Objectives

1.3.1 General Objective

The objective of this study was to investigate the influence of Mergers and Acquisitions on the financial performance of firms listed on the NSE.

1.3.2 Specific objectives

i. To compare the financial performance of NSE listed companies before and after Mergers and Acquisitions;
ii. To compare financial performance, synergy effects, risk diversification and market share of companies listed in the NSE before and after Mergers and Acquisitions; and
iii. To assess managerial perspectives regarding determinants of Mergers and Acquisitions of NSE listed companies.

1.4 Research Questions

i. What is the difference between financial performance of NSE listed companies before and after Mergers and Acquisitions;
ii. What is the difference of the financial performance, synergy effects, risk diversification and market share of companies listed in the NSE before and after Mergers and Acquisitions; and
iii. What is the managerial perspectives regarding determinants of Mergers and Acquisitions of NSE listed companies.

1.5 Scope of the Study

There are 64 listed firms in the Nairobi Securities Exchange as at January 2018. This study, however, is limited to 19 firms which have undergone Mergers and Acquisitions as at January 2018. The study targets heads and managers of finance, risk and compliance, risk and compliance, credit, internal audit, internal audit, and operations in each of the 19 firms. The study scope is three years before merger period and three year after the merger period for each of the companies. The study only uses Return on Assets (ROA) as an indicator for financial performance.

1.6 Significance of the Study

In theory researchers and academicians are groups who will benefit from the study in that they may identify the researcher gap and conduct further study on this topic. The research will also help in shedding some information which can be used to conduct other studies on the determinants of Mergers and Acquisitions not only in sectors within the NSE but also businesses in Kenyan economy and other economies in the world.

In practice the study will be used by the management of organizations who are agents of the shareholders and who their main aim is to maximize the wealth of the shareholders. The management will therefore gain insight on advantages and disadvantages of Mergers and Acquisitions. They will be able to know the kind of Mergers and Acquisitions they can use in order to accelerate the organisations growth.

The shareholders who are the owners of the firms are interested in the growth of the organization. With only an increase in shareholders' wealth is when the shareholders' will witness growth of the firm. The owners of the firm will therefore be looking to find out whether M&As are beneficial and if they lead to growth of shareholders' wealth.

The growth of the firms through Mergers and Acquisitions is beneficial to the government as this is an indicator of economic development. The government benefits through income growth from taxes paid and also general economic growth as the GDP generally goes up, there is decrease in inflation rate as well as improvement of general economic growth indicators in the country. The potential investors will be interested as they will be on the look out to see the companies undergoing Mergers and Acquisitions in order to make an investment decision on whether to invest or not.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a critical and in-depth evaluation of previous research related to the determinants of Mergers and Acquisitions of companies; it will contain theoretical literature and empirical literature. A theoretical review is important since it helps achieve an in-depth understanding of the existing information. Empirical literature will further assist in understanding past studies in the same field by different people and the recommendations therein.

2.2 Theoretical framework

This section of the chapter presents the theories that the study intends to use in understanding and explaining the study variables. The study adopted the synergy theory (Sirower, 1986), Agency theory (Jensen, 1986), and the behavioural theory (Roll, 1986).

2.2.1 Synergy Theory

According to the Synergy theory management of an organization achieves efficiency gains through a combination of efficiency targets with their businesses after which emphasize on elevating the target's performance (Sirower, 1986). Trautwein (1990) refers to the Synergy theory as the Efficiency Theory. The theory held that mergers were executed to achieve synergies from which different synergies can be achieved. One is the financial synergy that is focussed on reducing the capital costs attained through lowering systematic risks of an organization's investment portfolio through a number of activities increases its access to affordable capital as well as creating an internal capital market.

Second, operational synergies which can be realized from combining separate units or from knowledge transfer according to Porter, 1985. Thirdly, managerial synergies which can be attained when the acquiring firm managers possess managerial skills and knowledge which lack in the management of the firm being acquired. The financial synergy has recently been under immense scrutiny with the prominent argument being that there exists no proof that can either back lower systematic risks or advantages of internal capital markets. Moreover, it was established that operational and managerial synergies have no relationship with raising motivation levels for acquisitions.

The Synergy theory will inform this study as one of the most popular motive behind Mergers and Acquisitions is to achieve efficiency in the operations of the firm by taking advantage of the resources of the target company such as skills of the managerial team.

2.2.2 Behavioural theory

Roll (1986) argues that the hubris hypothesis states that management methodically are prone to error of optimism when evaluating merger opportunities as a result of having too much self-confidence. This implies that managerial motives are crucial in determining Mergers and acquisition outcomes since management can act in a way that maximizes their individual value and commit to empire building rather than focussing on their shareholders' value (Trautwein: 1990, Johnson-Selfridge & Zalewski, 2001).

Jensen (1986, 1988) insists that managers are most likely to invest the free cash flow in different project; acquisitions with negative NPV; if there lies a possibility of increasing personal value instead of maximizing that of the shareholder. The free cash flows, mainly within the reserves, should instead be paid out as dividends to shareholders if an organization intends to be not only effective but also maximize stock price. Managerial hubris can be perceived as an agency problem which comes about as a result of differentiating ownership and control, and the gap arising due to managerial and shareholders' interests as well as motives (Rau & Vermaelen, 1998; Jensen & Meckling, 1976).

A study on the stock returns of 191 acquiring companies from 1963 to 1981 by Lewellen and Rosenfeld (1985) concluded that there existed a strong correlation between unusual stock returns from Mergers and Acquisitions, and the management ownership levels within an acquiring organization. Moreover, it was discovered that a manger that holds large ownership within any firm is most likely to be less engaged in Mergers and acquisition which in turn reduces the acquirer's shareholder's wealth. Likewise, another study by Firth (1991) which focussed on link between executive reward and mergers and acquisition established that an increase in the shareholder's value led to executive rewards.

This was in contrast to situations where executives gained even when there was destruction of shareholders wealth. Outcomes from the study also raises eyebrows since managers via Mergers and Acquisitions still can make an effort of utilizing their individual value at their shareholders' expense. The Behavioural theory will inform this study as one of the motives that of Mergers and Acquisitions. Some managers engage into this due to advance their own benefit and not that of the shareholders. This is one of the major reasons blamed on failure of Mergers and Acquisitions.

2.3 Empirical Review

2.3.1 Synergy and financial performance

Synergy can be described as the situation where two organizations that combine their resulting institution obtain a higher value compared to the total of the previous firms, an argument which has so far been advanced with the aim of justifying mergers. For synergy to be achieved the costs from the combined firms have to be less than the total of each firm accrediting the reduction in economies of scale and scope (Chesang, 2002). Synergy has three main benefits which include the operating, financial and managerial synergies. Operating synergy is successfully employed by enhancing revenue while financial synergy is regarded as the impact to which a corporate merger has on the overall cost of capital to the acquiring organization thus the firms carry the possibility of having access to cheaper capital (Akenga & Olang, 2017).

A research on the effects of Mergers and Acquisitions when attaining synergy for commercial banks in Kenya was conducted by Misigah (2013). The study's population consisted of 15 banks which from the year 2000-2010 had successfully completed their merger and acquisition transactions. The ratios were analysed so as to provide a comparison of the effects mergers have on growth in assets, profitability and shareholders' value at both pre and post-merger periods. The outcomes implied that the banks undertook mergers due to the rise in stakeholders' value and profitability growth. Therefore, mergers were significantly contributed to rise in profitability and synergy.

Fatima and Shehzad (2014) further conducted a research to determine the effects of M&As of insurance firms' financial performance within Pakistan from which analysis was conducted on only six financial ratios. The study sample consisted of ten firms which from2007 to 2010 were already into mergers. A three-year pre and post-merger data points obtained from the firms after which their averages were compared. The findings found no relationship between synergy and financial performance.

Junge (2014) studied the changes in operating performance brought by the synergy types after the merger. The sample consisted of 420 mergers which occurred from 1988 to 2008. The results indicated an improvement in overall operating performance. Mergers which aimed at achieving efficiency synergy portrayed a steady performance improvement compared to those that aimed at synergy from complementary resources.

A study by Ogada, Njuguna, and Achoki (2016) was conducted to determine the effect synergy had on financial performance of merged institutions within Kenya's financial service sector. A mixed research design was used and data was obtained from forty firms which had already done their merger processes by 2013. Study findings showed there existed a firm correlation between performance, operating synergy and financial synergy as well as a performance post-merger improvement.

Akenga and Olang (2017) carried out a research to establish the effects of Mergers and Acquisitions Kenya's commercial banks' financial performance. Influences of asset growth, shareholders value and synergy on financial performance were the aspects that were being measured. The study adopted a causal research design. It adopted a census method which involved studying all the 6 merged banks from the year 2010 to 2017. Secondary data such as audited annual reports of commercial banks that had been published were used in the study. Descriptive and inferential statistics were used to analyse data at 5 % significance level. The results revealed that Mergers and Acquisitions portrayed a significant impact on shareholders' value and assets of the Kenyan banks that had already merged.

2.3.2 Risk Diversification and financial performance

The activities of M&A can be viewed as way of corporate diversification. Most organizations are always after minimizing the risk and exposure to a number of volatile segments in an industry through coming up with different sectors to their corporate umbrella. Diversification entails the entry of new markets by a firm. An increase in the number of businesses an organization operates in in relation to products, geographical markets or knowledge (Chandler, 2012; Jarrell, Brickley, & Netter, 2014).

However, other studies show evidences that M&As did not lead to risk diversification for organisations. One such study is that by Agrawal, Jaffe, and Mandelker (1992) which proves the existence of negative returns of firms which dwell on increasing corporate diversification after going through the cross-border M&A transactions dating from 1990 to 1999 it was concluded by Errunza and Miller (2008) that US acquirer firms' excess values shrank in the first two years after the acquisition. Moreover, they established that US acquires went through a significant post-merger after being involved in unrelated M&As.

Yigit (2012) examined how Turkish banks diversified and how it affected their performance via Mergers and Acquisitions. The sample consisted of fifty banks of which data was obtained from Banking Regulation and Supervision Agency (BRSA), The Banks Association of Turkey (BAT) and Istanbul Stock Exchange (ISE) determine the link between credit diversification and performance. Return on Assets (ROA) and Return on Equity (ROE) were used in the study as a measure of performance while Herfindahl Index (HI) was used as a measure f diversification. It was established that ROA and ROE were explained by diversification.

A different research by Walker (2000) concluded that related acquisitions did not have any significant impact compared to unrelated acquisitions for targets and acquirers. The sample consisted of 278 US M&A announcements from 1980 t0 1996. Meanwhile, Graham, Lemmon and Wolf (2002) used Compustat data obtained from 365 firms which made acquisitions and were in control of the existing characteristics of the firms that had been acquired from 1980 to 1995. It was established that entirely all the characteristics clearly explained how reduction occurred in the excess value of acquiring firms immediately after the merger irrespective of the form of acquisition and firm.

Ogada, Achoki, and Njuguna (2016) carried out a research on how financial performance of merged institutions was affected by diversification in Kenya. The study adopted a mixed methodology research design. The study population included all 51 merged financial service institutions in Kenya. Purposive sampling was used. Questionnaires were used as primary data while templates were used as secondary data. The researcher used quantitative techniques in analysing the data. Descriptive analysis for the study included the use of means, frequencies and percentages. Inferential statistics such as correlation analysis was also used. Panel data analysis was also applied. Further, a pre and post-merger analysis was used. The study found no significant effect on financial performance of merged institutions.

An examination by Mugo (2017) was conducted to determine the effects of merger and acquisition on financial performance in the commercial banking sector. The study mainly dwelt on the financial performance banks in Kenya that had initially merged from 1999 and 2005. Comparative analysis was done on both the pre and post-merger periods to check whether mergers had made any significant improvements after merging. Financial statements for five years prior to and after the merger provided secondary data which was analysed with the aid of statistical tools. The findings suggested a linear relationship between risk diversification and financial performance.

2.3.3 Market Share and financial performance

Through Mergers and Acquisitions, companies undergoing Mergers and Acquisitions will be able to extend their market share and revenue base hence increase their profitability. Kiplagat (2006) conducted his research to determine how the financial performances of companies listed at the NSE were affected by Mergers and Acquisitions. Forty-eight firms listed on the NSE served as the population while twenty were used as the sample. Half of the firms in the sample had merged while the other had not and were still in operation during the duration counterparts were emerged. The study concluded that concluded that mergers improved the performance of companies listed at the NSE. His findings are in line with the theory that companies engage in Mergers and Acquisitions to achieve growth and increase their profitability.

A study conducted by Nyagah (2007) focussed its attention on Kenya's pharmaceutical industries concerning how doctor's perceived mergers and acquisition. The study population was of doctors within Nairobi and a sample size of fifty doctors was selected. Study findings showed that many respondents agreed to the fact that merged pharmaceuticals firms were profit driven. Moreover, many respondents agreed to these firms being domineering and arrogant. On the other hand, the disregarded the idea of merged pharmaceuticals being caring partners. The findings indicate that there is significant relationship between growth and increase in market share and the occurrence of Mergers and Acquisitions.

Ashfaq, Usman, Hanif, and Yousaf (2014) conducted a research to determine what impact merger and acquisition activity had towards post-merger financial performance of firms in Pakistan's' non-financial sector. The study sample comprised of sixteen firms that had engaged in merger and acquisition from 2000 to 2009 and moreover appeared in the Karachi stock exchange list. The impact of merger and acquisition was analysed through absolute and relative financial performance. The post-merger financial performance was measured using ratios such as the return on equity, return on assets and earnings per share. The findings indicated that companies to maintain their market share in the presence of international competitor.

A study by Ghosha and Dutta (2014) in India aimed at degree of change on performance levels of the firms in the telecom sector. Comparison between the post and pre-merger phase was done through HR and different financial parameters such as the human capital return on investments. The outcomes of the study were mixed. A study by Ndora (2010) on the effects of M&A towards financial performance was conducted on insurance firms in Kenya. From a population of forty two registered firms the study used a sample of six that had already merged from 1995 to 2005. The firms' information about the five years prior and after the merger was analysed after which the outcome was tabulated. It was concluded that M&A resulted in an increase in market share and financial performance.

Ombaka and Jagongo (2018) conducted a study on Mergers and Acquisitions effect on financial performance among selected commercial banks. The population of a study consisted of 9 banks that have merged or acquired in the period 2010 to May 2017 in Kenya. This included 3 mergers and 6 acquisitions. The study used both primary and secondary data and established that operational synergy, differential efficiency, risk diversification and market share development significantly influence Kenyan commercial banks financial performance when they are considered as indicators of Mergers and Acquisitions.

A study aimed at identifying how growth of Kenyan banks is affected by M&A was conducted by Misigah (2013) of which it comprised of a population of fifteen banks which between 2000 and 2010 had merged. Comparison of the effects of mergers on asset growth, financial performance and shareholder's value before and after the merger period was conducted through a comparative analysis. From the respondents it was determined that the core reason that led to banks to undertake mergers was associated to the growth in the total number of shareholders' value and overall financial performance. A significant growth was possible due to the synergistic effect.

2.4 Research Gap

Several studies have been done on Mergers and Acquisitions. These studies have produced mixed conclusions with some finding firms that merge gain significantly while others arguing that the mergers played no positive role on overall performance. The studies have also concluded various motives behind Mergers and Acquisitions especially in companies listed in the NSE and individual sectors. There seems to be no study which compares the determinants across the sectors listed in the NSE. There also seem to be no evidence of why some sectors experience more Mergers and Acquisitions that others. It's also uncertain whether sectors with more Mergers and Acquisitions perform better than those without. Making a final conclusion based on the existing literature is rather impossible thus exists a need for more studies to be conducted on different sectors so that there could be generalized findings which could apply to other economies sharing similar characteristics.

2.5 Conceptual Framework

The conceptual framework (Figure 2.1) shows the independent and dependent variables and how these were measured synergy was measured by calculating an average increase of Earnings per Share (EPS) before and after M&A; risk diversification was measured by calculating the average of market betas before and after the merger; and market share will be measured by calculating an average of firm revenue over industry revenue before and after merger. The dependent variable (financial performance) was measured by calculating an average of Return on Assets (ROA) of sampled firms. The sectors in the NSE are also included as a part of the independent variables.

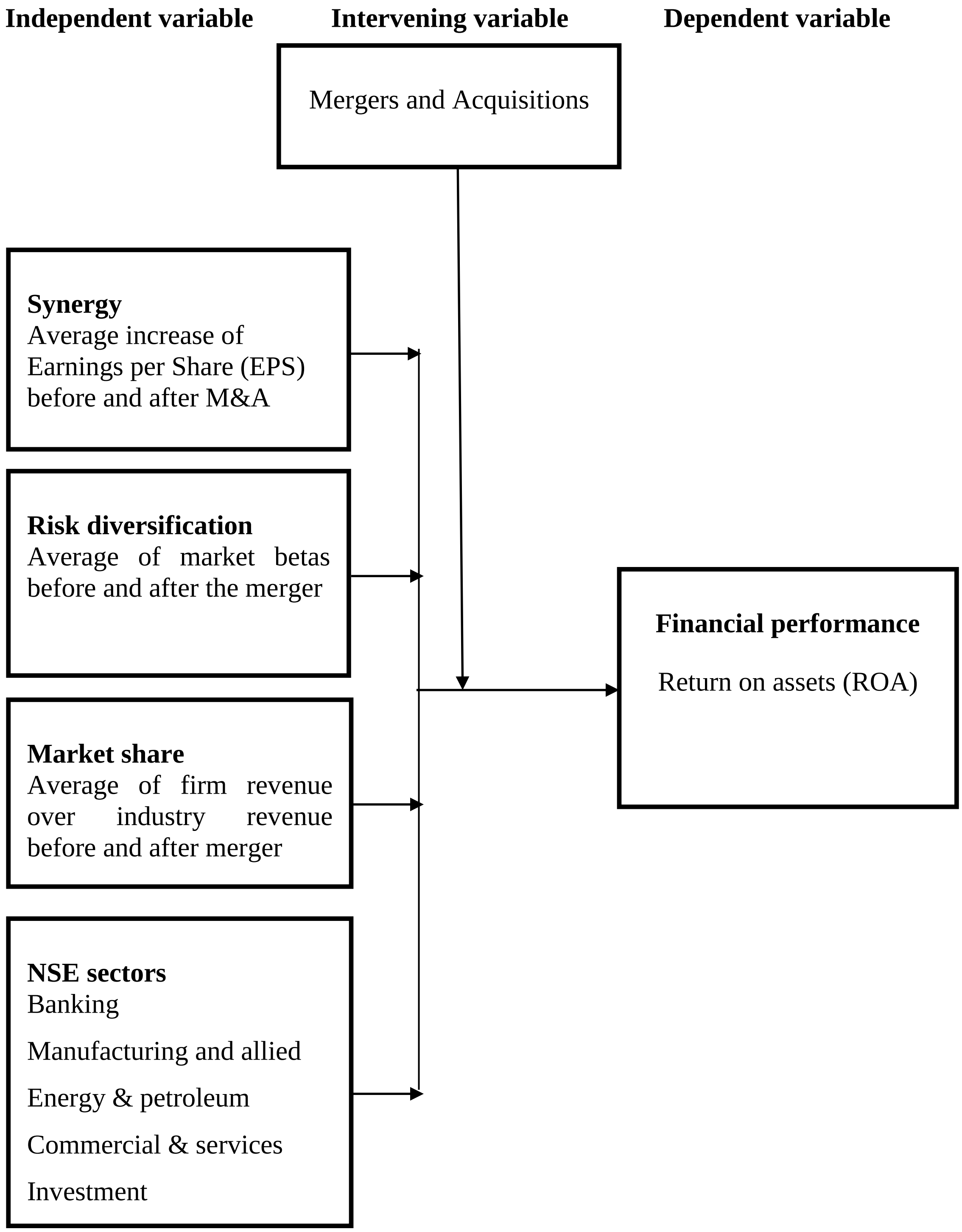

Figure 2.1: Conceptual Framework

Source: Author

2.6 Operationalisation table

The operationalisation table shows the variable information of the study. The independent and dependent variables are listed and the indicators that the study intends to measure are presented therein. The indicators are borrowed and adapted for this study from the literature review. For primary data, the study used likert scale items to measure synergy, risk diversification, and market share. For secondary data, the study will use Return on Assets (ROA), increase in Earnings per Share (EPS) to measure synergy, market Beta to measure risk diversification, and market share was measured using firm revenue against industry revenue. The intervening variable for the study was Mergers and Acquisitions.

Table 2.1: Operationalization Table

Variables	Operational definition	Indicators	Measurement Scale	Citation
Synergy	Reduced Cost of production Increased production yield	Average increase of Earnings per Share (EPS) before and after M&A	Ratio	Akenga & Olang (2017); Ombaka & Jagongo (2018)
Risk diversification	Growth in product base	Average of firm betas before and after the merger	Ratio	Ogada et al. (2016); Maditinos, Theriou, & Demetriades (2009)
Market share	New customer base Increase in order of existing customer base	Average of firm revenue over industry revenue before and after merger	Ratio	Ndora (2010); Ombaka & Jagongo (2018)
Financial performance	Increase in profitability	Return on Assets (three years before merger and three years after merger)	Ratio	Audited Financial Results

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design, population of the study, sample size and method, data collection method and the data analysis methods. The chapter presents a blueprint of how the study was conducted from data collection to the point of analysing and concluding the research findings.

3.2 Research Philosophy

The study adopted positivist approach to research. The aim of positivist studies is to consistently be rational and use logical approaches to seek objectivity (Carson, Gilmore, Perry, & Gronhaug, 2001). The positivist approach emphasises that researchers should be detached from the study and use statistical and mathematical procedures so as to make inferences from the study. The positivist approach was appropriate for this study as it used secondary data to determine relationship between variables. The use of secondary quantitative data allowed the researcher to be impartial when conducting the study and be objective. The positivist approach allows the researcher to conduct the research in a value-free way, and stay impartial to the subject of the research (Saunders, Lewis, & Thornhill, 2009).

3.3 Research design

The study employed a descriptive research design as it seeks to obtain information regarding the variables. The objective of the descriptive research design is to describe the way things are or the way in which they exist in a particular time. Descriptive studies are able to give a systematic description that is accurate and factual as possible which is applicable to a research phenomenon. According to Kothari (2008), the descriptive research approach is applicable when describing the features of a phenomenon in a specific situation. The design was helpful in obtaining data on the current status of merged companies within the sectors listed in the NSE.

3.4 Population

The population for the study was the 19 firms listed in the Nairobi Securities Exchange (NSE) that have undergone Mergers and Acquisitions. The target population of the study is staff of firms listed in the NSE that have been in engaged in a merger and acquisition.

The study targets managers and heads of finance, risk and compliance, credit, internal audit, and operations departments in the firms as shown in Table 3.1.

Table 3.1: Target population and sample size

Categories		Population	Sample size
1	Head of Finance	19	13
2	Manager Finance	19	13
3	Head of Risk and Compliance	19	13
4	Manager Risk and Compliance	19	13
5	Head of Credit	19	13
6	Manager Credit	19	13
7	Head of Internal Audit	19	13
8	Manager Internal Audit	19	13
9	Head of Operations	19	13
10	Manager Operations	19	13
Total		**190**	**129**

Source: Researcher (2018)

3.5 Sampling

Sampling is the process of selecting a portion of the target population to be interviewed in a study. The study used probability sampling techniques to select the sample and identify the size of the sample. Stratified random sampling was used to categorize the population into different strata. The study uses Yamane (1967) sampling formula; where the formula uses a 95% confidence level and p = 0.5 to determine the sample size for the study. The sample study established at 129 respondents.

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{190}{1 + 190(0.05)^2}$$

3.6 Data Collection

The study adopted both primary and secondary sources of data. The primary data was collected from respondents using a questionnaire and secondary data was collected from audited financial statements. This section elaborates the data collection methods. The primary data was used to gather perceptions of managers on the influence of M&As on financial performance whereas secondary data was used to collect objective data on the influence of M&As on financial performance.

3.6.1 Primary data

The study collected primary data through administering questionnaires to respondents. The questionnaires had four sections. The first section of the questionnaire had the demographic profile of the respondents, and sections on synergy, risk diversification, and market share. The statements for each of the independent variables was borrowed from previous studies.

3.6.2 Secondary data

Secondary data were used for the dependent variable where a data collection sheet was used to collect the market share (company revenue/sector revenue), risk diversification (Market Beta), synergy (increase in Earnings per Share [EPS]), and financial performance (ROA) of the 19 firms in the NSE that had undergone mergers and acquisition. This information was collected from audited financial reports of the firms three years before Mergers and Acquisitions and three years after the merger and acquisition. This is because most of the previous researchers have used 3 years (Marangu, 2011; Mboroto, 2013).

3.7 Data Analysis

The study used the Statistical Package for Social Sciences (SPSS) Version 23 to analyse the data. The primary data from the questionnaires was coded and captured into SPSS. The data from financial statements was also picked from annual financial reports of the sampled firms and entered into the statistical software. The first stage of analysis was conducted using descriptive analysis of the data. This was done using frequencies and percentages for the nominal data (demographic information). Mean and standard deviation were used to analyse the interval data from the likert scale items. A Paired samples t-test are used for comparing means between pre-merger and post-merger financial performance (Derrick, Toher, & White, 2017).

The study used ANOVA analysis to compare the financial performance of firms pre-merger and post-merger and to determine the difference in sectors on risk diversification, financial performance, synergy, and market share. Diagnostic tests were done prior to doing the regression analysis. Specifically, Normality tests, Multicollinearity tests, Heteroscedasticity test, and the Breusch – Pagan test.

Multiple linear regression analysis was conducted to measure the amount of change the predictor variables have on a response variable. These tests were done at 95 % confidence level. The proposed regression model for the study was therefore;

$$Y = a + bX_1 + cX_2 + dX_3 + \varepsilon_J$$

Where:

Y = Financial performance

a = constant, b, c, and d are coefficients of X_1, X_2, and X_3 respectively.

X_1 = Synergy

X_2 = Risk diversification

X_3 = Market share

ε_J = Error term

3.8 Research Quality

The study used different techniques in order to enhance the quality of the study. The researcher borrowed measurement items from previous studies that had already been established as reliable. Second, the study used both primary and secondary data to enhance the validity of the instrument. Advice and guidance was also sought from the university supervisor and instructions from the proposal defense panel were incorporated into the final instrument. The instrument was piloted among 5 managers and heads of respective departments and these were not included in the final sample of the study. Cronbach's Alpha was used to check the reliability of the research instrument using SPSS. A Cronbach Alpha of 0.82 was achieved for the instrument which is adequate. Tavakol and Dennick (2011) recommend a Cronbach value > 0.7 as adequate.

3.9 Ethical Consideration

The research process was planned, reviewed and commenced in a manner that ensures the integrity and quality of the research. The research aimed to present truth and knowledge. The research as carried out in an impartial and truthful manner with data used solely for academic purpose. The privacy of respondents was maintained by ensuring respondents identity are not revealed. Permission was sought from respondents ahead of their involvement with the researcher emphasizing that contribution is strictly voluntary. The participants were made aware of their privileges and security and the right to pull out from the process without any penalties.

CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the results and interpretation of the study findings. The data was analysed using descriptive statistics and inferential statistics. The chapter is presented in sections that include the response rate, background information of respondents, descriptive statistics of the independent variables, and inferential statistics showing the relationships between independent and dependent variables.

4.2 The Cronbach Reliability Test

The reliability of the study was done using SPSS Version 23 using the Analyze > Scale > Reliability Analysis function. Table 4.1 shows the results from the reliability test which show that the Cronbach Alpha value for the instrument was 0.897. The reliability of synergy on 0.853, risk diversification was 0.797, and market share on 0.817 Cronbach Alpha values. The rule of thumb is that the closer the value is to 1 is the more reliable an instrument is deemed reliable. The reliability of each variable is over 0.7 and this is adequate and thus all variables are included in the analysis.

Table 4.1: Table 4 8: Reliability Statistics

Item	Cronbach's Alpha	N of Items
Synergy	0.853	5
Risk diversification	0.797	5
Market share	0.817	5
Overall	0.897	15

Source: Survey data (2018)

4.3 Instrument Validity

The validity of the study was established by using instruments and research methods that have been adopted in past studies. The validity of the primary data was established by borrowing the questionnaire items from past studies (Akenga & Olang, 2017; Ombaka & Jagongo, 2018; Ogada et al., 2016; Maditinos et al., 2009; Ndora, 2010; Ombaka & Jagongo, 2018). The validity of the secondary data was established by collecting data from audited financial reports which are a source of authority for calculating synergy, market share, risk diversification, and financial performance of NSE listed firms.

4.4 Secondary Data Analysis

This section of the analysis presented the analysis of the secondary data collected from audited financial reports of the sampled organisations in the NSE. The secondary data collected was on synergy, risk diversification, market share, and financial performance of firms which was an average of three years before and after M&As.

4.4.1 Normality tests

The study conducted a diagnostic test for the variables to determine the normality of the data before conducting inferential statistical analysis. Figure 4.1 shows the spread of data for the variables which shows that majority of the data was within the normal curve which means that random variables underlying the data set were normally distributed.

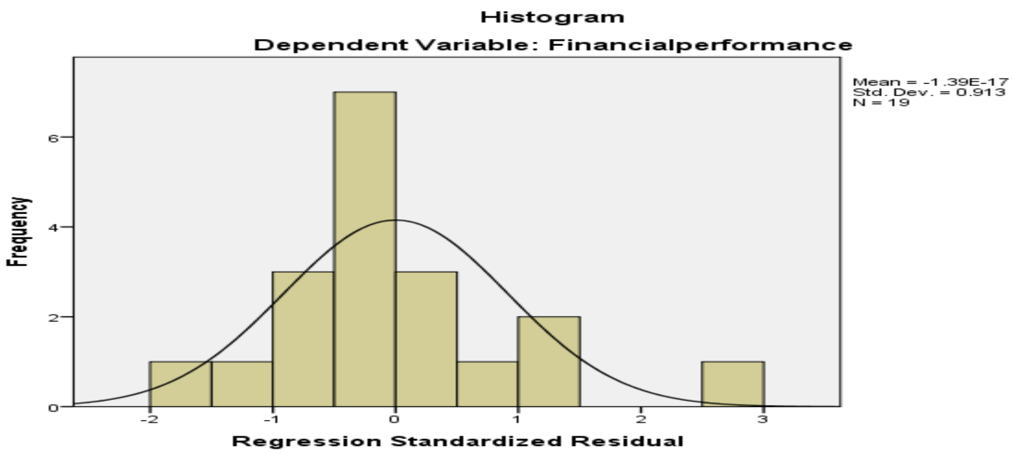

Figure 4.1: Normality of data

4.4.2 Multicollinearity

Multicollinearity is detected by examining the tolerance for each independent variable. Tolerance is the amount of variability in one independent variable that is no explained by the other independent variables, and it is in fact 1-R^2. Tolerance values less than 0.10 indicate collinearity and VIF values of more than 5 or 10 indicate multicollinearity (Belsley, Kuh, Welsch, 2004). Table 4.2 shows that the tolerance values are all greater than 0.10 and VIF values are all less than 5, thus concluding that there was no multicollinearity between the independent variables that would affect the outcome of the regression analysis.

Table 4.2: Collinearity statistics

		Collinearity statistics	
Model		Tolerance	VIF
1	Synergy	.977	1.024
	Risk diversification	.935	1.069
	Market share	.941	1.063

Source: Survey data (2018)

4.4.3 Heteroscedasticity test

The rule of thumb in interpreting the heteroscedasticity is that when a clear pattern exists there is a heteroscedasticity problem and when there is no pattern that means that there is no heteroscedasticity problem. Figure 4.2 shows the results of the heteroscedasticity test which indicates that there is no clear pattern from the data points which leads us to conclude that there is no heteroscedasticity problem.

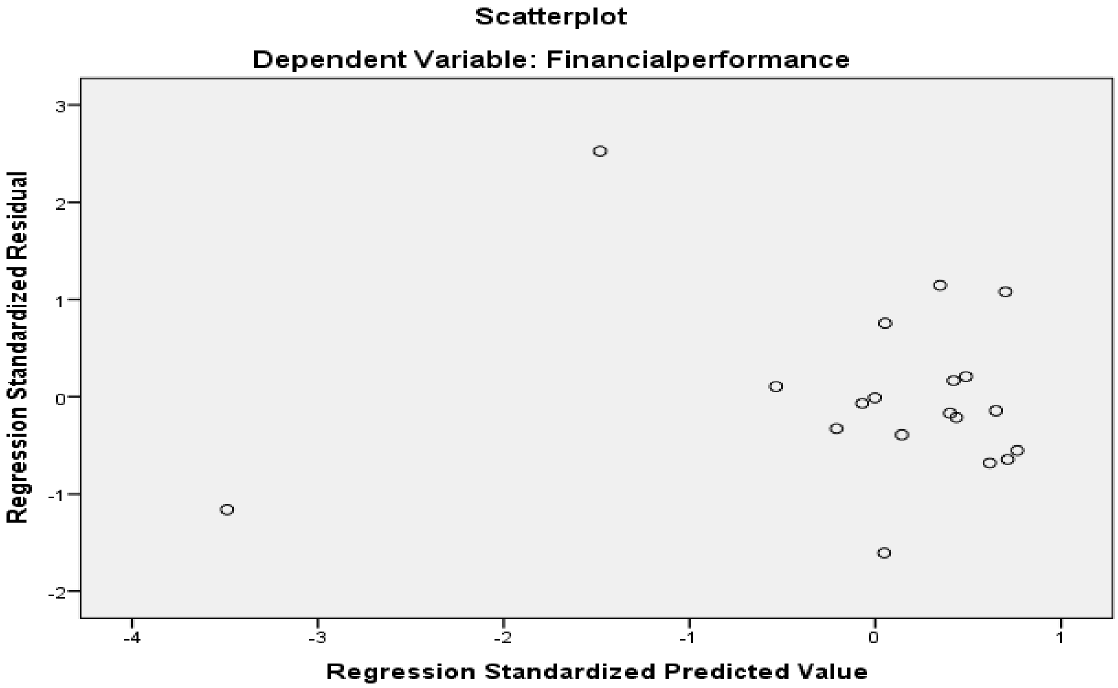

Figure 4.2: Heteroscedasticity test

Source: Survey data (2018)

4.4.4 Breusch – Pagan test

The study conducted the Breusch-Pagan (BP) for heteroscedasticity and Table 4.3 shows the results from the ANOVA which indicate a p value of more than 0.05 (p = 0.063) which means that there is no heteroscedasticity problems in the data.

Table 4.3: ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.503	1	12.503	3.947	.063[b]
	Residual	53.858	17	3.168		
	Total	66.361	18			

a. Dependent Variable: g

b. Predictors: (Constant), Unstandardized Predicted Value

4.5 Paired samples tests

Table 4.4 shows the results of the t-test which show that the mean difference between ROA before and after the mergers was -0.36439. The results show that the calculated value of t (7.000) for N=19 firms is significant at 0.05 level of significance (*p* = 0.031). This means that there is a statistically significant difference between pre-merger and post-merger financial performance (ROA).

Table 4.4: Paired samples tests

	Paired Differences					t	df	Sig.
	Mean	Std. Dev.	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pre-merger Post-merger	-.36439	.46561	.05206	.46801	.26078	7.000	18	.031

Source: Survey data (2018)

4.6 Regression analysis

A multiple regression analysis was conducted, and Table 4.5 shows the results of the model summary which indicate that the correlation coefficient (R) was 0.743 and the coefficient of determination (R^2) was 0.552. This means that synergy, risk diversification, and market share explained 55.2 % change in financial performance.

Table 4.5: Model summary b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.743[a]	.552	.410	.181321

a. Predictors: (Constant), Market Share, Risk Diversification, Synergy

Table 4.6 show the results of the analysis of variance (ANOVA) which is used to determine the significance of the model. The findings show that the model was significant with p values of less than 0.05 and F statistics of 21.681 which means that the model was statistically significant.

Table 4.6: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.067	3	.022	21.681	.006[b]
	Residual	3.222	15	.033		
	Total	3.289	18			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Market Share, Risk Diversification, Synergy

Table 4.7 shows the regression coefficients of the model which show that there was a positive and statistical effect of market share on financial performance with a coefficient of 0.228 and a p value of 0.000; risk diversification with a coefficient of 0.164 and p value of 0.009; and synergy with a coefficient of 0.117 and a p value of 0.015.

Table 4.7: Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.013	.149		.089	.929
Risk Diversification	.117	.043	.054	.393	.015
Synergy	.164	.031	.114	.940	.009
Market share	.228	.043	.088	.652	.000

a. Dependent Variable: Financial performance

4.7 Equality of means

An ANOVA test was conducted to establish the equality of means for the independent variable (financial performance) from the different sectors listed in the NSE. Table 4.8 shows that the F statistics was positive (F = 2.354) and the significance level was above 0.05 (p = 0.099). This means that we reject the null hypothesis that there is no statistical difference between financial performance of sectors that have been involved in M&As.

Table 4.8: Financial performance Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	355.665	5	71.133	2.354	.099
Within Groups	392.754	13	30.212		
Total	748.419	18			

Source: Survey data (2018)

4.8 Financial performance, synergy, market share, risk diversification among sector

The study sought to compare financial performance, synergy effects, risk diversification and market share of companies listed in the NSE before and after Mergers and Acquisitions. The study conducted an ANOVA one sample test on the dependent and independent variables. Table 4.9 shows the results and report that there was a positive and significant difference among the sectors in terms of market share ($F_{(5, 13)} = 3.251$, p = 0.031). This finding suggests that market share of NSE listed companies were significantly different for each of the sectors included in the sample. This means that there is need for further study to determine the difference of each sector in terms of market share after merger and acquisitions.

Table 4.9: Sector financial performance, synergy, market share, risk diversification

		Sum of Squares	df	Mean Square	F	Sig.
Risk Diversification	Between Groups	2.300	5	.460	1.319	.316
	Within Groups	4.535	13	.349		
	Total	6.835	18			
Synergy	Between Groups	1100.127	5	220.025	1.338	.309
	Within Groups	2138.410	13	164.493		
	Total	3238.537	18			
Market share	Between Groups	7209.391	5	1441.878	3.521	.031
	Within Groups	5323.865	13	409.528		
	Total	12533.257	18			
Financial performance	Between Groups	355.665	5	71.133	2.354	.099
	Within Groups	392.754	13	30.212		
	Total	748.419	18			

Source: Survey data (2018)

4.9 Financial performance of M&As by sectors

The study compared means between the different sectors in the Nairobi Securities Exchange. Table 4.18 shows that highest mean of financial performance was in the energy and petroleum sector which had a high return on assets compared to the other sectors. This means that M&As in the energy and petroleum sector had a large impact on their financial performance.

Table 4.10: Financial performance of M&As by sectors

	Financial performance		
Sector	**Mean**	**N**	**Std. Deviation**
Banking	2.1950	8	1.09466
Commercial & Services	3.6500	3	9.04290
Insurance	5.2000	2	.98995
Energy & Petroleum	9.5400	2	3.05470
Manufacturing & Allied	6.0900	2	6.57609
Investment	-7.8450	2	12.93298
Total	**2.8674**	**19**	**6.44817**

Source: Survey data (2018)

4.10 Primary Data Analysis

This section of the analysis presents the findings from the analysis of the primary data. A structured questionnaire was used to collect data from managers and heads of department on the effects of synergy, risk diversification, and market share on financial performance of M&As. The demographic information and variables information descriptive statistics are presented in this section.

4.10.1 Response Rate

The sample size of the study was 190 respondents. Out of the 190 questionnaires administered, the study was able to collect back 102 questionnaires which met the criteria for conducting analysis. This means that the study was able to achieve a response rate of 72.3 %. Nulty (2008) recommends for a response rate of above 50 % as adequate in research. This means that our response rate is adequate.

4.10.2 Demographics

The study asked respondents to indicate their background profiles which included information on their age, gender, highest education level, and work experience. These findings are presented in this section.

4.10.3 Age

In regard to their age, the findings show that most of the respondents were in ages 41-50 years representing 39.2 % of the sample, respondents in ages 31-49 years accounted for 31.4 % of the sample, 24.5 % were above 50 years, and 4.9 % were in ages 20-30 years as shown in Table 4.11.

Table 4.11: Age distribution of respondents

Age	Frequency	Percent
20-30 years	5	4.9
31-40 years	32	31.4
41-50 years	40	39.2
Above 50 years	25	24.5
Total	**102**	**100.0**

Source: Survey data (2018)

4.10.4 Gender

Table 4.12 shows that male respondents accounted for 59.8 % of the sample and female respondents accounted for 40.2 % of the sample. This finding suggests that there are more male managers than female managers in the sampled industries.

Table 4.12: Gender distribution of respondents

Gender	Frequency	Percent
Male	61	59.8
Female	41	40.2
Total	**102**	**100.0**

Source: Survey data (2018)

4.10.5 Education

The findings revealed that postgraduate level was the highest recorded education attainment as cited by 53.9 % of the sample followed by 46.1 % who mentioned having a bachelor's degree as illustrated in Table 4.13.

Table 4.13: Highest education level among respondents

Highest education level	Frequency	Percent
Bachelor's Degree	47	46.1
Postgraduate degree	55	53.9
Total	**102**	**100.0**

Source: Survey data (2018)

4.10.6 Work Experience

Table 4.14 shows the results in terms of the work experience of the respondents where 36.3 % had a working experience of more than 11 years, 35.3 % had a working experience of 5-10 years, and 28.4 % had a work experience of less than five years in their current position.

Table 4.14: Work experience of respondents

Years of experience	Frequency	Percent
Less than five years	29	28.4
5-10 years	36	35.3
More than 11 years	37	36.3
Total	**102**	**100.0**

Source: Survey data (2018)

4.11 Determinants of M&As descriptive statistics

Table 4.15 shows the descriptive statistics of market share, synergy, and risk diversification from the primary data. The findings show that market share had the largest mean score from the three determinants indicating that managers perceived it as a major determinant of M&As. This finding suggests that the motivation for firms to undergo Mergers and Acquisitions are to increase their market share.

Table 4.15: Primary data descriptive statistics

S/No	Determinant	Mean	Std. Deviation	Significance
1	Synergy	3.95	0.900	Significant
2	Risk diversification	4.06	0.785	Significant
3	Market share	4.30	0.735	Significant

Source: Survey data (2018)

4.12 Summary of findings

The descriptive findings show that the highest mean score was for market share followed by risk diversification, and synergy. The regression results indicate that while holding all other factors constant, a unit increase in market share results in a 0.228 increase in financial performance. A unit increase in risk diversification results to a 0.164 increase in financial performance. A unit increase in synergy results in a 0.117 increase in financial performance. The primary and secondary data show similar trends on the financial performance of mergers and acquisition. However, the findings show that there was a difference among the sectors in terms of market share after mergers and acquisition.

CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion of the study findings, conclusions of the study, recommendations for managers and policy makers. The chapter also explains some limitations that the study experienced and gives suggestions for further study.

5.2 Discussion of Findings

This section of the chapter presents a discussion of the findings. The section is presented in tandem with the research objectives of the study. The discussion involves a presentation of the study findings which are contrasted and compared to previous study findings.

5.2.1 Financial performance of NSE listed companies before and after M&As

The first objective of the study was to assess the financial performance of NSE listed companies before and after M&As. The study conducted a comparison of means within the different sectors in the NSE which showed that the highest mean of financial performance was in the energy and petroleum sectors. The findings showed that there was a statistically significant effect of M&As on financial performance of firms listed in the NSE.

Several studies have shown that there was a difference in financial performance pre-merger and post-merger. Leepsa and Mishra (2012) study on post-merger financial performance of manufacturing companies in India found that M&As had a significant effect on financial performance in terms of profitability, liquidity and solvency of firms after engaging in M&As.

This finding agrees with Marangu (2011) study which investigated the influence of M&As on financial performance using three measures of performance, that is, profit, Return on Assets and shareholders' equity/total assets had values were above the significance level of 0.05 with exception of total liabilities/total assets. These results concluded that there was significant improvement in performance for firms which merged compared to the firms that did not merge within the same period.

This finding, however, disagrees with Inoti, Onyuma, and Muiru (2014) research on the impact of acquisitions on the financial performance of the acquiring companies listed acquiring firms at the NSE findings it was apparent that there was no significant difference in pre and post-acquisition ratios measuring profitability and asset utilization. The study therefore concluded that corporate acquisitions do not affect the financial performance of the acquiring company.

5.2.2 Financial performance, synergy, market share, and risk diversification of NSE listed companies in M&As

The second objective of the study was to compare financial performance, synergy effects, risk diversification and market share of companies listed in the NSE before and after Mergers and Acquisitions. The findings show that the three determinants (synergy, market share, and risk diversification) had a positive and significant effect on financial performance. The findings show that market share was the most common M&As factor that influenced financial performance in the sectors.

This study finding corroborates previous findings in Kenya which have found that market share had a significant impact on financial performance. These are, Nyagah (2007) study on doctor’s perception of mergers & acquisitions in the pharmaceutical industry in Kenya found that there is significant relationship between growth and increase in market share and the occurrence of Mergers and Acquisitions. Ombaka and Jagongo (2018) found that market share had a significant influence on the financial performance of the commercial banks in Kenya.

Mugo (2017) study found that there was a positive and statistically significant relationship between risk diversification and financial performance. Ogada et al. (2016) study on effect of diversification on the financial performance of merged institutions in Kenya found no significant effect of diversification on financial performance of merged institutions. This finding is also in agreement Gwaya and Mungai (2015) study which found that M&As did not have a significant effect on the amount of dividends declared to the shareholders and the frequency of issuing dividends. On the profitability of the banks, the Mergers and Acquisitions had a significant positive effect since the majority of the banks increased their market share, gross profit and net profit significantly. The number of account holders in the majority of these banks notably increased.

This finding corroborates Junge (2014) study which found significant improvements of operating performance during post-merger period. Ogada et al. (2016) confirmed a positive relationship between financial performance and operating synergy and found that there was significant improvement in performance post-merger. This study finding, however, disagree with past studies that did not find a relationship between synergy and financial performance.

5.2.3 Managerial perspectives regarding determinants of M&As in listed companies

The third objective of the study was to assess' managerial perspectives regarding determinants of Mergers and Acquisitions of NSE listed companies. The respondents were asked to indicate their level of agreement with market share, synergy, and risk diversification statements. The findings show that market share had the highest mean score followed by risk diversification, and synergy.

This finding agrees with past studies that have found that synergy, market share, and risks diversification. Katuu (2003) did a survey on factors considered important in mergers and acquisition decision by selected Kenyan based firms and established that the cardinal factors considered by firms when they make merger decisions from top priority to least were: synergy, growth and revenues, to be more competitive and cost reduction.

Similarly, Mukele (2006) found that respondents strongly agreed that merged pharmaceutical companies in Kenya were profit and market oriented. In their study, Gwaya and Mungai (2015) found that most banks merged to raise their profitability through enlargement of their market share. The banks that merged or acquired for the purpose of enlarging their market share and raise their profitability accounted for about 76 percent of all the Mergers and Acquisitions in the banking sector.

5.3 Conclusion

The first objective of the study was to study was assess the financial performance of NSE listed companies before and after Mergers and Acquisitions. The secondary data shows that M&As had a positive and significant difference on financial performance of firms pre-merger and post-merger. The study concludes that financial performance of firms increased in the post-merger era.

The second objective of the study was to compare financial performance, synergy effects, risk diversification and market share of companies listed in the NSE during Mergers and Acquisitions

The findings indicted a positive and significant influence of market share, risk diversification, and synergy on financial performance of firms listed in the NSE. The study, therefore concludes that market share determined financial performance of NSE firms post-merger.

The third objective of the study was to assess' managerial perspectives regarding determinants of Mergers and Acquisitions of NSE listed companies. The study findings show that managers perceived market share as the motivation for their firms going into merger and acquisition. The study therefore concludes that market share was the greatest motivation for firms' mergers and acquisition.

5.4 Recommendations

This study makes the following recommendations; first, the study recommends that companies with little market share should merge to improve their performance and maximize the shareholders wealth. Market share seems to have the greatest effect on financial performance and hence companies should take advantage of this. Secondly, the study recommends that companies on different lines of production and different industries should engage in M&As to diversify their risks. The study has concluded that risk diversification fairly influence the performance in a positive way and this. Companies should therefore adopt this as part of their strategy to improve performance.

5.5 Limitations of the study

The researcher experienced some limitations when conducting the study. First, the study relied on secondary data of the listed firms which is found in the public domain. However, some of these data was not available from the internet and the researcher had to schedule visits, seek permission, and manually collect the data from the NSE resource centre. This was a limitation which affected the timelines of the study completion.

5.6 Suggestions for Further Study

The study recommends for further study on influence on financial performance of M&As in the NSE. The findings revealed that there was a statistically significance difference in the market share of firms post-merger. The study suggests for further study to determine the difference of each sector in terms of market share after merger and acquisitions.

REFERENCES

Agrawal, A., Jaffe, J. F., & Mandelker, G. N. (1992). The post-merger performance of acquiring firms: A re-examination of an anomaly, *The Journal of Finance, 47* (4), 1605-1621.

Akenga, G. M., & Olang, M. A. (2017). Effect of Mergers and Acquisitions on Financial Performance of Commercial Banks in Kenya, *IOSR Journal of Business and Management, 19* (8), 84-90.

Anthony, M. (2017). Effects of merger and acquisition on financial performance: case study of commercial banks, *International Journal of Business Management & Finance, 1* (6), 93-105.

Ashfaq, K., Usman, M., Hanif, Z., & Yousaf, T. (2014). Investigating the Impact of Merger & Acquisition on Post Merger Financial Performance (Relative & Absolute) of Companies (Evidence from Non-Financial Sector of Pakistan), *International Journal of Academic Research in Business and Social Sciences, 4* (11), 258-281.

Belsley, D. A., Kuh, E., & Welsch, R. E. (2004). *Regression diagnostics: identifying influential data and sources of collinearity.* New York, NY: John Wiley

Berkovitch, E., & Narayanan, N. P. (1993). Motives for Takeovers: An Empirical Investigation, *Journal of Financial and Quantitative Analysis*, *28* (3), 347-362.

Brealey, R.A., Myers, S. C., & Allen, F. (2006). (8th Ed.). New York, NY: McGraw-Hill Irwin.

Carson, D., Gilmore, A., Perry, C., & Gronhaug, K. (2001). *Qualitative Marketing Research*. London, UK: Sage.

Chandler, A.D. (2012). Strategy and Structure: Chapters in the History of American Industrial Enterprises. Cambridge, MA: MIT Press.

Chatterjee, S. & Banerjee, S. (2013). Merger and Acquisition - A Myth? (From an Indian Acquirer's Perspective), *Globsyn Management Journal, 7* (1/2), 17-33.

Chaudhary, G. M., Shah, S. Z. A., & Hashmi, S. H. (2016). Impact of Mergers & Acquisitions upon Banking Efficiency in Pakistan: A Data Envelopment Analysis Approach, *Journal of Business Studies Quarter, 8* (1), 47-59.

Chesang. C. (2002). *Acquisition Restructuring and Financial Performance of Commercial Banks in Kenya.* Unpublished MBA Thesis. University of Nairobi.

DePamphilis, D. (2010). *Mergers, Acquisitions and Other Restructuring Activities.* Burlington: Academic Press Advanced Finance Series.

Derrick, B., Toher, D., & White, P. (2017). How to compare the means of two samples that include paired observations and independent observations: A companion to Derrick, Russ, Toher and White (2017), *The Quantitative Methods in Psychology, 13* (2). 120-126.

Dos Santos, M. B., Errunza, V. R., & Miller, D. P. (2008). Does corporate international diversification destroy value? Evidence from cross-border Mergers and Acquisitions, *Journal of Banking and Finance, 32* (12), 2716-2724.

Fatima, T., & Shehzad, A. (2014). An Analysis of Impact of Merger and Acquisition of Financial Performance of Banks: A case of Pakistan, *Journal of Poverty, Investment and Development, 5* (29), 29-37.

Focarello, D., Panetta, F, & Salleo, C. (2002). *Corporate Finance.* Why do Banks merge? *Journal of Money, Credit and Banking, 34* (4), 1047-1066.

Ghosh, S., & Dutta, S. (2016). Mergers and Acquisitions: A Comparative Review of Literature, Industrija, 44 (1), 188-208

Graham, J. R., Lemmon, M. L., & Wolf, J. G. (2002). Does corporate diversification destroy value? *The Journal of Finance, 57* (2), 695–720.

Gwaya, O. J., & Mungai, J. N. (2015). The effect of Mergers and Acquisitions on financial performance of banks (A Survey of Commercial Banks in Kenya), *International journal of innovative research & development, 4* (8), 101-113.

Hitt, M. A., Harrison, J. S., & Ireland, R. D. (2001). *Mergers and Acquisitions: A Guide to Creating Value For Stakeholders.* Oxford, U.K: Oxford University Press:

Hyde, C. E. (2002). Evaluating mergers in the Australian petroleum industry, *Economic Record, 78* (242), 299-311.

Inoti, G. G., Onyuma, S. O., & Muiru, M. W. (2014). Impact of Acquisitions on the Financial Performance of the Acquiring Companies in Kenya: A Case Study of Listed Acquiring Firms at the Nairobi Securities Exchange, *Journal of Finance and Accounting, 2* (5), 108-115.

Jarrell, G.A., Brickley, J. A., & Netter, J. M. (2014). The Market of Corporate Control: The Empirical Evidence since 1980, *Journal of Economic Perspective, 2,* 40-68.

Junge, L. M. (2014). *Operating Synergy; Types and their Impact on post-merger Performance.* Master Thesis. Department of Finance, Faculty of Economics and Business Administration. Tilburg University.

Katuu, J. M. (2003). *A survey of factors considered important in merger and acquisition decisions by selected Kenyan Based Firms.* Research Project. Nairobi. University of Nairobi.

Kemal, M. U. (2011). Post-merger profitability: A case of Royal Bank of Scotland (RBS). *International Journal of Business and Social Science, 2* (5), 157-162.

Kiarie, C. N. (2014). *Effect Of Mergers On Financial Performance Of Firms Listed At The Nairobi Securities Exchange.* Research Project. Nairobi. University of Nairobi.

Kimani, T. (2012). T*he effect of Mergers and Acquisitions on financial performance of Glaxosmithkline Company: A case study of Glaxosmithkline Company.* Research Project. Nairobi. University of Nairobi.

Kothari C. R. (2008). *Research Methodology Method and Techniques.* New Delhi, New Age International Ltd.

Leepsa, N. M., & Mishra, S. M. (2012). Post-Merger Financial Performance: A Study with Reference to Select Manufacturing Companies in India, *International research journal of finance and economics, 83*, 7-17.

Loukianova, A., Nikulin, E., & Vedernikov, A. (2017). Valuing synergies in strategic Mergers and Acquisitions using the real options approach. Investment Management and Financial Innovations, 14 (1), 236-247.

Luypaert (2008). *Determinants of Growth through Mergers and Acquisitions. Empirical Results from Belgium*. Brussels. European University College Brussels.

Machiraju, H.R. (2007). *Merger & acquisitions and takeovers.* New Delhi, India: New Age International.

Maditinos, D., Theriou, N., & Demetriades, E. (2009). The Effect of Mergers and Acquisitions on the Performance of Companies – The Greek Case of Ioniki-Laiki Bank and Pisteos Bank, *European Research Studies, 7* (2), 112-130.

Marangu K. (2007). *The effects of mergers and acquisition on financial performance of non-listed commercial banks in Kenya.* Research Project. Nairobi. University of Nairobi.

Mboroto, S. N. (2013). *The effect of Mergers and Acquisitions on the financial performance of petroleum firms in Kenya.* PhD Thesis. University of Nairobi.

Mehran, H., & Peristiani, S. (2009). Financial Visibility and the Decision to Go Private, *Review of Financial Studies, 23* (2), 519-547.

Misigah (2013). Mergers, Acquisitions and Firms' Performance: Experience of Indian Pharmaceutical Industry, *Eurasian Journal of Business and Economics, 3 (*5), 111–126.

Mukele, W. (2006). *A survey of factors that determine the choice of Mergers and Acquisitions partners in Kenya.* Research Project. Nairobi. University of Nairobi.

Muthiani, M. N. (2008). *Cross cultural perspective of Mergers and Acquisitions: The Case of Glaxosmithkline Kenya Plc.* Unpublished MBA Project. University of Nairobi.

Ndora N (2010). *The effects of Mergers and Acquisitions on financial performance of insurance companies in Kenya.* Unpublished MBA project University of Nairobi.

Njoroge, F. W. (2007). *A Survey of Mergers & Acquisitions Experiences by Commercial Banks in Kenya.* Unpublished MBA Project. University of Nairobi.

Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education, 33* (3), 301–314.

Nyagah, B. W. (2007). *Doctor's perception of mergers & acquisitions in the pharmaceutical industry in Kenya.* Unpublished Dissertation, School of Business, University of Nairobi

Ogada, A., & Njuguna, A., & Achoki, G. (2016). Effect of Synergy on Financial Performance of Merged Financial Institutions in Kenya, *International Journal of Economics and Finance, 8* (9), 199-207.

Ogada, A., Achoki, G., & Njuguna, A. (2016). Effect of Diversification on the Financial Performance of Merged Institutions, *American Journal of Finance, 1* (2), 92-107

Ombaka, C. & Jagongo, A. (2018). Mergers and Acquisitions on financial performance among selected commercial banks, Kenya, *International Academic Journal of Economics and Finance, 3* (1), 1-23.

Roll, R. (1986). The Hubris Hypothesis of Corporate Takeovers, *Journal of Business, 59* (2), 197–216.

Saunders, M., Lewis, P., Thornhill, A. (2009). *Research Methods for Business Students.* (5th ed.). New York, NY: Prentice Hall

Sharma, V. (2009). Do Bank Mergers Create Shareholder Value? An Event Study Analysis. Unpublished Report: Minneapolis Federation Research.

Sirower, M. L. (1997). *The synergy trap: How companies lose the acquisition game.* New York, NY: Free Press.

Sudarsanam, S. (2003). *Creating Value from Mergers and Acquisitions.* Malaysia: Prentice Hall.

Trautwein, F. (1990). Merger motives and merger prescriptions, *Strategic management journal, 11* (4), 283-295.

Turkmen, S. Y., & Yigit, I. (2012). Diversification in Banking and its Effect on Banks' Performance: Evidence from Turkey, *American International Journal of Contemporary Research, 2* (12), 111-119.

Very, P., & Schweiger, D. (2001). The acquisition process as a learning process: Evidence from a study of critical problems and solutions in domestic and cross border deals,*Journal of World Business, 36* (1), 11–31.

Weber, Y., Shenkar, O., & Raveh, A. (1996). National and Corporate Culture Fit In Mergers/Acquisitions: An Exploratory Study, *Management Science 42* (8), 1215–1227.

Weston, F. J., Copeland, M. L., & Mulherin, H. J. (2005). Takeovers, Restructuring and Corporate Governance. Upple Saddle River, NJ: Pearson Prentice Hall.

Wullaerts, L. (2002). *Successful Mergers and Acquisitions.* London, UK: Garant Publishers.

Yamane, T. (1967). *Statistics: An Introductory Analysis* (2nd ed.). New York, NY: Harper and Row.

APPENDICES

APPENDIX I: INTRODUCTION LETTER

30th April 2018

TO WHOM IT MAY CONCERN

Academic Reference for Kimotho Ndunyu Terry No. 060686

Ms. Kimotho, Terry Ndunyu is a postgraduate student in our Master of Commerce (MCom) programme. In partial fulfilment of the MCom degree, students are required to carry out a research project and write a thesis on a contemporary subject within their field of specialisation. Among other activities, the project involves data collection and analysis.

Terry is requesting to gather information to be used in her research. The information she will obtain from your organization will be used for her academic purpose only and will be kept confidential. The results of the survey will be in summary form and will not disclose any individual, company name or company information in any way.

The research study is entitled **"Influence of Mergers and Acquisitions on financial performance of firms listed in Nairobi Securities Exchange"**

We hope that your organisation can assist by providing information to the above-named student.

Yours Faithfully,

Quindos Karanja
Coordinator Master of Commerce
School of Management and Commerce
Email: qkaranja@strathmore.edu

APPENDIX II: QUESTIONNAIRE

Section A: General Information

1. Age

   20-30 years [ ]

   31-40 years [ ]

   41-50 years [ ]

   Above 50 years [ ]

2. Gender

   Male [ ]

   Female [ ]

3. Highest level of education

   Certificate [ ]

   Diploma [ ]

   Bachelor's degree [ ]

   Postgraduate degree [ ]

4. Work experience

   Less than 3 years [ ]

   4-7 years [ ]

   More than 8 years [ ]

Section B: Synergy effects

5. On a scale of 1-5 where 1 = no extent, 2= very little extent, 3=moderate extent 4 = to some extent and 5= to a great extent. Please indicate the extent to which you agree with the following statements as they relate to the factors influencing Mergers and Acquisitions performance

	Synergy Effects	**1**	**2**	**3**	**4**	**5**
1	Horizontal mergers which involves organizations with same ability, market, customers and industry coming together, promotes a wide resource base					
2	Vertical mergers also involves a stronger firm (financially) takes up a weaker firm to gain a stronger financial stability					
3	Mergers were also instrumental in gaining customer confidence					
4	Mergers and Acquisitions also aided in promoting creativity and innovation due to integration of human resources					
5	Conglomeration aided in increasing geographical, product, and market and customer scope					

Section C: Risk Diversification

On a scale of 1-5 where 1 = no extent, 2= very little extent, 3=moderate extent 4 = to some extent and 5= to a great extent. Please indicate the extent to which you agree with the following risk diversification statements as they relate to the factors influencing Mergers and Acquisitions performance

	Risk Diversification	**1**	**2**	**3**	**4**	**5**
1	Our institution has established many branches as a result of merger and acquisition activity					
2	New branches formed after the merger have resulted into an the expansion market portfolio					
3	New branches formed after the merger has led to an increase in product portfolio					
4	New branches formed after the merger has led to an increase in investment portfolio					
5	New branches formed after the merger has attracted a wide human resource portfolio					

Section D: Market share

On a scale of 1-5 where 1 = no extent, 2= very little extent, 3=moderate extent 4 = to some extent and 5= to a great extent. Please indicate the extent to which you agree with the market share statements following statements as they relate to the factors influencing Mergers and Acquisitions performance

	Market Share	**1**	**2**	**3**	**4**	**5**
1	Mergers and Acquisitions have increased market share					
2	The market coverage has also gone global for some since the merger and acquisition					
3	There is a reduction of the number of players in the market due to consolidation of small players through acquisitions and mergers.					
4	Our brands have gained market favour since the merger and acquisition					
5	Some organisations have taken over more players hence gaining monopoly					

APPENDIX III: LISTED FIRMS IN MERGERS & ACQUISITIONS

No.	Institution	Merged with/ Acquired by	Current Name	Date approved
	Banking			
1	Diamond Trust Bank (K) Ltd	Premier Savings & Finance Ltd	Diamond Trust Bank (K) Ltd	1999
2	National Bank of Kenya Ltd	Kenya National Capital Corp	National Bank of Kenya Ltd	1999
3	Standard Chartered Bank (K) Ltd	Standard Chartered Financial Service	Standard Chartered Bank (K) Ltd	1999
4	Barclays Bank of Kenya Ltd	Barclays Merchant Finance Ltd	Barclays Bank of Kenya Ltd	1999
5	Kenya Commercial Bank	Kenya Commercial Finance Co	Kenya Commercial Bank Ltd	2001
6	Co-operative Merchant Bank ltd	Co-operative Bank ltd	The Co-operative Bank of Kenya Ltd	2002
7	CFC Bank Ltd	Stanbic Bank Ltd.	CFC Stanbic of Kenya Holdings Ltd	2008
8	Habib Bank Kenya Ltd	Diamond Trust Bank Kenya Ltd	Diamond Trust Bank Kenya Ltd	2017
	Commercial and Services			
9	Kenya Airways Ltd	Precision air	Kenya Airways Ltd	2003
10	Nation Media Group	Mwananchi Communications Tanzania & Radio Uhuru Ltd Uganda	Nation Media Group	2002
11	Standard Newspapers Ltd	Baraza Ltd	Standard Group Ltd	2001
	Insurance			
12	Jubilee Insurance Co. Ltd	Jubilee Insurance of Uganda Jubilee Insurance of Tanzania	Jubilee Insurance Co. Ltd	2002
13	Pan Africa Insurance Holdings Ltd	APA Insurance Limited	APA Insurance Limited	2001
	Energy and Petroleum			
14	Kenya Oil Company Kenol	Jovenna Zambia	Kenya Oil Company Kenol	2002
15	Total Kenya Ltd	Chevron Kenya	Total Kenya Ltd	2009
	Manufacturing and Allied			
16	East African Breweries	International Distillers Uganda Ltd UDV(K) Ltd	East African Breweries	2002
17	Unga Group Ltd	Unga Millers (Uganda) Ltd	Unga Group Ltd	2013
	Investment			
18	Centum Investment Co Ltd	Platcorp Holdings	Centum Investment Co Ltd	2013
19	Trans-Century Ltd	Rift Valley Railways	Trans-Century Ltd	2006

Source: Survey data (2018)

APPENDIX IV: SECONDARY DATA

Firm	Sector	Risk Diversification	Synergy	Market share	Financial performance	PRE_1	RES_1	Res1sq	g
Firm 1	1	1.18	23.73	6	1.87	5.5664	-3.6964	13.66	0.53
Firm 2	1	0.87	1.26	3	0.2	2.07725	-1.87725	3.52	0.14
Firm 3	1	1.04	19.64	8	3.3	4.52002	-1.22002	1.49	0.06
Firm 4	1	0.98	1.23	8	2.8	2.86	-0.060	0	0.00
Firm 5	1	1.39	6.43	13	2.6	5.77	-3.166	10.02	0.39
Firm 6	1	1.23	1.99	9	3.42	4.39	-0.971	0.94	0.04
Firm 7	1	0.83	10.9	6	2.2	2.60	-0.403	0.16	0.01
Firm 8	1	0.91	16.47	4	1.17	3.41	-2.240	5.02	0.19
Firm 9	2	0.68	-6.82	95	-6.14	3.05	-9.191	84.47	3.27
Firm 10	2	1.21	6.9	40	11.69	5.52349	6.16651	38.03	1.47
Firm 11	2	1.17	3.32	20	5.4	4.46	0.937	0.88	0.03
Firm 12	3	0.74	54.26	13	4.5	5.32871	-0.82871	0.69	0.03
Firm 13	3	1.31	0.21	8	5.9	4.71487	1.18513	1.4	0.05
Firm 14	4	-0.03	1.67	17	11.7	-2.74301	14.44301	208.6	8.09
Firm 15	4	0.95	4.35	14	7.38	3.0689	4.3111	18.59	0.72
Firm 16	5	0.7	9.71	90	10.74	4.18701	6.55299	42.94	1.66
Firm 17	5	0.52	4.32	23	1.44	0.84225	0.59775	0.36	0.01
Firm 18	6	1.32	1.38	20	1.3	5.20076	-3.90076	15.22	0.59
Firm 19	6	-1.3	-1.56	18	-16.99	-10.3502	-6.63977	44.09	1.71

Source: Survey data (2018)