EFFECT OF MERGERS AND ACQUISITIONS ON FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN KENYA

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER 2018

DECLARATION

I declare that this research project is my own work and it has not been submitted for any degree or examination in any other University.

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ACKNOWLEDGEMENT

Firstly, I am thankful to the Almighty God for all the blessings he has bestowed on me. His strength, guidance and wisdom guided my success in this academic journey. I was privileged to work with my supervisor Dr. J. Lishenga who guided, advised and supported me through the entire project. I would also like to thank the University of Nairobi team for their endless support.

DEDICATION

The success of this project would not have been met without the support and sacrifices of various people whom I extend my sincere thanks to all of them. I am highly indebted to my parents, my father Mr. Boniface Kamutu, my late mother Mrs. Caroline Kamutu, my siblings Doris and Kelvin. Your endless encouragement and support have always been my backbone. Thank you for believing in me. I am most thankful and fortunate enough for your motivation and endless support and believe in me Benjamin. You made this journey achievable.

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ABBREVIATIONS

ICP: Interconsumer Products Limited

M&As: Mergers and Acquisitions

R&D: Research and Development

ROA: Return on Asset

ROE: Return on Equity

SALL: Sameer Agriculture and Livestock Limited

SMEs: Small and Medium Enterprises

ABSTRACT

Every business aims at making profits and all efforts are directed towards profit. It is therefore important for firms to come up with initiatives such as mergers and acquisitions that can increase profit and come up with metrics to measure financial performance. Firms adopt M&As when faced with financial constraints. Sometimes government regulatory agencies compel firms to undertake mergers and acquisitions during periods of financial constraints. Nevertheless, mergers and acquisitions can either result in improved financial performance or poor performance. Kenya has experienced mergers and acquisitions involving SMEs. The objective of this study was to establish the effect of mergers and acquisitions on financial performance of small and medium enterprises in Kenya. This study adopted descriptive survey research design and the target population comprised of 9 small and medium enterprises in Kenya. The study collected secondary data on return on assets and return on investment for the period 2008 to 2017. The study used *t*-Test to analyze and examine the association between mergers and acquisitions and performance of Kenyan SMEs. The study established that financial performance of SMEs was influenced by mergers and acquisitions. Mergers and acquisitions led to the rise in the return on assets and return on equity. The study recommended that the process of merger and acquisition should be led by clear policy guidelines agreed upon by all stakeholders, SMEs intending to participate in mergers and acquisitions should invests in research aimed at establishing the best opportunities and firms for mergers and acquisitions, government of Kenya through the ministry of trade and industrialization should come up with a national policy guideline that govern merger and acquisition of SMEs and further research on the Key success factor for mergers and acquisition involving SMEs.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Business enterprises are formed to attain specific goals comprising making profit and corporate growth. The success of an enterprise is evident in its growth in terms of financial and nonfinancial parameters. Nevertheless, changes in macroeconomic determinants have influence on the profitability of business enterprises. Mergers and Acquisition (M&A) is one of the initiatives than an SME can undertake to boost their growth and profitability in the face of economic recession (Indhumathi *et al.,* 2011). M&A improve the competitiveness of SMEs by increasing market share owned by the two merging enterprises. Another reason for involvement in M&A is to improve management of risks due to diversification of the firm's portfolio. Besides, M&As result in economies of scale and expanded customer base as the firms enter new markets (Kemal, 2011).

According to Sharma (2009), M&As benefit firms in terms of increased geographical coverage, reduces taxation, enhanced synergetic relations between the firms involved, enhanced economies of scale, expanded market share and improved revenues. M&As lower the cost of operation and enhance operational efficiency as two companies streamline their policies. The performance of merged or acquired firms improves as the synergetic effects lead to improved business strategies, investments and maximization of shareholder values (Sharma, 2009).

Financial performance is an importance attribute of sustainability of any firm as it shows how much competitive advantage a firm has gained within a specific sector. Mergers and Acquisitions is a phenomenon that has gained acceptance as one of the strategies' that SMEs can use to improve financial performance. Therefore, M&As is a strategy adopted by managers of SMEs in Kenya, Africa and the world at large as means to minimize operational cost, improve profitability and shareholder value. In this regard, the study determines how M&As influence performance of Kenyan SMEs.

1.1.1 Mergers and Acquisitions

Merger means joining of two or more firms that are of almost similar sizes and whose resources are pooled together into one business entity (Coyle, 2000). Mergers are characterized by changes in the ownership of the firms, combination of business processes, combination of assets and partnerships. The main aim is to increase the value of shareholders. The shares in the merged firm are owned by all shareholders from the constituent firms. None of the constituent firms is referred to as the acquired firm or the acquirer and they all take part in the formation of structures used in the management of the joint business. Moreover, both firms should have near equal sizes to avoid dominance from them of them after the merger (Pazarkis et al., 2006).

A merger of two or more firms into a larger business enterprise is done on voluntary basis and in most cases, it results into a new name for the formed business (Anthony, 2008). The new name usually emerges from a combination of the original names of the constituent firms. Mergers are often driven by the friendship between the merging firms hence the combination of original names in to one name after the merger (Umar, 2009).

Unlike merger, an acquisition takes place when a firm buys another firm and the acquiring firm gain control of the acquired one (Anthony, 2008). Acquisition can take place voluntarily or involuntarily. The firm that acquires is usually larger in size than the acquired firm. The acquiring firm can purchase assets of the smaller company or stocks owned by the acquired company. According to Okwuosa (2005), acquisition refers to business arrangement whereby management and ownership of an independent firm are subjected to the one management which controls its operations. Two types of acquisition exist: - full acquisition or partial acquisition.

Full acquisition is characterized by the purchase of the entire stock capital owned by the firm that has been acquired. On the other hand, partial acquisition is characterized by purchase and control of more than 50% of interest in the acquired firm but the interest acquired must be less than 100%. The acquired firm transform into a subsidiary of the larger firm (Pandey, 2000).

M&As take place in business environment where it enhances competitive advantage through pooling of resources. The advantages of M&As include improved financial position of the formed enterprise, expansion of the market base, access to better information communication technology infrastructure and improved access to products. The combined firm the result from M&As can gain control of a larger market share and enables firms to undertake market positioning with a view to improve competitive advantage.

1.1.2 Performance

Every business aim at making profits and all efforts are directed towards profit. It is therefore importance for firms to come up with initiatives such as M&As that can increase profit and come up with metrics to measure financial performance. The return on asset and the return on equity are two important measures of performance (Alexandru et al., 2008). This study used the two ratios to measure financial performance of Kenyan SMEs following mergers and acquisitions. The two measures of performance are discussed as follows:

Return on Equity (ROE) is calculated by net income after taxes divided by total equity capital (Khrawish, 2011). ROE denote the amount of profit earned by a firm in comparison with the total amount of shareholder equity that has been invested in the firm. Shareholders use ROE to determine the returns that they gain from the investments made in firm. When a firm records high figures of ROE it is able to generate cash from internal sources.

Khrawish (2011) states that Return on Asset (ROA) is the ratio of a firm's income to its total asset. ROA shows a firm's profitability of a company and is used to evaluate whether the firm is able to generate income using the assets that a company owns. ROE enables stakeholders to determine the efficiency of the business strategies adopted by managers in ensuring that firm's assets generate income. ROE also indicate how efficient the managers of a firm are in making income from the resources owned by the firm.

1.1.3 Effects of Mergers and Acquisitions on Financial Performance

Mergers and acquisitions can either result in improved financial performance or poor performance. Mergers and acquisitions can improve financial performance by building synergies through better management and larger resource bases (Weitzel & McCarthy, 2011). However, mergers and acquisitions can fail to improve performance due to management wrangles of poor management decision which end up destroying firm value.

M&As improve financial performance of firms via enhanced competitive advantage as the new firm expand its economies of scale, enter new markets and expand its share of the market and reduced financial risks due to larger risk portfolio (Saboo and Gopi, 2009). According to Ismail, Abdou and Annis, (2011), the ability of the merging firms to synergize their strengths is often the leading factor to mergers and acquisitions as M&As enable firms to enlarge market shares and ownership of the firms.

Changes in ownership, management and controls improves the values of the merged firms and lead to better financial performance (Pazarkis *et al*., 2006). Changes in ownership and control of firms in M&As influence financial performance through formulation of efficient business strategies, redistribution of assets and design of new plans for operations of the new firm after M&As. New business strategies that emerge due to M&As increases revenue generation capacities, hasten growth of the new firm, improves market efficiency of the firm and enables technological advancement. Therefore, M&As leads to better performance. According to Joze et al., (2015) the performance of the firms targeted in M&A in terms of productivity of the labor becomes better after M&A. The improved performance in post M&A can be attributed to efficient utilization of financial and human capital.

Despite the positive influence that M&A have on financial performance as discussed in the paragraphs above, Akinbuli (2013) established that M&A does not mitigate the effects of financial constraints that a firm may encounter during economic recession. Mergers may not improve performance if they happen in response to regulation and not the conditions affecting business operations. The efficiency of operation of firms that participate in M&A reduces in the short period after the merger. M&A do not offer permanent solution to financial constraints (Akinbuli, 2013).

According to Weitzel and McCarthy (2009) the focus of research on M&A has been mainly on large companies and very limited research has been carried out on SMEs. A major reason behind lack of research on SMEs is the fact that most of them are not listed at the capital market hence the lack of data on their operations and financial performance. The performance of Small and medium enterprises during M&A is different from large firms. The probability of SMEs terminating agreements made during M&A is high. SMEs exhibit little difficulty in getting out of M&A that destroy their value.

1.1.4 Mergers and Acquisition of Selected Enterprises in Kenya

Small enterprises in Kenya refer to firms which employ staff ranging from 5 to 49 while medium enterprises employ between 50 and 99 workers (Minama, 2016). SMEs make major contribution to the development of Kenya through creation of jobs and provision of essential goods and services (Kamendi, 2016). Nevertheless, the SME sector in Kenya has experience the rise in number of firms closing business due to financial constraints and competition from large firms (Minama, 2016). SMEs in Kenya include registered enterprises in the informal sector known as Juakali and registered enterprises in the formal sector such as ICT firms, transport companies, wholesalers and retailers (Otor, 2013).

This study seeks to determine how M&As influence financial performance of Kenyan SMEs. The selected mergers and acquisitions include: L'Oréal which acquired the Health & Beauty business of Interconsumer Products Limited (ICP); the Artcaffe which acquired Dormans; the acquisition of Buzeki Dairy, Delamere, Sameer Agriculture and Livestock Limited (SALL) Spinknit Dairy by Brookside Dairy; the acquisition of Access Kenya by Dimension Data Holdings; acquisition of a majority stake in Genesis Kenya Investment Management Limited by Centum Limited and; acquisition of additional stake in Scan Group by Cavendish Square Holdings BV.

The enterprises targeted in this study M&A as means to enhance performance and increase the value of shareholders. A good example is the acquisition of a branch of Interconsumer Products Limited that deals with health and business by L'Oréal in the year 2013 (L'oréal, 2013). ICP had a good performance and held a large share of beauty market in Kenya and East African region. Therefore, the acquisition of ICP by L'oréal provided the latter with opportunity to access wider market and enhance its competitive advantage in Africa. L'Oréal was alive to the fact that Africa has a growing middle class with increasing income and a preference for beauty products. Therefore, the merger was intended to gain greater competitiveness and wider access to beauty market on the African continent. The merger enabled L'Oréal to improve on its business strategy through initiatives such as training of beauty practitioners and establishment of better retail networks (L'oréal, 2013).

1.2 Research Problem

Firms adopt M&As when faced with financial constraints (Akinbuli, 2013). Sometime government regulatory agencies compel firms to undertake M&As during periods of financial constraints. M&As enable firms to carry out business process reengineering and improve liquidity. Kenya has experienced mergers and acquisitions involving SMEs. Example of SMEs involved in M&As include Interconsumer Products Limited (ICP) (acquired by L'Oréal), Dormans (acquired by Artcaffe), Buzeki Dairy (acquired by Brookside), Genesis Kenya Investment Management Limited (acquired by Centum Limited), Access Kenya (acquired by Dimension Data Holdings) and Scan Group (acquired by Cavendish Square Holdings BV).

The results on the influence of M&As on performance remains inconclusive because the nature of M&As is complex (Lipeikyte, 2015). Studies by Akinbuli (2013) and Virani (2009) concluded that performance does not improve after M&As. Malmendier and Tate (2008) recorded a mixed result from M&As whereby the value of shareholders in the acquired firm increases while the value of shareholders in the acquiring firm reduces. Research on M&As is further limited by presence of varied data from various sectors and countries, variation in methods and metrics which lead to divergent conclusions (Gomes *et al.*, 2013). Moreover, studies on M&As involving SMEs are limited by lack of data because small firms hardly disclose statements of financial positions (Weitzel and McCarthy, 2009). The divergent conclusions and the limitations in the research on M&As indicate that further studies are needed to enhance the understanding of importance of M&As.

Despite the involvement of Kenyan SMEs in M&As, studies on the link between M&As and performance in Kenya have focused on large firms such as petroleum firms (Mboroto, 2013), insurance companies (Mwanza, 2016), firms listed at the NSE (Nyalanda, 2016), financial institutions (Njoroge, 2012) and commercial banks (Onyango, 2015). Research has not focused on the link between M&As and performance of SMEs in Kenya. This study sought to bridge the research gap by determining how M&As influence financial performance of Kenyan SMEs. The study sought to answer the following research questions: What is the effect of mergers and acquisitions on return on equity of SMEs in Kenya? What is the effect of mergers and acquisitions on return on asset of SMEs in Kenya?

1.3 Research Objective

To establish the effect of mergers and acquisitions on financial performance of small and medium enterprises in Kenya.

1.4 Value of the Study

The study presents an empirical analysis and insight into the effect of M&As on financial performance of SMEs in Kenya. Current research on mergers and acquisitions has mainly focused on large firms yet both large firms and SMEs continue to engage in M&As. Therefore, the findings of this study provide information that policy makers can use to review strategies on mergers and acquisitions involving SMEs. Specifically, proprietors of Kenyan SMEs can use the results of this study to understand the implications of M&As on financial performance of their enterprises.

The study also adds information to the available body of knowledge on the effects of mergers and acquisitions on financial performance particularly among SMEs. Therefore, scholars and researchers in the area of mergers and acquisitions can use the information generated in this study as reference in future studies.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter entails a discussion of the theoretical and empirical literature on mergers and acquisitions. The theoretical literature discusses theory of synergy, "Eat or be Eaten" theory of mergers and agency theory. The empirical literature covers mergers and acquisitions, measures of financial performance and the relationship between M&As and financial performance.

2.2 Theoretical Review

This section review theories that are relevant to mergers and acquisitions and its influence on financial performance of SMEs. Then theories under review in this study are theory of synergy, "Eat or be Eaten" theory of mergers and the agency theory.

2.2.1 Theory of Synergy

Synergy is a term that describes the coming together of two or more firms that have distinct organizational mechanisms to achieve greater values by cooperating in their work (Benecke, Schurink and Roodt, 2007). Synergy is achieved when firms pool resources together and have optimal use of physical, technological and human resources and established market chains. Synergies form when firms gain competitive advantage from their individual areas of strength through collective use of the available resources (Steinfeld *et al.,* (2001). The combing of operations between two or more firms integrates their intellectual properties thus enabling achievement of greater competitive edge as opposed to each firm operating on kits own (Gupta & Roos, 2001). One of the benefits of synergies is the enhancement of efficiency in operations and economies of scale as the firms exploit market niches where the partner firm has established its brand name (Krumm, Dewulf & De Jonge, 1998).

According to Nevo and Wade (2010), synergetic associations result in development of new products and enhancement of existing services and commodities. The improvements that come out of synergies exceed the individual capabilities of each firm. The formation of synergies involves cultural realignments in which each partner must learn from one another and ensure that all personnel have adapted to the new systems of management and machoism's of operation. Each organization retains a great deal of autonomy and its identity while exploiting new strengths created by integration of business processes (Harris, 2004).

Synergies can be formed in the areas of sales, operation, management and investment (Ansoff, 1965). According to Chang (1990) synergies can be created in business aspects such as management of risks, establishment of entrepreneurial systems and strategies, expansion of business frontiers, marketing and operational management. Besides, synergies can be built in amortization, creation and enhancement of assets (Markides & Williamson, 1994). Benecke, Schurink and Roodt (2007) discusses striking features of synergy in theoretical model based on process in organizations as illustrated in Figure 2.1.

According to Benecke, Schurink and Roodt (2007) the conditions that facilitate change towards synergy are: the external and internal contexts of an organization and the understanding and activities undertaken by the management. Example of external factors that affect synergies are competitiveness in the global business arena and parameters that drive profit. Conversely, internal elements that influence synergies are the challenges and key success factors in synergetic business associations (Benecke, Schurink and Roodt, 2007).

The control that managers have on synergies in their firms constitute managerial cognition. Such control is exercised over performance measurement tools such as balanced scorecard, spreading the benefits of synergies to all stakeholders, providing solution to poor returns and creation of value in managerial process and among staff. The actions undertaken by managers can be expressed through channels of communication and the identification of areas that can create synergies (Benecke, Schurink and Roodt, 2007).

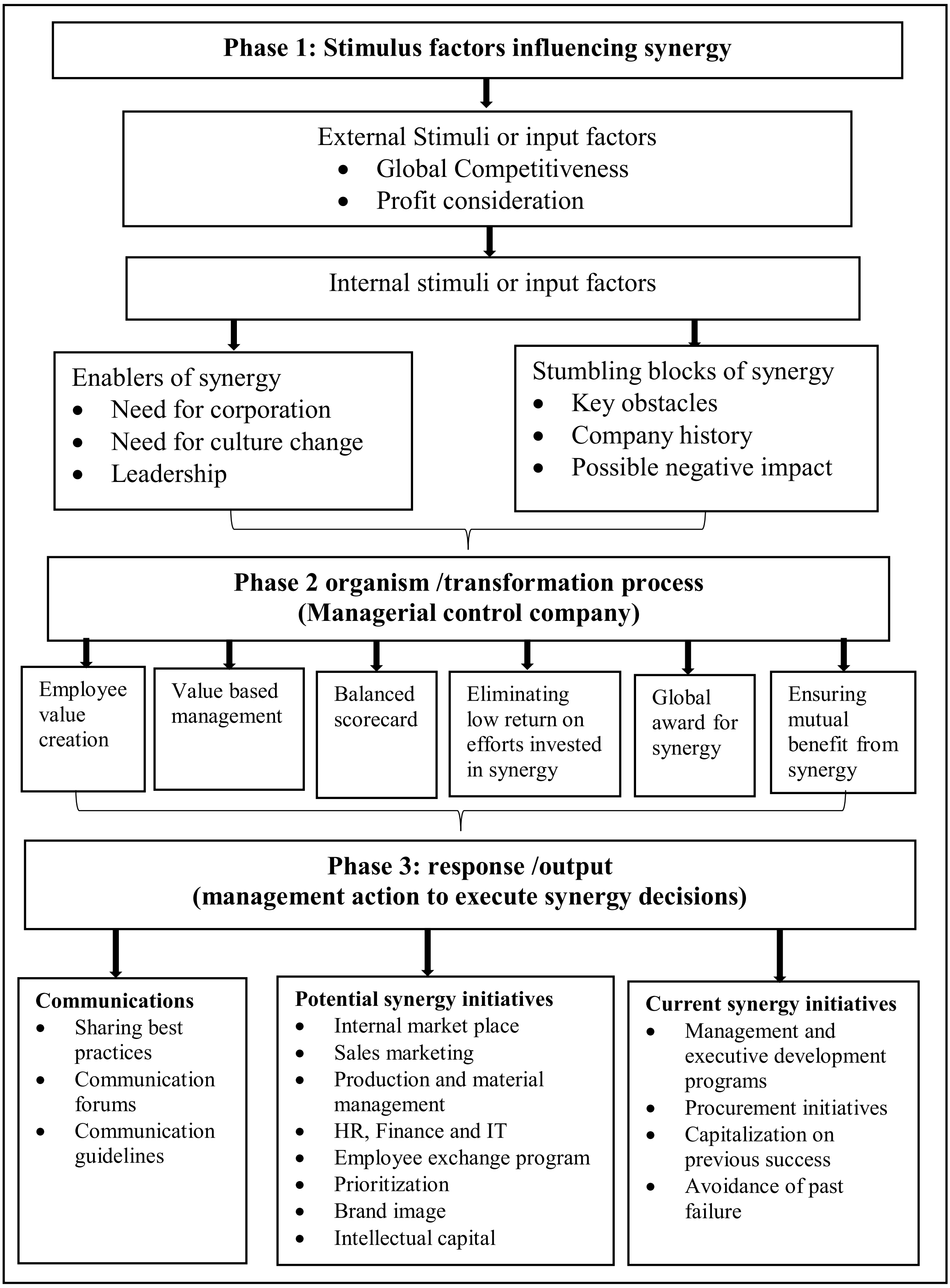


Figure 2.1: Substantive theory of synergy

Source: Benecke, Schurink and Roodt (2007)

2.2.2 "Eat or be Eaten" Theory of Mergers

Gorton, Kahl and Rosen (2005) founded the came up with the "Eat or be Eaten" theory of mergers. The main factor that lead to the theory was the surge in the number of mergers that occurred in the United State from 1960s to late1990s. The 'eat or be eaten' theory present a theoretical model in which firms undertake mergers as a defense. According to the theory of 'eat or be eaten,' manager opts for mergers because they want their firms to remain independent as opposed to acquisition where the acquired firm lose control of ownership to the acquiring firm. Gorton, Kahl and Rosen (2005) arguer that firms minimizes possibilities of acquisition by merging with other firms and widening their firm sizes.

The "eat or be eaten" theory of merger has three basic assumptions. The first assumption is that managers decide to participate merger as a mean to preserve the independence of their firms. Such managers avoid acquisition because in renders the management of the acquired firms powerless as far as control is concerned. Acquisition forces managers of the acquired firm in subordinate positions or, worse still, they may be laid off. The second assumption is that mergers occur because a state exists which allows mergers to create greater firm values. The third assumption is that a large firm lacks the ability to acquire another firm of a relatively large size. Large acquisitions present challenges when it comes to financing the acquired firm (Gorton, Kahl and Rosen, 2005).

A firm can merge with another one as a strategy to increase its size and avoid being acquired by a larger firm (Gorton, Kahl and Rosen, 2005). Once the firm size has increased due to merger, it becomes hard for larger firms to acquire the new firm formed doe to challenges that may be experienced in financing the acquisition. This defensive approach to mergers leads to rise in mergers as firms defensively compete to protect themselves from acquisition. In this regard the possibilities of acquisition prompt firms to undertake merger.

A manager can decide to drive a firm into merger as a way to protect his or her job tenure even though the chosen merger pose threat to financial health of the firm. Such self-centered decisions by managers can lead to fall in shareholder values and prove harmful to the sustainability of the firm (Gorton, Kahl and Rosen, 2005). The management can become wary of anticipated instabilities in the business environment and as a defense against being "eaten" through acquisitions, they can opt for merger that can later turn out to be detrimental to performance.

The study examines how M&As affect return on equity or shareholders value. The "eat or be eaten" theory therefore provides the basis upon which this study examines its objectives. Using this theory, the study argues that managers of Kenyan SMEs may enter into mergers as a defense against looming acquisition and thereby end up achieving poor or better performance.

2.2.3 Agency Theory

The agency theory is founded on the principle of rationality on the part of firm mangers and the firm owner of the firms (Thomsen, 2008). Whenever, managers make self-centered decisions, conflict is bound to ensue between the managers and the shareholders. Mangers can access more information regarding the firm and business environment and they may end up using this vantage point as tool to advance selfish agenda.

Mergers and acquisitions can either lead to better performance or poor performance depending on premises upon which merger decision are made and the effectiveness of the management framework for the merger. Bjarke and Peter (2010) argue that agency theory provides a premise upon which scholars can understand the link between the decisions made by the managers on M&As and the effects of their actions on shareholders' value and performance of the firm.

There are two approaches in agency theory upon which the role of M&As on performance can be examined (Nguyen et al. 2012). The first approach is referred to as the value-increasing efficient-market approach. This approach posits that better performance can be realized if M&As create synergetic relationships the improve firms' competitiveness, profitability and productivity (Hitt et al. 2001). The synergies can manifest in the form of expanded market shares, better economies of scale and improved financial management.

The second approach in the agency theory is the value-decreasing approach which provide insight in to the reasons why M&As can lead to poor performance. When the agency problem result in conflict between firm managers and the shareholders, M&As can result in poor performance conflict (Parvinen and Tikkanen 2007). According to Wright et al. (2002), the conflict between managers and shareholders are caused by selfish moves by the managers to engage in M&As for self-gains despite the negative effects on the shareholders' value. Sometime managers may have the good intentions to improve performance through M&As but fail to achieve the intended synergies thus resulting in agency problems (Ben-David et al. 2013).

According to Schulze *et al.* (2001), SMEs that undertake mergers and acquisitions are less likely to experience agency problems emanating from conflicts over ownership because the firms streamline ownership structure into a single entity. SMEs have lean management structures with few managers which minimizes the possibilities information asymmetries because the managers can closely interact (Weitzel and McCarthy, 2011).

With reference to the value decreasing approach of the agency theory, SMEs are disadvantages when it comes to the realization of benefits of the synergies created during M&As (McDonald, Westphal and Graebner, 2008). The main drawbacks that SMEs encounter include limited resources needed to ascertain targets that can benefit them, the inability to welcome diverse cultures and limited experience in the management of M&As in a way that maximizes the benefits to the firm.

The two approaches provide a premise upon which this study determine how M&As influence performance of Kenyan SMEs. The agency problems may lead to poor performance. On the other hand, synergetic relationships can result in improved performance of Kenyan SMEs post M&As. The study therefore embarks on a mission to determine how M&As influence performance of Kenyan SMEs.

2.3 Empirical Review

Mboroto (2013) analyzed how M&As influence performance of Kenyan firms that deal with petroleum. The companies that participated in the study has undergone M&As in the 2002-2012 and were listed at the capital market. The study used paired t-test and carried out analysis of financial ratios. Mboroto (2013) established that mergers/acquisitions have impact on financial performance of the firms whose ROA were analyzed. ROA improved after M&As. The study firms recorded higher rates of ROA post M&As. According to Mboroto (2013), the reasons for engagement in M&As include enhancement of operational efficiency, boost sustainability during economic downturn, enhancement of competitive advantage and improvement of financial position of a company.

Anderibom and Obute (2015) examined how M&As influence performance of commercial banks in Nigeria. The variables of interest were liquidity, capital, profit and asset. The period covered in the study ranges from the year 2000 to 2010. Anderibom and Obute (2015) concluded that M&As significantly influenced profitability of banks. M&A had positive influence indicating that performance increases with the increase in the number of M&A.

A study by Lipeikyte (2015) analyzed the influence of M&As on firm profitability in the Baltic States. The study focused on M&As that took place between the year 2008 and 2010. Lipeikyte (2015) established that M&As led to batter performance of the firms as indicated by improved productivity after M&As. The findings of the study indicated that there was no difference in performance registered between domestic and foreign M&As. The study by Lipeikyte (2015) narrowed down to SMEs and the results indicated that their performance improved after M&As. The performance of SMEs that undertook M&As was also better than those that never engaged in M&As. Contrary to changes in performance of SMEs after M&As, large firms did not record significant changes following M&As.

Ullah et al., (2010) analyzed whether the merger between Glaxo Smith and Cline into Glaxo Smithcline had significant impact on firm value. The study findings revealed that the merger did not have significant impact on firm value. The period after the merger were characterized by poor performance of the stock prizes. Contrary to the expected improvement in performance, Glaxo Smithcline had to reduce the number of employees and reduction in research and development activities.

A study by Ismail, Abdou and Annis (2011) investigated how firms performed in the technology and construction industries in Egypt prior to and post M&As. The study analyzed M&As that took place between the year 1996 and 2005. Ismail *et al.,* (2011) recorded a mixed result for firms in the two sectors regarding profitability. The results showed that profitability of technology firms was better after M&As while profitability of construction firms did not change after M&As. However, financial aspects such as liquidity, cash flows and solvency did not change after M&As for the two sectors.

Okpanachi (2011) studied the influence of M&As on how efficient Nigerian banks managed their finances. Financial efficiency was assessed using net assets, gross earnings and the profit realized after tax. The period under study ranged between 2002 and 2008. The study used *t*-test to examine the data. Okpanachi (2011) established that M&As had a significant influence on financial efficiency of the banks. The banks recoded improved financially efficient in the period after M&As. According to Okpanachi (2011), banks should put a lot of efforts on profit-driven initiatives to enhance their financial positions.

A study by Stiebale and Reize (2011) analyzed the performance implication of M&As that take place between firms from different countries by looking at Research and Development (R&D) in SMEs that participate in such M&As in Germany. Stiebale and Reize (2011) established that of M&As that take place between firms from different countries had negative influence on research and development both in terms of willingness to undertake the initiatives and allocation of resources to research and development functions. The negative effect of M&As that take place between firms from different countries on research and development was attributed to the fact that SMEs relocate their research and development functions to headquarters in a foreign country.

2.4 Reasons for Mergers and Acquisitions

M&As occur due to various reasons. The reason are to expand business operations in new markets, creation of new commodities and services (McClure, 2010), establishment of competitive strategies through synergistic associations (Miller, 2008), minimization of competition from other players in the industry (Stahl &Mendenhall, 2005), expand income generation (Huang & Kleiner, 2004), create a large pool of resources (Miller, 2008), to be efficient in production through economies of scale (Sufian, 2011) enhancement of business growth (Pasiouras and Zopounidis, 2008).

Smirnova (2014) stated that the reasons for M&A are to expand business operations across national borders, improve the value shares owned in the firm, generate more income, gain greater share of the market, allow diversification, improve technological capacity of the firm and benefit from legal regime in different regional markets and countries. Nguyen, Yung and Sun (2012) argued that M&A help firms to overcome adverse effects of economic crises. Firms also benefit from human resource development opportunities presented by M&A (Mziwonke, 2014).

2.5 Determinants of Financial Performance

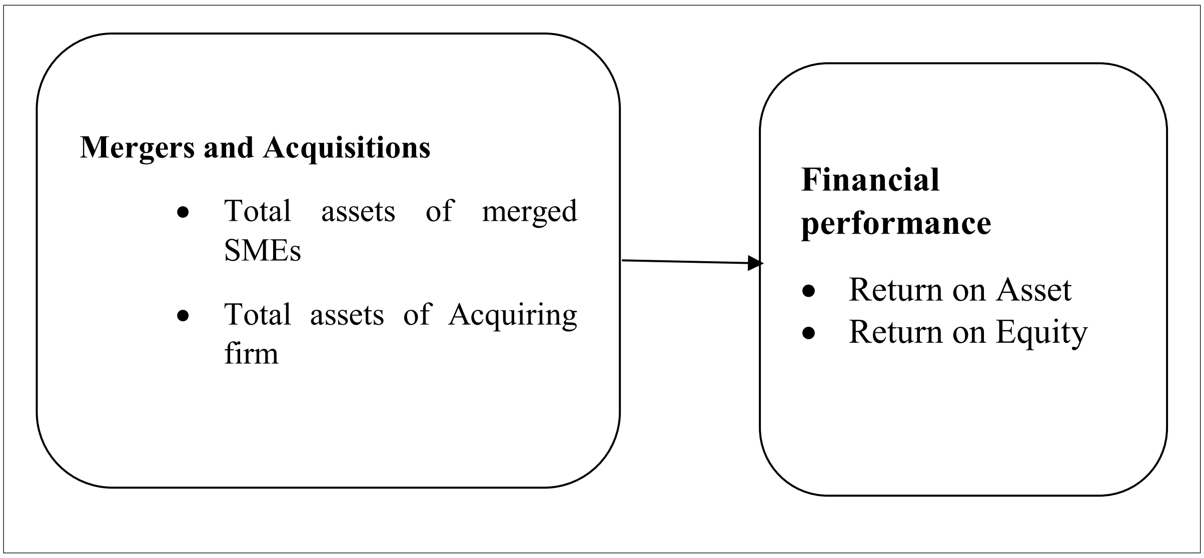
This section discusses determinants of financial performance and the metrics for financial performance. Financial performance is influence by management of working capital. According to Raheman, Afza, Qayyum and Bodla (2010) profitability of a firm depends on the efficiency in management of working capital. Shareholders wealth increases due to prudent management of working capital. Performance improves when a firm makes good decisions on capital structure regarding combinations of debt and equity. Appropriate monitoring of working capital turnover ratio is important in the evaluation of firm performance.

Performance is also influenced by efficient utilization of resources (Yang, 2010). A good budgeting process that ensures good utilization of resources improves financial performance. Performance depends on how well budgeting process is devolved to all units and departments within a firm (Kpedor, 2012). Another factor that influence performance is investments by a firm. According to Karvonen (2010), investments increases plow of cash in a firm and minimizes the effects of changes in the business environment that might interfere with cash flow.

Metrics for financial performance include ROE and ROA. According to Khrawish (2011), ROE shows the manner in which a company is using investments made by the shareholders. It shows whether the investments are managed in an effective way such that the shareholders are able to profit from their investments. Using ROE, the firm and the shareholders can monitor the rate at which their investments earn returns. A firm that has high ROE effectively manages investments made by the shareholders. ROE also indicate how efficient the managers of a firm are in making income from the resources owned by the firm (Wen, 2010).

2.6 Conceptual Framework

The conceptual framework in Figure 2.2 illustrates the study variables and how they are related. The conceptual framework below shows that the independent variable (merger and acquisition) influences the dependent variable (performance). Financial performance is measured in using rerun on assets and return on equity.



Independent Variables **Dependent Variable**

Figure 2.2: Conceptual Framework

2.7 Summary of Literature Review

The chapter has reviewed empirical and theoretical literature on mergers and acquisitions. The empirical studies on M&As have yielded mixed results. A section of literature (Okpanachi 2011; Asuquo 2012; Mboroto 2013; Arvanitis and Stucki 2014; Anderibom and Obute 2015 and; Lipeikyte 2015). The aforementioned studies established that mergers and activations improve financial performance. Studies by established that firms posted better performance in the periods that followed M&As compared to performance in per-M&A periods.

Contrary to the study findings above, another section of empirical studies (Ullah *et al*., 2010; Ismail *et al.,* 2011; Stiebale and Reize 2011) concluded that mergers and acquisition do not lead to performance improvement. Ullah *et al*., 2010, Ismail *et al.,* 2011 and Stiebale and Reize 2011) established that M&As did not result in statistically significant improvements in performance post M&As. In the light of mixed results from empirical research on M&As, it is necessary for scholars to continue with research in this field of study.

In Kenya, research on mergers and acquisitions have mainly focused on sectors with large firms such as the financial sector and the energy industry (Mboroto, 2013). There is limited research on the M&As involving SMEs. Coupled with the mixed results on M&As identified above, this study seeks to bridge the research gap by determining how M&As influence financial performance of Kenyan SMEs.

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CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This entails a discussion of the procedures and techniques that was used to achieve the objective of the study. The chapter entails the research design for the study, the population targeted by the study, methods of data collection and analysis that the study employed to in the generation of the results.

3.2 Research Design

The design of a study is an outline of the framework that the study uses to come up with answers to the questions or hypotheses postulated in the study (Orodho, 2003). This study adopted descriptive survey research design. Cooper and Schindler (2006) defined a descriptive study as the one which endeavours to describe a specific phenomenon by answering the questions who; what; when and; how through creation of a profile of a group of research problems, persons, or events.

The study established how mergers and acquisitions influence performance SMEs in Kenya. The study established 'how' mergers and acquisitions (representing the question 'what') affect the financial performance of SME in Kenya (representing the question 'who'). The period under study was five years preceding and five years after the mergers and acquisition (representing the question 'when').

3.3 Target Population

The study involved 9 small and medium enterprises in Kenya which have undertaken mergers and acquisitions. The enterprises include:

i. Interconsumer Products Limited (ICP) (acquired by L'Oréal).
ii. Dormans (acquired by Artcaffe)
iii. Buzeki Dairy (acquired by Brookside)

iv. Delamere (acquired by Brookside)

v. Sameer Agriculture and Livestock Limited (SALL) (acquired by Brookside)

vi. Spinknit Dairy (acquired by Brookside)

vii. Genesis Kenya Investment Management Limited (acquired by Centum Limited)

viii. Access Kenya (acquired by Dimension Data Holdings)

ix. Scan Group (acquired by Cavendish Square Holdings BV)

x. Ilara Milk (acquired by Brookside)

xi. Tuzo (acquired by Brookside)

xii. Gateway Insurance (acquired by Pan Africa Insurance)

3.4 Data Collection

The data used in the study was secondary in nature. The data was retrieved from the annual statements of financial position of the selected small and medium enterprises. These statements were accessed by the researcher after seeking authorization from the University of Nairobi and the selected enterprises. The data extracted from the financial statements were ROA and ROE. The data collected covered a period of 10 year from 2008 to 2017, that is, five years preceding and five years after the mergers and acquisition of the SMEs in Kenya.

3.5 Data Analysis

Data was analyzed using descriptive statistic including mean and standard deviations. Descriptive was used to analyze ROA and ROE. The study used *t*-Test to examine the association between mergers and acquisitions and performance of Kenyan SMEs.

3.5.1 T-Test

The study used Independent-Sample T Test to determine how M&As influence performance of Kenyan SMEs. The Independent-Sample *t*-test enabled analysis of the significance of the difference between the means of two samples in a study. The study adopted the following model to calculate t-scores:

$$t = \frac{(\sum D)/N}{\sqrt{\frac{\sum D^2 - \left(\frac{(\sum D)^2}{N}\right)}{(N-1)(N)}}}$$

Where:

D : differences of Score 1 and Score 2 for ROA, ROE, CAR and LR

ΣD : Sum of the differences of Score 1 and Score 2 for ROA, ROE, CAR and LR

ΣD^2 : Sum of the squared differences of Score 1 and Score 2 for ROA, ROE, CAR and LR

$(\Sigma D)^2$: Sum of the differences Score 1 and Score 2 for ROA, ROE, CAR and LR, squared.

3.5.2 Measurement of Variables

The independent variable for the study was mergers and acquisitions. The dependent variable was performance which was measured in terms of return on assets and return on equity. The first metric for performance of the SMEs will be ROA and it was calculated as net profit of the SMEs divided by total assets as follows:

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Average Total Assets}}$$

The second metric for performance of the SMEs was ROE which was measured as net income of the SMEs divided by shareholders' equity. The following formula shows how ROE was calculated:

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

The study calculated the degrees of freedom and use it to establish the p-value in the t-table at 95% degree of freedom. The t-table value was compared to the calculated t-value generated from SPSS. If the calculated t-value was less than the table value at 95% degree of freedom, the study concluded that there was a difference between means of Score 1 and Score 2 for ROA and ROE.

The results of the dependent-Sample *t*-Test were categorized as (a) group statistics and (b) independent samples test.

3.5.3 Group Statistics

The output labelled group statistics present the following statistics for each group: (i) sample sizes (N); (ii) means; (iii) standard deviations and; (iv) the standard error of the mean.

3.5.4 Levene's Test for Equality of Variances

The first step was to test the assumption of *t*-tests which requires an equal standard deviation for the two groups. The significance level (Sig.) of Levene's Test for Equality of Variances assisted the study in deciding whether equal variance would be assumed or not assumed. The study assumed equal variance if the value for the significance was greater than 0.05. In this case, the study interpreted the findings of the study on the first row of *t*-test results. Conversely, study did not assume equal variance if the value for the significance was less than or equal to 0.05. In this case, the study interpreted the findings of the study on the second row of *t*-test results.

3.5.5 Independent Samples Test

The Independent Samples Test results provided the following: (i) the *t* obtained; (ii) degrees of freedom (*df*); (iii) the two tailed level of significance (Sig.) and; (iv) the mean difference (Score 1 mean - Score 2 mean). If the significance level was less than .05, the study concluded that

M&As had a statistically significant effect on performance of Kenyan SMEs. A significance level greater than .05 indicated that M&As did not influence performance of Kenyan SMEs.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter present the outcome of data analysis and the interpretation of the results. The chapters also discuss the findings of the study and relates the findings to the outcome from similar previous studied. The chapter is organized into group statistics, test for normality of the data, Levene’s test for equality of variances, independent samples test and discussions.

The study intended to collect secondary data on ROA and ROE from nine companies listed in section 3.3 (Target population). However, the study collected data from six companies namely Interconsumer Products Limited (ICP), Dormans, Buzeki Dairy, Centum Limited, Access Kenya and Scan Group (Appendix I). This constituted a response rate of 67 percent which was adequate for statistical generalization of the result to other SMEs that have undergone mergers and acquisitions.

4.2 Group Statistics

The group statistics in Table 4.1 and Table 4.2 shows the group statics for ROA and ROE for the six firms.

4.2.1 Return on Assets

Table 4.1 shows the sample sizes means, standard deviations and the standard error of the mean for the return on assets for the SMEs involved in the study.

Table 4.1: Group Statistics for Return on Assets

	Period	N	Mean	Std. Deviation	Std. Error Mean
Scan Group	Pre-M&A	5	8.7641	1.82017	.81400
	Post M&A	5	2.4056	1.37512	.61497
ICP	Pre-M&A	5	7.5115	1.69865	.75966
	Post M&A	5	11.7700	2.12755	.95147
Buzeki Dairy	Pre-M&A	5	7.8844	.30856	.13799
	Post M&A	5	9.5710	1.25767	.56245
Dormans	Pre-M&A	5	4.3139	1.21882	.54507
	Post M&A	5	7.0823	1.39760	.62503
Access Kenya	Pre-M&A	5	3.0334	2.55096	1.14083
	Post M&A	5	7.0979	.55870	.24986
Centum Limited	Pre-M&A	5	12.0332	5.05881	2.26237
	Post M&A	5	9.2698	3.76511	1.68381

The results in Table 4.1 shows that the mean ROA and the corresponding standard deviations for the Scan Group reduced from *M*=8.7641, *SD*= 1.82017 before the mergers and acquisitions to 2.4056 after the mergers and acquisitions. Similarly, mean ROA for Centum Limited reduced from *M*=12.0332 to *M*=9.2698. Conversely, the mean ROA for the remaining SMEs increased after mergers and acquisitions as follows: ICP (*M*=7.5115 Pre-M&A to *M*=11.77 post M&A), Buzeki Dairy (from *M*=7.8844 to *M*=9.5710), Dormans (from *M*=4.3139 to *M*=7.0823), and Access Kenya (from 3.0334, to *M*=7.0979).

The study findings in Table 4.1 shows that the mean ROA for the following SMEs increased after mergers and acquisitions as indicated: ICP (6.35846), Buzeki Dairy (1.6866), Dormans (2.76831), and Access Kenya (4.06452). The mean ROA for Scan Group and Centum Limited reduced by 6.35846 and 2.76343 respectively after mergers and acquisitions. The changes in the mean of ROA for the periods before and after the mergers and acquisitions of the SMEs implied that mergers and acquisitions could have influenced performance of the firms. Nevertheless, further analysis was required to evaluate the significance of changes observed in ROA before and after the mergers and acquisitions. In this regard, the study carried out *t*-test as shown in section 4.5.

4.2.2 Return on Equity

Table 4.2 presents the sample sizes, means, standard deviations and the standard errors of the mean for the return on equity for ICP, Dormans, Buzeki Dairy, Centum Limited, Access Kenya and Scan Group.

Table 4.2: Group Statistics for Return on Equity

	Period	N	Mean	Std. Deviation	Std. Error Mean
Scan Group	Pre-M&A	5	16.1697	4.16665	1.86338
	Post M&A	5	3.6725	2.14246	.95814
ICP	Pre-M&A	5	10.8937	1.56385	.69937
	Post M&A	5	15.5884	2.51464	1.12458
Buzeki Dairy	Pre-M&A	5	11.3261	1.21617	.54389
	Post M&A	5	13.6411	1.56830	.70137
Dormans	Pre-M&A	5	11.3590	.67449	.30164
	Post M&A	5	13.3137	1.52262	.68094
Access Kenya	Pre-M&A	5	5.6750	5.03113	2.24999
	Post M&A	5	13.8379	.80939	.36197
Centum Limited	Pre-M&A	5	15.6598	8.97694	4.01461
	Post M&A	5	17.0921	7.71431	3.44994

The results in Table 4.2 indicate that there was decrease in the mean ROE for the Scan Group from M=16.1697 before the mergers and acquisitions to M=3.6725 after the mergers and acquisitions. The mean ROE for the remaining SMEs that participated in the study increased after mergers and acquisitions as follows: ICP (M=10.8937 Pre-M&A to M=15.5884 post M&A), Buzeki Dairy (from M=11.3261 to M=13.6411), Dormans (from M=11.3590 to 17.092113.3137), Access Kenya (from 5.6750, to M=13.8379) and Centum Limited (from M=15.6598 to M=17.0921).

The study findings in Table 4.2 indicate that the return on equity for the SMEs covered in the study changed after the mergers and acquisitions. With the exception of Scan Group which recorded a decrease in mean after the mergers and acquisitions, the SMEs registered rise in the mean ROE after mergers and acquisitions. In order to ascertain the statistical significance of the changes observed in ROE consequent to mergers and acquisitions, the study carried out *t*- test as shown in section 4.5.

4.3 Normality Test

Shapiro Wilk Test was used to examine normality of data collected in the study prior to execution of *t*-test. Table shows the results of the Shapiro Wilk Test.

4.3.1 Tests of Normality for Return on Assets

Table 4.3 shows the Shapiro-Wilk test results for normality of the data on the return on assets for the six SMEs for the ten-year period from 2008-2017.

Table 4.3: Tests of Normality for Return on Assets

	Period	Shapiro-Wilk		
		Statistic	**df**	**Sig./*p***
Scan Group	Pre-M&A	.962	5	.819
	Post M&A	.981	5	.938
ICP	Pre-M&A	.956	5	.780
	Post M&A	.938	5	.652
Buzeki Dairy	Pre-M&A	.878	5	.299
	Post M&A	.776	5	.051
Dormans	Pre-M&A	.819	5	.116
	Post M&A	.781	5	.056
Access Kenya	Pre-M&A	.945	5	.701
	Post M&A	.920	5	.530
Centum Limited	Pre-M&A	.964	5	.835
	Post M&A	.845	5	.181

The results in Table 4.3 indicate that the data collected on independent variable ROA was normally distributed as indicated by probability (*p*) values in Shapiro-Wilk test greater than 0.05 at 95 percent level of confidence. The *p* values were as follows for pre and post mergers and acquisitions consecutively: Scan Group (p=0.962 and p=0.981), ICP (p=0.956 and p=0.938), Buzeki Dairy (p=0.878 and p=0.776), Dormans (p=0.819 and p=0.781), Access Kenya (p=0.945 and p=0.920) and Centum Limited (p=0.964, and p=0.845). The data collected on ROA was normally distributed and the study proceeded to perform *t*-test without any modification of the data.

4.3.2 Tests of Normality for Return on Equity

Table 4.4 shows the results of Shapiro-Wilk test for normality of the data on return on equity.

Table 4.4: Tests of Normality for Return on Equity

	Period	Shapiro-Wilk		
		Statistic	df	Sig./*p*
Scan Group	Pre-M&A	.958	5	.794
	Post M&A	.968	5	.861
ICP	Pre-M&A	.928	5	.584
	Post M&A	.835	5	.152
Buzeki Dairy	Pre-M&A	.968	5	.862
	Post M&A	.851	5	.197
Dormans	Pre-M&A	.907	5	.447
	Post M&A	.934	5	.627
Access Kenya	Pre-M&A	.864	5	.244
	Post M&A	.874	5	.285
Centum Limited	Pre-M&A	.970	5	.873
	Post M&A	.940	5	.664

From the study findings in Table 4.4, the probability (p) values of the Shapiro-Wilk test for data on ROE were as follows for pre and post mergers and acquisitions consecutively: Scan Group (p=0.958and p=0.968), ICP (p=0.928 and p=.835), Buzeki Dairy (p=0.968 and p=0.851), Dormans (p=0.907 and p=0.934), Access Kenya (p=0.864 and p=0.874) and Centum Limited (p=0.970 and p=0. 940). Therefore, the data collected on ROE was normally distributed and the study proceeded to perform *t*-test without any modification of the data.

4.4 Levene's Test for Equality of Variances

The study tested the assumption of *t*-tests which requires an equal standard deviation for the data subjected to *t*-test. The Levene's Test for Equality of Variances enabled the study to assess homogeneity of the two sets of data on ROA/ROE before the mergers and acquisitions and the data on ROA/ROE after the mergers and acquisitions. The Levene's Test for Equality of Variances in Table 4.5 assisted the study in deciding whether equal variance would be assumed or not assumed.

4.4.1 Levene's Test for Equality of Variances for ROA

Table 4.5 shows the F-statistics and the corresponding probability (p) values for the Levene's Test for Equality of Variances for return on assets.

Table 4.5: Levene's Test for Equality of Variances for ROA

	df	F	Sig.
Scan Group	8	0.404	0.543
ICP	8	0.327	0.583
Buzeki Dairy	8	18.034	0.003
Dormans	8	0.505	0.498
Access Kenya	8	10.049	0.013
Centum Limited	8	0.364	0.563

The results of Levene's Test for Equality of Variances in Table 4.5 shows that there was no significant difference between the ROA data before the mergers and acquisitions and the ROA data after the mergers and acquisitions for Scan Group ($F(8)=0.404$, $p=0.543$), ICP ($F(8)=0.327$, $p=0.583$), Dormans ($F(8)=0.505$, $p=0.498$) and Centum Limited ($F(8)=0.364$, $p=0.563$). The p values were greater than alpha value $\alpha=0.05$. Therefore, the assumption of homogeneity was met for ROA data from Scan Group, ICP, Dormans and Centum Limited. Consequently, the t-test for ROA at Scan Group, ICP, Dormans and Centum Limited in Table 4.7 were interpreted using the results in rows labelled "Equal variances assumed".

Conversely, Levene's Test for Equality of Variances in Table 4.5 shows that there was significant difference between the ROA data before the mergers and acquisitions and the ROA data after the mergers and acquisitions for Buzeki Dairy ($F(8)$=18.034, p=0.003) and Access Kenya ($F(8)$=10.049, p=0.013). The p values were less than alpha value α=0.05. Therefore, the assumption of homogeneity was not met for ROA data from Buzeki Dairy and Access Kenya. Consequently, the *t*-test for ROA at Buzeki Dairy and Access Kenya in Table 4.7 were interpreted using the results in rows labelled "Equal variances not assumed" which factored in the adjustments made on the degrees of freedom.

4.4.2 Levene's Test for Equality of Variances for ROE

Table 4.6 shows the F-statistics and the corresponding probability (p) values for the Levene's Test for Equality of Variances for return on equity.

Table 4.6: Levene's Test for Equality of Variances for ROE

	df	F	Sig.
Scan Group	8	1.119	0.321
ICP	8	1.959	0.199
Buzeki Dairy	8	0.98	0.351
Dormans	8	4.833	0.059
Access Kenya	8	27.89	0.001
Centum Limited	8	0.09	0.772

The results of Levene's Test for Equality of Variances in Table 4.6 shows that there was no significant difference between the ROA data before the mergers and acquisitions and the ROA data after the mergers and acquisitions for Scan Group ($F(8)$=1.119, p=0.321), ICP ($F(8)$=1.959, p=0.199), Buzeki Dairy ($F(8)$=0.98, p=0.351), Dormans ($F(8)$=4.833, p=0.059) and Centum Limited ($F(8)$= 0.09, p=0.772). Therefore, the assumption of homogeneity was met for ROE data from Scan Group, ICP, Dormans and Centum Limited. Consequently, the *t*-

test for ROA at Scan Group, Buzeki Dairy, ICP, Dormans and Centum Limited in Table 4.7 were interpreted using the results in rows labelled "Equal variances assumed".

Levene's Test for Equality of Variances in Table 4.6 shows that there was significant difference between the ROE data before the mergers and acquisitions and the ROE data after the mergers and acquisitions at Access Kenya ($F(8)=27.89$, $p=0.001$). The p value ($p=0.001$) was less than alpha value $\alpha=0.05$. Therefore, the assumption of homogeneity was not met for ROE data from Access Kenya and *t*-test was interpreted using the results in rows labelled "Equal variances not assumed".

4.5 *t*-Test

The study findings in Table 4.6 shows the results of the Independent Samples *t*-Test which included the *t* obtained, degrees of freedom, the two tailed level of significance and the mean difference. The results of the *t*-Test were interpreted under the guidance of Levene's Test for Equality of Variances in section 4.4.

4.5.1 *t*-Test results for ROA

Table 4.7 shows the results of the *t*-Test for return on equity for ICP, Dormans, Buzeki Dairy, Centum Limited, Access Kenya and Scan Group.

Table 4.7: Independent Samples Test results for ROA

		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Scan Group	Equal variances assumed	6.233	8	.000	6.35846	1.02019	4.00589	8.71102
	Equal variances not assumed	6.233	7.444	.000	6.35846	1.02019	3.97496	8.74195
ICP	Equal variances assumed	-3.498	8	.008	-4.25853	1.21753	-7.06616	-1.45090
	Equal variances not assumed	-3.498	7.626	.009	-4.25853	1.21753	-7.09030	-1.42676
Buzeki Dairy	Equal variances assumed	-2.912	8	.020	-1.68660	.57913	-3.02207	-.35113
	Equal variances not assumed	-2.912	4.480	.038	-1.68660	.57913	-3.22882	-.14438
Dormans	Equal variances assumed	-3.338	8	.010	-2.76831	.82931	-4.68071	-.85590
	Equal variances not assumed	-3.338	7.855	.011	-2.76831	.82931	-4.68689	-.84973
Access Kenya	Equal variances assumed	-3.480	8	.008	-4.06452	1.16787	-6.75763	-1.37142
	Equal variances not assumed	-3.480	4.383	.022	-4.06452	1.16787	-7.19833	-.93071
Centum Limited	Equal variances assumed	.980	8	.356	2.76343	2.82020	-3.73996	9.26682
	Equal variances not assumed	.980	7.391	.358	2.76343	2.82020	-3.83442	9.36129

The study used *t*-Test to establish the effect of mergers and acquisitions on financial performance of small and medium enterprises in Kenya. The results in Table 4.7 indicate that ROA differed significantly after mergers and acquisitions at Scan Group [$t(8)=6.233> t_{cr}=2.302$, $p=0.000 < \alpha=0.05$, CI: 4.00589 to 8.71102], ICP [$t(8)= 3.498 > t_{cr}=2.302$, $p=0.008 < \alpha=0.05$, CI: -7.06616 to -1.45090], Buzeki Dairy [$t(4.480)= 2.912 > t_{cr}=2.776$, $p=0.038 < \alpha=0.05$, CI: -3.22882 to -0.14438], Dormans [$t(8)=3.338 > t_{cr}=2.302$, $p=0.010 < \alpha=0.05$, CI:-4.68071 to -.85590] and Access Kenya [$t(4.383)= 3.48 > t_{cr}=2.776$, $p=0.022 < \alpha=0.05$, CI:-7.19833 to -.93071].

The t-tests in Table 4.8 indicate that mergers and acquisitions had statistically significant influence on ROA at Scan Group, ICP, Buzeki Dairy, Dormans and Access Kenya was statistically significant as indicated by the obtained *t*-statistics greater than critical values, p values less than $\alpha=0.05$ and confidence intervals that exclude zero. However, the study established that ROA did not differed significantly after mergers and acquisitions at Centum Limited [$t(8)= 0.98 < t_{cr}=2.302$, $p=0.356 >\alpha=0.05$, CI: -3.73996 to 9.26682]. The obtained *t*-

statistics was less than critical values, p values greater than α=0.05 and confidence intervals that included zero.

4.5.2 *t*-Test results for ROE

Table 4.8: Independent Samples Test results for ROA

		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Scan Group	Equal variances assumed	5.964	8	.000	12.49726	2.09528	7.66553	17.32899
	Equal variances not assumed	5.964	5.977	.001	12.49726	2.09528	7.36549	17.62903
ICP	Equal variances assumed	-3.545	8	.008	-4.69475	1.32431	-7.74862	-1.64088
	Equal variances not assumed	-3.545	6.691	.010	-4.69475	1.32431	-7.85576	-1.53374
Buzeki	Equal variances assumed	-2.608	8	.031	-2.31493	.88754	-4.36160	-.26826
Dairy	Equal variances not assumed	-2.608	7.533	.033	-2.31493	.88754	-4.38389	-.24597
Dormans	Equal variances assumed	-2.624	8	.030	-1.95461	.74476	-3.67202	-.23720
	Equal variances not assumed	-2.624	5.512	.043	-1.95461	.74476	-3.81683	-.09239
Access	Equal variances assumed	-3.582	8	.007	-8.16288	2.27892	-13.41808	-2.90768
Kenya	Equal variances not assumed	-3.582	4.207	.021	-8.16288	2.27892	-14.36932	-1.95644
Centum	Equal variances assumed	-.271	8	.794	-1.43232	5.29332	-13.63873	10.77409
Limited	Equal variances not assumed	-.271	7.823	.794	-1.43232	5.29332	-13.68698	10.82234

The results in Table 4.8 indicate that ROE differed significantly after mergers and acquisitions at Scan Group [$t(8)$= 5.964> t_{cr}=2.302, p=0.000 < α=0.05, CI: 7.66553 to 17.32899], ICP [$t(8)$= 3.545> t_{cr}=2.302, p=0.008 < α=0.05, CI: -7.74862 to -1.64088], Buzeki Dairy [$t(8)$= 2.608 > t_{cr}=2.776, p=0.031 < α=0.05, CI: -4.36160 to -.26826], Dormans [$t(8)$=2.624 > t_{cr}=2.302, p=0.030 < α=0.05, CI: -3.67202 to -0.23720] and Access Kenya [$t(4.207)$= 3.582 > t_{cr}=2.776, p=0.021 < α=0.05, CI: -14.36932 to -1.95644].

The t-tests in Table 4.8 indicate that the influence of mergers and acquisitions on ROE at Scan Group, ICP, Buzeki Dairy, Dormans and Access Kenya was statistically significant as indicated by the obtained t-statistics greater than critical values, p values less than α=0.05 and confidence intervals that exclude zero. However, the study established that ROE did not differed significantly after mergers and acquisitions at Centum Limited [$t(8)$= 0.271< t_{cr}=2.302,

p=0.794 >α=0.05, CI: -13.63873 to 10.77409]. The obtained t-statistics was less than critical values, p values greater than α=0.05 and confidence intervals that included zero.

The study also calculated the Eta Squared to determine the mature of the effects of mergers and acquisitions on financial performance of small and medium enterprises in Kenya. Table 4.9 shows the values of Eta squared for ROA and ROE.

Table 4.9: Eta squared

ROA	t	N-2	Eta Squared
Scan Group	6.233	8	0.83
ICP	3.498	8	0.60
Buzeki Dairy	2.912	8	0.51
Dormans	3.338	8	0.58
Access Kenya	3.48	8	0.60
ROE			
Scan Group	5.964	8	0.82
ICP	3.545	8	0.61
Buzeki Dairy	2.608	8	0.46
Dormans	2.624	8	0.46
Access Kenya	3.582	8	0.62

According to Cohen (1988) stated that Eta squared values 0.01 indicate small effect 0.06 denotes medium effect and 0.14 shows large effect in the changes observed in the independent variable. From the results in Table 4.9, the magnitude of the differences in the means was medium for ROA at Scan Group (eta squared =0.83), ICP (eta squared=0.60), Buzeki Dairy (eta squared=0.51), Dormans (eta squared=0.58) and Access Kenya (eta squared=0.60). Besides, the magnitude of the differences in the means was medium for ROE at Scan Group (eta squared=0.82), ICP (eta squared=0.61), Access Kenya (eta squared=0.62). Nevertheless, the magnitude of the differences in the means was medium for ROE at Buzeki Dairy (eta squared=0.46) and Dormans (eta squared=0.46).

4.6 Discussions

The study established that both ROA and ROE changed after mergers and acquisitions and the change was statistically significant for five out of the six examined firms. The results of the data analyzed indicted that mergers and acquisitions affected financial performance of small and medium enterprises in Kenya. The SMEs recorded improved performance by overcoming financial challenges faced by small firms. The acquiring firms provided the finances needed by the SMEs to enhance their growth.

Mergers and acquisitions enabled the SMEs to venture into new markets and create new services and products that improve their competitive advantage. The SMEs are often lack finances and means to reach larger markets compared to large firms. Therefore, mergers and acquisitions enable SMEs to reach markets that have been established by acquiring firm. The study findings agree with Miller (2008) who argued that mergers and acquisitions increase the market power. Mergers and acquisitions also enable SMEs to diversify their business ventures by adopting established business strategies and channels established by the acquiring firm. The study findings are in tandem with McClure (2010) who argued that mergers and acquisitions enable diversification.

The return on assets and the return on equity improve after mergers and acquisitions as SMEs enhance their performance through improved economies of scale. The study agrees with Sufian (2011), stated that one of the reasons for M&A is to benefit from economies of scale. The SMEs also benefits from technological advances made by the merging or acquiring firm leading to improved performance. The study findings are similar to Mziwonke (2014) who stated that M&A bring significant benefits in terms of transfers of capital, technology and know-how.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the key findings of the study on the effect of mergers and acquisitions on financial performance of small and medium enterprises in Kenya. Conclusions drawn from the study findings are also presented in the chapter as well as recommendations for policy development and for further research.

5.2 Summary

The study collected data from six out of the targeted nine SMEs representing a response rate of 67 percent. The following is a summary of the study finding in respect to each of the independent variables.

5.2.1 The effect of mergers and acquisitions on the return on assets of SMEs in Kenya

The study established that the mean ROA for Interconsumer Products Limited, Buzeki Dairy, Dormans and Access Kenya increased after mergers and acquisitions. The mean ROA for Scan Group and Centum Limited reduced after mergers and acquisitions. The Shapiro-Wilk test for normality indicated that the data collected on ROA was normally distributed and the study proceeded to perform *t*-test without any modification of the data. The Levene's Test for Equality of Variances indicated that the assumption of homogeneity was met for the ROA data from Scan Group, Interconsumer Products Limited, Dormans and Centum Limited (the *p* values were greater than 0.05). The assumption of homogeneity was not met for the ROA data from for Buzeki Dairy and Access Kenya (the *p* values were less than 0.05).

The study established that mergers and acquisitions had statistically significant influence on ROA at Scan Group (p=0.000), Interconsumer Products Limited (p=0.008), Buzeki Dairy (p=0.038), Dormans (p=0.010) and Access Kenya (p=0.022). However, mergers and acquisitions did not have significant influence on the return on assets at Centum Limited (p=0.356). The study findings revealed that mergers and acquisitions affected financial performance of small and medium enterprises in Kenya. The study established that a medium effect size was observed in the differences in the means of ROA at all the SMEs that participated in the study.

5.2.2 The effect of mergers and acquisitions on the return on equity s of SMEs in Kenya

The study established that the mean return on equity for the SMEs covered in the study changed after the mergers and acquisitions. The mean ROE for Interconsumer Products Limited, Buzeki Dairy, Dormans, Access Kenya and Centum Limited increased the mergers and acquisitions. The mean ROE for Scan Group decrease after the mergers and acquisitions. The Shapiro-Wilk test for normality indicated that the data collected on ROE was normally distributed. The Levene's Test for Equality of Variances indicated that the assumption of homogeneity was met for the ROE data from Scan Group, ICP, Buzeki Dairy, Dormans and Centum Limited (the p values were greater than 0.05). The assumption of homogeneity was not met for the ROE data from for Access Kenya whose p=0.001 was less than 0.05.

The study established that mergers and acquisitions had statistically significant influence on the return on equity at Scan Group (p=0.000), ICP (p=0.008), Buzeki Dairy (p=0.031), Dormans (p=0.030) and Access Kenya (p=0.021). However, mergers and acquisitions did not have significant influence on the return on equity at Centum Limited (p=0.794). A medium effect size was observed in the differences in the means of ROE at Scan Group, Interconsumer Products Limited, Access Kenya and Centum. The effect size of the differences observed in the means of ROE at Buzeki Dairy and Dormans was small. The study findings revealed that mergers and acquisitions affected financial performance of small and medium enterprises in Kenya.

5.3 Conclusion

The study conclude that financial performance of SMEs was influenced by mergers and acquisitions. Mergers and acquisitions led to the rise in the return on assets and return on equity thus indicating an improved financial performance of the SMEs. The improved performance of SMEs following mergers and acquisitions result from the abilities of the acquired firms to discover and access new opportunities for growth as the firms combine human and financial resources to build synergies that enhance performance.

The improvement observed on the return on assets and return on equity after mergers and acquisitions attests to the improved financial strength that SMEs gain from the acquiring firm. This enable SMEs to overcome financial challenges that small and medium forms contend with and at the SMEs time benefit from the strategic management initiatives that enables large forms to perform well. The acquired SMEs also benefit from the pool of human resource that give the acquiring firm competitive advantage. Moreover, mergers and acquisitions enable SMEs to gain from technological transfer from the acquiring firm resulting in better return on assets and return on equity.

The rise in the values of return in equity after mergers and acquisitions indicate that the SMEs improved the profit earned compared to the amount of equity owned by shareholders. The improvement of the return on equity indicate that investments made by shareholders result in gains. Moreover, the increase in the values of return on assets after mergers and acquisitions indicated that the profitability of the SMEs improved, and they were able to generate more income from the expanded asset base after merger or acquisition.

5.4 Recommendations

5.2.1 Recommendations for Policy Development

The study recommends that the process of merger and acquisition should be led by clear policy guidelines agreed upon by all stakeholders. This ensures that merger and acquisition is devoid of managerial challenges that may affect the value of the firms and lead to poor performance post-merger or acquisition.

The study recommends that SMEs intending to participate in mergers and acquisitions should invests in research aimed at establishing the best opportunities and firms for mergers and acquisitions that will propel the goals of the firm in both short and long terms. This will enable SMEs to enter into mergers and acquisitions that optimally harness synergies created when firms pool human and financial resources together and leverage on technology for improved performance.

The study recommends that the government of Kenya through the ministry of trade and industrialization should come up with a national policy guideline that govern merger and acquisition of SMEs. The policy will ensure that mergers and acquisitions are conducted in a manner that minimizes agency problems and enable SMEs to register improved performance after merger or acquisition.

5.2.2 Recommendations for Further Studies

The study recommends further research on the Key success factor for mergers and acquisition involving SMEs. The analysis of factors that lead to success of mergers and acquisition involving SMEs will complement the findings of this study by establishing measures through which SMEs can improve their performance through mergers and acquisition.

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APPENDICES

Appendix I: ROA and ROE Data (2008-2017)

	ROA				
Year	**Scan Group**	**ICP**	**Buzeki Dairy**	**Dormans**	**Access Kenya**
2008	10.1991585	9.57654683	7.729034218	4.893244886	2.113256966
2009	7.99788399	7.6767499	8.090354643	5.213456256	1.56456779
2010	10.7949905	8.65989635	7.677270954	5.465487645	0.291354492
2011	8.6050232	6.15648784	7.60285439	3.075975083	4.516728217
2012	6.22328718	5.48787544	8.322716731	2.921553928	6.68120513
2013	4.38162785	10.1446532	7.775288822	5.90301044	6.932145454
2014	2.20799987	11.3214788	8.707964149	8.124857554	7.554442545
2015	3.04549072	14.8654265	10.43498621	8.154656445	7.632125455
2016	1.57504248	12.8655412	10.46614113	7.983245457	6.24554799
2017	0.81790559	9.65312549	10.4708578	5.24548644	7.125454154
	ROE				
Year	**Scan Group**	**ICP**	**Buzeki Dairy**	**Dormans**	**Access Kenya**
2008	16.9531008	13.3316449	9.949999475	11.48548484	3.028934456
2009	17.9044135	11.0235679	10.6598409	12.32454488	2.484413254
2010	21.0449403	9.19441266	11.00208399	11.55648415	0.773185601
2011	15.18631	10.9871455	11.92921309	10.68849531	9.952901546
2012	9.75988285	9.93156565	13.08960705	10.74020802	12.13560594
2013	6.81359174	17.5345647	11.37618239	11.98582812	13.45455656
2014	3.19962437	17.3486785	12.63109398	14.35685465	14.12145424
2015	4.66277481	16.9123248	14.76132826	15.12254554	15.12555646
2016	2.38947309	14.4879844	14.955366	13.54858546	13.36532357
2017	1.29687265	11.6585412	14.48142275	11.554441	13.12255454