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BENEFICIARIES OF MERGERS & ACQUISITIONS IN SOUTH AFRICA

By

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31 MARCH 2014

DECLARATION

I, Tshifhango Emmanuel Ndadza do hereby declare that the work presented in this dissertation is solely done by me, except where otherwise indicated and acknowledged. This dissertation has not either in whole or in part, been submitted at any other University or institution for degree purposes. I further declare that I was given authorization by a panel from the Wits Business School research committee to carry out this research.

Name: ……

Student Number: …….

Signature: …… signed at ……..

Date: .... August 2014.

DEDICATIONS

This research is dedicated to God, who created all things. To my family and friends who have given me unconditional support. I am thankful for an opportunity such as this. To my lectures and classmates, it has been a wonderful learning experience. Through the Lord Jesus Christ all things are possible.

ABSTRACT

Anecdotal evidence shows that Africa experienced increasing foreign direct investment inflows for the period 2007-2011 and half of Africa's top merger and acquisition deals in 2012 targeted firms from South Africa. Therefor the value of merger and acquisition deals in South Africa and Africa as a whole requires more robust and rigorous research like is the case in developed countries. This research adds to the merger and acquisition literature by determining whether these deals create value for the shareholders of the South African involved. The research also assesses the social impact that these M&A deals have on the South African economy, particularly on employment.

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Chapter 1: Introduction

1.1 Introduction

This chapter formally introduces the thesis including a presentation of the research problem, research question and research objectives. Section 1.2 presents the background of the study. Section 1.3 presents the research problem. Section 1.4 presents the research objectives. Section 1.5 presents the research question. Section 1.6 presents the contribution of the study to the Merger and Acquisitions body of knowledge. Section 1.7 discusses the structure of the report and the chapter summary concludes the chapter.

1.2 Background of the Study

Mergers and acquisitions (M&As) are important events in corporate finance. They are important to both the country's economy and to the firms involved. M&A activity is also an indication of how well the economy is doing and determines whether firms are in an expansionary or recessionary business cycle. M&As have also become a vehicle for firms to create competence and grow in their core businesses (Mantravadi & Reddy, 2008; Andrade, Mitchell & Stafford, 2001). In light of the 2008 financial crisis[1], superior economic growth levels in emerging markets have exceeded those of developed economies and the liberation of markets and financial market integration has led to investors seeking alternative investment and growth opportunities in emerging markets for better returns. This has led to an increase in cross-border deals mainly in emerging markets in the form of foreign direct investments and cross-border acquisitions.

Anecdotal evidence shows that Africa experienced increasing foreign direct investment inflows for the period 2007-2011 and half of Africa's top 10 M&A deals in 2012 targeted South African firms (Kamhunga, 2012). The increase in M&As is a cause for concern given the documented value destruction of M&A deals in developed countries. According to Dobbs, Goedhart and Suonio (2007), M&A deals recorded an all-time high in 2006, exceeding the record that was set in 2000. However, M&A activity for the latter period was not only significant due to the high levels of completed deals, but was also associated with

[1] The financial crisis that began in late 2006 in the US was caused by sharply declining housing prices. According to economic forecasts this crisis was expected to affect housing related investments and consumption and thus slow down the economy. However, it triggered a financial system meltdown as banks and financial institutions were affected by the mortgage defaults that followed. Interest rates increased substantially and led to adverse effects on spending and a reduction in output. Consequently, interventions by US Federal Reserve resulted in yields nearing zero and capital outflows to countries with much higher yields.

high premiums and massive value destruction for shareholders of acquiring firms (Moeller, Schlingemann and Stulz, 2005).

M&A activity in the South African economy has been persistent and also has the characteristics of the conventional wave-like nature of activity 'booms and busts' noted in merger literature. Firms that engage in M&As have the ability to reduce costs and the ability to charge higher prices (Charterjee, 1986) and thus, these firms have the ability to create value. Prior work by Jensen and Ruback (1983) attributes gains to synergies that occur through realization of economies of scale, vertical integration, exploitation of more efficient production practices, and the agency costs reduction.

M&As involve the reallocation of both tangible and intangible economic resources for the purpose of creating value, more economic stability or for reducing costs. The market for corporate control hypothesis indicates that successful M&As readily create economic value when management pursues investment policies and decisions that maximize shareholders wealth. Corporate managers compete for opportunities and limited economic resources in order to create value, this may explain why M&As benefit shareholders as inefficient management is replaced and underemployed economic assets are redeployed (Jensen and Ruback, 1983). Datta, Iskandar-Datta, and Raman (2001) find that shareholders of a firm where management's compensation is tied to the share performance of the firm experience positive excess returns after acquisitions. Moeller, Schlingemann and Stulz (2005) find that management with compensation structures that are aligned with their investment decision are considerate of the impact of the acquisition on the firm's share price.

Some evidence suggests that M&As destroy value rather than create it (Andrade et al. 2001; Moeller et al. 2005). Value destruction has devastating consequences on the economy because it has a negative impact on stakeholders. Furthermore, M&A research is extensively skewed towards the value creation aspect of M&As for shareholders of the firms involved and neglects its implications on the employees of these firms (Gugler and Yurtoglu, 2004). Researchers suggest that mergers and acquisitions can be used as corrective tools in economies where rigid labour markets prevail. Werhane, (1988) states that as a result of almost every merger or acquisition, the number of jobs are shifted or even eliminated. Conyon, Girma, Thomson, and Wright (2001) also suggest that there is a common impact on labour demand irrespective of the friendliness of the deals.

In South Africa, M&As are administered by the Mergers and Acquisitions division of Competition Commission. According to Chapter 3 of the Competition Act, firms participating in an intermediate merger must first obtain written approval from the Commission, whilst for large mergers, written approval from the Competition Tribunal is required before implementation. Small mergers are readily implementable without prior notification of and written approval from the Competition Commission unless the nature of the deal has an adverse effect on competition or the deal cannot be justified on the grounds of public interest, (Competition Commission South Africa, Annual Report 2011/2012). The Competition Commission only focuses on the ex-ante stages of M&As, therefore, it is essential that we study the pre-announcement and post-announcement performance of M&As in South Africa.

Thus, traditional short-window event studies can be used to capture the wealth effect of approved mergers on shareholders prior to the conclusion of the deal, if the respective markets are efficient (Healy, Palepu and Ruback, 1992; Fama, 1970).

1.3 Research Problem

The M&A literature and several economic theories support the notion that shareholders experience positive abnormal returns as a result of the anticipated value creation post-merger (Cartwright and Cooper, 1993; Moeller et al., 2005; Halebian, 2009). Thus, M&As are expected to create value as a result of firms exploiting economic resources that are both available and implementable, which leads to synergy. Chatterjee (1986) states that M&A deals that create value constitute at least one or more combinations of the following types of synergy namely financial, operational and collusive synergy.

However, in the 1980s M&A wave, acquiring firm shareholders in the UK and US experienced more negative gains on average (Moller et al, 2005). It is argued that the findings are attributable to the inaccurate valuation of target firms and high premiums (Fuller et al., 2002). The 2006 M&A wave was a significant one, the number of completed deals reaching an all-time high, that year also saw the highest losses on aggregate to acquiring firms (Dobbs et al. 2007). This wave was characterized by target overvaluation and mergers between firms with negative synergies and cultural misfits. The empirical evidence seems to indicate that merger stakeholders (firms' management) have not built sufficient merger capabilities because acquiring firms are failing to capture the potential value inherent in M&A deals (Roll 1986; Epstein 2004). There is a strong relationship between a firm's short-term financial

performance and its long-term financial performance. This indicates that- ceteris paribus- poor short-term share performance propagates into poor long term share performance (Healy et al., 1992; Hazelkorn et al. 2004).

The debate as to whether M&As create value for investors is still a raging one among practitioners and investors. The expected value created by M&As is largely dependent on the merit of the deal which is also a function of pre-merger activities such as due diligence, accurate valuation of target, good partner/target selection and the post-merger activities (Tjemkes, Vos, and Burgers, 2012).

The value of M&A deals in SA requires more robust and rigorous research like is the case in developed countries. Merger or acquisition related deals totalled 4 280 during the period of 2002-2013 for rumoured or announced deals in connection with South African firms. According to the Competition Commission's 2011/2012 annual report, only three sectors, namely; manufacturing, property and mining, account for 60% of the total completed merger reviews. There a shortage of comprehensive literature that covers the financial performance of South African M&A related deals. Also, given the more rigid nature of the SA labour market[2], it is necessary to assess the social impact of M&As on employees (Lublin and O'Brien, 1997; Galpin and Herndon, 2000).

Due to a significant number of M&As activity in SA being within the manufacturing and mining sectors, it is imperative that the research considers how such deals affect employees given that both industries are labour intensive. Despite the perceived benefits that may arise from M&As, cross-border M&As are publicly viewed as a threat to employment (Gugler and Yurtoglu, 2004; Lehto and Bockerman, 2008). This further motivates the need to assess the impact M&A deals have on employment in the African context given that acquiring firms are likely to be foreign firms. Lehto and Bockerman (2008) find that employment suffers when M&As also result in a change in ownership.

1.4 Research Objectives

The research objectives of the study are as follows:

[2] Rigid labour markets are characterised by stringent labour laws that restrict employers from increasing and decreasing the number of jobs at will on the basis of productivity. Firms are often forced to close down due to the specified minimum wages which become unsustainable when there are market shocks that limit productivity. Gugler and Yurtoglu (2004) draw the distinctions between liberal and rigid labour markets making reference to the US and some EU countries.

- To assess the share performance of listed firms involved in M&As in the South African market context.
- To determine beneficiary of M&A deals between target and acquiring firms.
- Assess the performance M&A deals for two sub-periods.
- Assess the impact of M&A activity on employment.

1.5 Research Question

The following research questions guide the scope this study:

- Do South African related M&As create value for shareholder?
- Do South African M&As lead to value transfer from acquiring firms to target firms?
- Is there a difference in M&A performance when relatively long time horizon is distributed into two sub-periods?
- What is the relationship between M&A activity and employment activity?

1.6 Research Contribution

The stock performance of the firms involved in M&As gives an indication of how the market's responds to merger or acquisition announcements. It is imperative that the South African market compete for M&A related investments only if value is being created, and not on the basis of which African country is the most desired investment destination. Galpin and Herndon (2000) also give an indication of the implications of mergers on the financial performance of firms done in the past. According to the authors, critical failure factors for M&A deals that they have studied in the past stem from competency related issues (indicting a lack of post-merger integration planning and execution); human related issues, organization cultural differences and breach of trust (Werhane, 1988; Mariappan, 2003).

The Competition Commission diligently reviews M&A deals that are not justified on the grounds of public interest, i.e. deals that may result in job losses and anti-competitiveness, therefore job loss events may not coincide with M&A events. This research adds to the M&A literature by indicating whether South African M&As create value for the shareholders and what social impact these M&A deals have on the South African economy. This is important because large losses have been synonymous with large deals that have resulted in larger premiums and non-cash acquisitions.

1.7 Organization of the Thesis

The research is organized as follows: Chapter 2 presents the literature review which mainly consists of previous empirical evidence. Chapter 3 deals with the description of the data and the methodology adopted in this study. Chapter 4 follows with the presentation of the research results and their interpretations. Chapter 5 presents the discussions and Chapter 6 the conclusion of the study.

Chapter Summary

Further research on merger activity and the respective performance of M&A deals in the South African context is necessary given the divided performance outcomes from literature on developed markets. Given growing demand for foreign direct investments by developing economies coupled with that of developed economies for growth opportunities; and the competition amongst developing economies for investments, it is equally important that emphasis should be placed on the deal quality and not on the size alone. Quality deals are those that do not destroy or extract shareholder value resulting from unnecessary spill-over effects.

Chapter 2: Literature Review

2.1 Introduction

Corporates are regularly developing new competencies, new capabilities, overcoming barriers to entry, procuring new technologies, sharing risk and research knowledge, and combining complementary assets to derive incremental sources of revenue. Apart from forging alliances and utilisation of networks, mergers and acquisitions are an alternate method through which accomplishing these tasks can be achieved (Koza and Lewin, 2000).

This chapter presents the literature review related to this research. Section 2.2 presents the definition of M&As. Section 2.3 presents the types of mergers. Section 2.4 discusses the methods of payment. Section 2.5 covers the motivations for M&As. Section 2.6 follows with the performance of M&As and Section 2.7 covers the social impacts of M&As.

2.2 Definition of Mergers and Acquisitions

Merger and acquisitions are seen as the process through which two firms with different cultures come into contact with each other and subsequently assimilate and accommodate each other's cultures (Mariappan, 2003).

Academic research literature often does not draw a distinction between mergers and acquisitions and uses them interchangeably. A merger involves two (or more) entities coming together to form a completely new organisation. Acquisitions involve the process of fitting one (or more) firms into an already existing structure (Epstein, 2004).

2.3 Types of Mergers and Acquisitions

There are three broad categories that mergers and acquisitions fall into. Cartwright and Cooper (1993) define the various types based on the level of cultural change, degree of integration and intervention necessary for the mergers and acquisitions to meet the set objectives. Epstein (2004) defines the three categories from a comparative or complimentary view with respect to the relative size, industry focus and relative autonomy of the firms involved.

2.3.1 Horizontal Mergers

Horizontal mergers are motivated by size and by forming barriers to entry thereby reducing the number of competitors within an industry (Capron et al, 1998). Researchers classify them as such when both firms have identical SIC codes and produce goods that are substitutes.

Moeller et al., (2005) find that large firms tend to not derive any benefit when both firms are significantly large; however, smaller firms perform much better. Chatterjee (1986) states that horizontal mergers are closely associated with collusive synergy, stems from price control and anti-competitive market structures. Horizontal mergers are often referred to as mergers of equals because they involve the combination two firms of relatively equal stature, complementary resources and competencies to form a new organization (Epstein, 2004).

2.3.2 Vertical Mergers

These are mergers that take place between firms that are not in competition with one another but are related in terms of an input/output or supplier/purchaser relationship. In this regime, changes in the environment for the supplying firm cause a certain degree of uncertainty for the purchasing firm. Vertical mergers are closely associated with operational synergy where firms merge to reduce their dependence on the environment and other firms (Fan and Goyal, 2006).

2.3.3 Conglomeration

This occurs when a firm attempt to extend its economies of scope by acquiring firms that are in unrelated industries. A firm may also acquire smaller firms to enhance its economies of scale by growing the size of its already existing diverse operations through acquisitions (Mueller, 1969). The acquiring firms are often significantly larger than their targets. Conglomerates are closely are associated with financial synergy and often engage in many acquisitions and often compete for potentially profitable assets that will expand the economies of scale and scope (Maksimovic and Phillips, 2001).

Furthermore, conglomerate attempt to smoothen future income by exploring new revenue sources through acquisitions. However, in the case of serial acquires, this is often mistaken for the firms inability to sustain growth internally (Fuller et al, 2002). Conglomerates achieve their growth through integrating the smaller firms into the larger firms' existing structure, thus creating autonomy. Alternatively, conglomerations involves combining firms but keeping them separate as standalone entities to provide the benefits of decentralization and autonomy (Epstein, 2004).

2.4 Method of Payment in Mergers and Acquisitions

As a method of payment, acquiring firms have a choice between cash, stock or a combination of cash and stock (Fuller et al., 2002). Acquiring firms prefer to use stock as a method of payment when the firm's stock is overvalued and cash when the stock is undervalued (Heron

and Lie, 2002). Earlier work by Myers and Majluf (1984) indicates that information asymmetry increases the incentive for managers to issue stock when it is overvalued instead of using cash as a method of payment.

2.4.1 Cash Acquisitions

Researchers find that cash acquisitions tend to positively affect the performance of the acquiring firms (Fuller et. al., 2002; Chatterjee, 2000). Hazelkorn et al. (2004) state that cash acquisitions often create the incentive for acquiring firms to realize the anticipated synergies and diligently manage the merger integration process. The authors' further state that cash acquisitions send a positive signal to investors, indicating that the firm is confident of recouping economic benefits in excess of the cost of the deals.

2.5.2 Stock Acquisitions

It is argued that stock acquisitions are associated with negative market responses when announced. Shleifer and Vishny (2003) cite that mispricing creates an incentive for acquiring firms to overvalue their stock. By manipulating earnings, firms can acquire other firms cost-effectively with overvalued stock. Therefore managers tend to be tactical about the medium of payment in acquisitions, choosing stock acquisitions when their firms stock is overvalued.

2.5 Motivation for Mergers and Acquisitions

The sources of gains from M&As are still a mystery as research findings are inconclusive (Jensen & Ruback, 1983; Haleblian et al., 2009). However, there are common target firm attributes' that lead to positive gains for acquiring firms and such attributes may include; targets within related industries or a target with modest earnings growth. According to Hazelkorn et al. (2004) and Haleblian et al., (2009), the acquisition of assets/units or private firms has a positive impact on the acquiring firms stock price.

The globalization of world economies, long-term market rallies, weakening trade barriers and past successes of serial acquirers amongst other economic events, have contributed to the increasing levels of merger and acquisition activity. Mantravadi and Reddy (2008) cite various motives for the increasing use of mergers and acquisitions and conclude that the sole aim is to remain competitive and to grow profits by firms. Their study is solely focussed on the post-merger period across operational performance of acquiring firms across the different types of mergers in the Indian industry.

Cartwright et al. (1993) state that there are many motives for mergers and these include practical, psychological, or opportunistic aspects. However, the objective of mergers and acquisitions is to achieve synergy or the commonly described "two plus two equals five" effect.

Gorton, Kahl and Rosen, (2009) attribute the concentrated and persistent nature of merger and acquisition activity within related sectors or industries to be as a result of triggered reactions of market rivals. The authors make use of a model which closely resembles different market structures (varying relative size and number of market participants within sectors) and two possible states of the economy from an equilibrium state scenario to explain the wave like nature of merger and acquisition activity. In their study, they posit that the merger and acquisition activity within various industry structures were defensive.

Gibeaut (2003) cites that pre-merger activities by unapproved merging firms with the intent to safeguard their operations and ensure prudence planning led them to be suspected of price collusions and violations of antitrust laws. Activities that lead to acquiring firms gaining a competitive advantage through use of the targets privates pricing and other policies constitute a violation.

Brusco et al. (2007) suggest that industry shocks in the expansionary periods lead to merger waves because they give rise to new synergy amongst firms. Maksimovic and Phillips (2001) confirm that unexpected market events increase acquisition activity and acquisition of divisions. In their study, they find target firms with operations in multiple industries and the predominant subset of acquiring firms also operating in multiple industries. The authors further define the market for asset acquisitions to be one where both the target and acquirer are conglomerate firms.

2.5.1 Value Creation

Mergers provide the potential for power gain. Market power is considered an attempt by firms to appropriate more from their customer base through price control by reducing the number of independent firms in an industry (Eckbo, 1981; Chatterjee, 1986). Under the market power hypothesis, the stock price reaction of rival firms to anticipated industry pricing power determines whether having fewer firms in an industry has spill over effects on rival firms. Price control is identified as one of the possible synergy types that create value. Chatterjee (1986) classifies synergies in three broad categories and the merger types they are associated with. Collusive synergy relates to the increase the in firm’s pricing power for its

output or lowered input costs as result of an M&A. Financial synergy relates to the firm's reduced cost of capital after an M&A. Operational synergy relates to the firm's archiving economies of scale as a result of an M&A. Although M&As lead to more than one synergy type, it is believed that horizontal mergers are closely associated with the most economic value, followed by conglomerates and vertical mergers respectively.

Another contributing factor to value creation is resource redeployment. Horizontal acquisitions lead to a significant resource alignment between acquirers and targets (Capron et al., 1998). This further supports the resource based view economic theory considering that mergers facilitate the redeployment of complementary assets and competencies to generate economies of scope (Tjemkes et al., 2012). Firms also unlock value when they acquire poor performing firms. Thus, acquisitions serve as a disciplinary mechanism that replaces inefficient managers and help protect shareholders from poor management (Jensen and Ruback, 1983).

2.5.2 Managerial Self-Interest

Although the traditional motives for M&As are viewed as means to enhance and maximize shareholders interest, there is opposing evidence that acquisitions destroy shareholder value and managers often conclude deals only to maximize their own self-interests (Haleblian et al., 2009). During the conglomerate merger wave in 1960, researchers found that managerial compensation was positively related to firm size or change in the firm size rather than performance (Mueller, 1969).

Another contributing factor that drives deal activity is egocentric manager behavioural characteristics, also known as managerial hubris. Managerial hubris is classified as excessive pride, and self-confidence or arrogance. It is also associated with egocentric, overconfidence and narcissism manager characteristics. There is overwhelming evidence that M&A deals are driven by managerial hubris and these deals often destroy a considerable amount of value of the acquiring firms (Haleblian et al., 2009; Kroll et al., 2000). CEOs who suffer from this behaviour tend to ignore the market's response about the bid price for their intended targets and conclude deals which are not vested in the best interest of shareholders. Managers suffering from hubris often have a different idea about corporate growth which is centred around size and empire building, (Kroll et al., 2000) rather than on financial growth. Therefore, the personality of CEOs influences their decisions about whether or not to conclude deals.

2.5.3 Market Power

Although synergy is cited as the most pressing motive for M&As, managers often engage in empire building deals for prestige and self-preservation – corporate control. Firms reinforce their competitive position in the market by acquiring in the same industry. Thus, firms create a near monopolistic industry by reducing the number of independent firms within an industry. Chatterjee (1986) counters the collusion implication relating to increasing prices on consumers, stating that consumer benefit from better quality products. Monopolies focus on profit; firms reduce cost, charge higher prices and produce fewer units than what the market requires (Norman et al., 2005). Related firms can influence the price of their output or the cost of the input by becoming larger through mergers (Lubatkin, 1989).

2.6 Performance of Mergers and Acquisitions

The literature review indicates that academics and practitioners present varying conclusions on the value creation effect of mergers and acquisitions. Value creation is related to the impact of a merger announcement on the share price and improvements in operational performance of both the target and acquiring firm, where applicable.

The event study methodology empirically evaluates the nature of returns to shareholders of the target and acquiring firms in excess of market returns as a result of the announcement (Jensen and Ruback, 1983). Assessing the impact of an event on the firms' stock prices gives an indication of the expected value impact of the event on the firm (Fama et al., 1969; Fama, 1970; Brown & Warner, 1985).

There are varying conclusions drawn from different studies depending on the observation window length, method used to finance the deal, the relative sizes of the acquirer and targets. On aggregate, it seems target firm shareholders benefit the most from M&A deals and this is more pronounced in deals where tender offers are made (Fowler et al. 1988). Chatterjee (1986) finds that targets in related mergers perform better than targets in unrelated mergers during the 5-days surrounding the announcement of mergers. Acquiring firms in related mergers do not perform better than acquiring firms in unrelated firms. This suggests that there is spill over effect of the collusive synergy to rival firms. Heron and Lie (2002) find that the operational performance of acquiring firms is improved when glamour firms acquire value firms and when the both firms belong in the same industry.

Acquiring shareholders are often worse off after M&As. However, some literature finds that this in not so when the target is not listed and privately owned, the relative size of the target is

larger than the acquirer, the target firm is a value firm rather than a glamour stock and the target subscribe to a higher regulatory environment (Aybar and Ficici, 2009).

Managers of large firms, whose compensation is derived from the size of the firm tend to be inefficient in protecting and maximizing shareholder wealth and are found to be self-seeking. Chatterjee (2000) finds that acquires of large targets in the US and UK in the 1980's did not report improved performance which indicates that corrective takeovers do not create value nor improve efficiency which is contrary to the findings of Andrade et al. (2001). Their findings are consistent with the predictions of two theories, namely the market for corporate control (Jensen and Ruback, 1983) and the market for corporate assets (Maksimovic and Phillips, 2001). The market for corporate control theory states that acquisitions serve as a disciplinary mechanism that replaces inefficient managers and also help protect shareholders from poor management. The market for corporate assets theory suggests that poor performing firms are likely to become targets or sellers of assets while competent firms are likely to be acquires or buyers of assets.

Moeller, Schlingemann and Stulz (2005) conclude that firms that make acquisitions at a premium generally perform poorly thereafter. Furthermore, the method of payment for the acquisition affects the economic value added to the acquiring firm. Fuller, Netter and Stegemoller, (2002) find that the performance of acquiring firms using stock as a method of payment is superior to those using other mediums of payment. Kroll et al. (2000) find that acquiring managers tend to underestimate the process of integrating the target firm with the existing structures of their firms. Consistent with these findings, successfully integrating two firms requires commitment from both firms in order to realize the potential synergies inherent in an acquisition (Galpin and Herndon, 2000). Aybar and Ficici (2009) find that cross-border expansion attempts by emerging-market multinationals lead to value destruction. However, the authors find that the relative size of targets, privately held targets and diversified targets are associated with positive market responses around expansion announcements.

2.7 Social Impact of Mergers and Acquisitions

Mergers and acquisitions are adaptive mechanism through which firms can facilitate growth, increase speed to market and readjust labour costs in rigid labour market structures (Gugler and Yurtoglu, 2004; Lehto, and Bockerman, 2008). In these markets, firms are not free to reduce the firms' capacity at will. Managers of conglomerates sell off excess business units and assets, which are acquisitions for acquiring firms, in an attempt to consolidate their main

operations and lower their overhead costs (Maksimovic et. al. 2001). Gugler and Yurtoglu (2004) provide evidence of the role mergers and acquisitions as restructuring devices. Their study indicates that there are firms using mergers and acquisition as a mechanism to reduce excess labour to less than optimal levels, namely in rigid labour markets.

However, cross-border M&As are considered as more of a threat to employment from the public point of view (Lehto and Bockerman, 2008). Conyon et al. (2002) find that the effects on employment vary by merger type. Horizontal mergers have substantial detrimental effects on employment than vertical and unrelated mergers. However, despite the differences in the initial impact of each merger type on employment, they find that M&A deals negatively affect employment in the long-run. Also, Conyon et al. (2001) indicates that hostile M&As reduce jobs earlier because of the negative initial impact on jobs but the same fate prevails as with friendlier mergers in the long run. Werhane (1988) states that employees are considerably affected by M&As because, more frequently than not, employment is shifted and some jobs are eliminated. The author's argument is that M&A practices pose contraventions to the employees' basic human rights – the right not to be coerced into a circumstance unwillingly and the right to information concerning their job security. This is the case when the acquiring firm completely absorbs the target firms; certain functions are duplicated and cause confusion, internal disruptions, and frustration between employees and often leads to breach of trust - declining employment satisfaction (Mariappan, 2003; Epstein, 2004).

Norman et al. (2005) argue that mergers in markets with high barriers to entry are often justified by cost reduction synergies but do not benefit consumers. They argue that mergers in such markets may reduce the number of substitutes and cause an increase in prices regardless of cost reductions generated by mergers. Consequently, such mergers create a monopolistic industry as suggested by Chatterjee (2000).

2.8 Review of the South African Labour Market

In SA, the number of people employed in the formal non-agricultural sector in 2013 was estimated at 8 495 000. This is an increase of 39 000 employees from 2012. The Community and social services industry (including state employment) is the largest employer accounting for approximately 28.0% of employment in the formal non-agricultural sector. This is followed by the Finance and other business services industry and Trade industry which account for 22.0% and 20.0% of employment in the formal sector respectively.

The South African economy experienced steady growth in jobs over the period of 2003-2013 and the economy gained 2.1 million jobs over the 10 year period. Of the 2.1 million jobs gained over the period, the Community and Social Services, Finance and Trade industry account for 92% of the jobs created. However, not enough jobs were created to absorb the 4.9 million of the working age population increase over the same period. During the period of 2003-2008, the job growth was positive, followed by a downturn in 2009 due to the global economic recession. In the post-recession period, employment growth was slow and rising unemployment resulted in little change (-0.1%) on the official unemployment rate from 24.8% in 2003 to 24.7% in 2013. Unemployment is more pronounced among the youth, especially amongst the black African and female population. The youth unemployment rate (34.8%) is at least twice as high as that of adults (14%), whilst the unemployment rate amongst black Africans (28.1%) and Coloured population (24.2%) is higher than the combined unemployment rate of the Indian/Asian and White population. The male unemployment rate (23.1%) increased by 2.6% from 21.7% in 2003. However this is still lower than the female unemployment rate which was estimated at 26.7% in 2013, a decline of 1.7% from the 2003 estimate.

With the exception of tertiary industries, all other industries have a higher percentage of persons with education levels below matric. Across all industries, 47.3% of the employed labour force has an education level below matric, 31.0% has a matric only education level and 15.2% has a tertiary education. Over the 10 year period, the proportion of employees occupying semi-skilled positions remained unchanged at around 46.0% of total employment and unskilled position occupants are on the decline estimated at 28.3% in 2013 compared to 30.9 in 2003. The number of people occupying skilled positions has increased from 22.9% in 2003 to 25.6% in 2013 (Statistics SA, *National Labour Market Trends*).

From the literature review, the following hypotheses are developed.

Hypothesis 1

H_0: M&A announcements have a significant negative or no effects on the stock price of target firms in any given day around the time of the announcement.

H_1: M&A announcements have a significant positive effect on the stock price of target firms in any given day around the time of the announcement.

Hypothesis 2

H_0: M&A announcements have a significant negative or no effects on the stock price of acquiring firms in any given day around the time of the announcement.

H_1: M&A announcements have a significant positive effect on the stock price of acquiring firms in any given day around the time of the announcement.

Hypothesis 3

H_0: The level of M&A activity is not related to the level of employment.

H_1: The level of M&A activity is related to the level of employment.

Chapter Summary

M&As are sensible when the results favour the shareholders of the target and acquiring firms involved. Essentially, the underlying argument is whether a merger deal enhances the competitive advantage of the firms involved. However, not all deals are concluded on deal merits, some are driven by managerial hubris and empire building. On average, target firm shareholders experience positive abnormal returns this may indicate that M&As may create value to the shareholders of target firms. However, the market is not as rewarding to the shareholders of acquiring firms for deals that have potential economic values that are perceived to be lower than the premiums paid. M&As do not only lead to wealth creation or destruction but also present social impacts that affect employees.

Chapter 3: Research Methodology

3.1 Introduction

Event studies are used to examine the markets' response to an event that is well defined by accessing the performance of stock prices around that event. This methodology is used frequently as an analytical tool to ascertain the wealth impact of a particular event on the security prices. The event of interest in this research is merger and acquisition deal announcement.

This chapter presents the data and the methodology related to this research. Section 3.2 covers the data and data sources of the research including deal selection process. Section 3.3 covers the research design and Chapter summary concludes the chapter.

3.2 Data and Data Sources

The events analysed in this research are M&A deal announcements associated with listed SA firms for the period of 2002-2013. The data on M&As considered are published by several sources which include: the Competition Commission of South Africa, *Zephyr* and *Bloomberg*. The M&A data include: deal type, payment type and transaction value information which is also extracted from *Bloomberg*. There are 4 280 deals from *Zephyr*- the database of M&A deals- for the period under consideration. The Competition Commission of South Africa published 3 321 deals for this period. *Bloomberg* records 3 556 deals M&A type related deals for the same period. The daily price data to assess the performance of M&As is also obtained from *Bloomberg*. Further, the data related to social impact of M&As including job losses statistics and unemployment will be obtained from *Bloomberg* and from *Statistics SA*.

The sample selection process followed the following procedure. One, we select M&A related deals for which the domicile of acquiring firm or target firm is South Africa. Two, the focus is strictly on M&A deals with announcement dates. Deals that involve increased share purchases, spinoffs and venture deals are excluded from the analysis. Three, we select deals that are either approved or pending in this period. Rumoured and terminated deals are not included. Last, this sample is further reduced by focussing on firms for which the stock prices are available on *Bloomberg*. Table 1 below shows how the final sample was derived.

Table 1 below presents the procedure followed to select the sample.

	Target firms	Acquirers
Initial sample	2,374	2,374
Less firms without ticker	781	191
	1,593	2,183
Less firms delisted firms	1,338	453
Final sample	255	1,730

3.3 Research Design

The event study methodology employed in this research empirically evaluates the nature of returns earned by shareholders of the target and acquiring firms in excess of the markets' expected returns as a result of an M&A announcement (Jensen & Ruback, 1983; Elton & Gruber, 1995). The method focuses on the impact of firm-specific events on the stock prices of the concerned firms (Brown & Warner, 1980). The price data are converted into returns data, this research use geometric returns using the following formula:

$$R_{it} = \frac{P_{it} - P_{i(t-1)}}{P_{i(t-1)}}$$

Where:

R_{it} is the return over the period t for asset i, P_{it} and $P_{i\,(t\text{-}1)}$ represent the prices for asset i over period t and t-1 respectively.

3.3.1 Estimation of Expected Returns

Different models for estimating the expected returns are used in this research include: market models, mean-adjusted models and market-adjusted models (see Brown & Warner, 1985; Peterson, 1989). This research uses mean-adjusted models and market-adjusted methods as the underlying process for estimating the expected returns. These methods are used to calculate that stock return that would have been expected if the event had not occurred. The expected return of asset i in period t is given by R^{*}_{it}. The actual asset returns are denoted by R_{it}. The estimation period is from t =-60 to t = -11. The full impact of the events on the firms stocks may not be felt on the event day, we examine returns the event period is from t = -10 to t =10.

3.3.1.1 Mean-adjusted models

Mean-adjusted models assume that returns on assets are constant over the event period. The expected returns over the event period are equal to the average return over during estimation

period. This research considers an estimation period of 60-days to 11-days (49 days prior to event) prior to the event day. The mean-adjusted returns are calculated as follows:

$$\overline{\mathrm{R}_i} = \frac{1}{49}\sum_{t=-60}^{-11} R_{it}$$

The mean return is comprised of 49-return observations realised from the 60th day to the 11th day prior to the even. In this instance, the actual return of each stock is estimated by the mean return over the (60,11) window period prior to the merger announcement. Where the estimated expected returns for the event period are denoted by:

$R^*_{it} = \overline{R_i}$

R^*_{it} is the estimated expected return over period *t* for asset *i*.

3.3.1.2 Market-adjusted models

The market-adjusted model assumes that the best predictor for the returns on a given asset is equivalent to the relative market returns. The *JSE All Share Index* is proxy for the market portfolio in the South African context. The market-adjusted returns are calculated as follows:

$R^*_{it} = R_{mt}$

Where:

R_{mt} is the return from the over the period *t* for the index.

3.3.2 Excess Returns

The abnormal return of an asset for a given period is the differences between the actual return and the expected return from the estimation model for that period (Elton & Gruber, 1995). These are returns in excess of the estimated expected returns. For each firms stock, the excess return for day in the event period is calculated as follows:

$A_{it} = R_{it} - R^*_{it}$

Where:

A_{it} denotes the excess returns on asset *i* over period *t*.

3.3.3 Average Excess Returns

The excess returns for a sample of *N* firms for each day *t* are averaged to obtain general insights. The average abnormal returns for N assets for each day *t* are given by:

$AAR_t = \overline{AR}_t$,

Where

$$\overline{AR}_t = \frac{1}{N}\sum_{i=1}^{N} A_{it}.$$

3.3.4 Cumulative Average Abnormal Returns

The cumulative average abnormal return on each day *t* is given by:

$$CAR_t = \sum_{k=-10}^{t} \overline{AR}_k.$$

3.3.5 Test Statistics under the Null Hypothesis

Statistical significance of the abnormal returns is essential to test the hypotheses related to the market events. This requires the standardization of the excess returns to reflect statistical error in the estimation of expected returns. The test of significance is an assessment of errors in the forecasting of returns in the event period or on any particular day in the event period. The test statistics is given by the ratio of the day '0' average excess return to the estimated standard deviation. The standard deviation is estimated from the time-series of mean excess returns. The test statistic for an event day k is given by $t = \frac{\overline{A_k}}{\widehat{S}\left(\overline{A_t}\right)}$, where $\overline{A}_t = \frac{1}{N}\sum_{i=1}^{N} A_{it}$,

$\widehat{S}\left(\overline{A_t}\right) = \frac{\sigma}{\sqrt{N}}$,

N is the number of the sample of stocks on day any given day *t*.

3.4 Impact of Mergers & Acquisitions on Jobs

The literature presented in this research suggests that jobs are affected by M&As. Firms that embark on expansionary operations are most likely to be 'for jobs' given the widely accepted macroeconomic relationship between output and unemployment. However we are not certain of the relationship; M&As can either be 'for jobs' or 'against jobs' or both. We determine the impact of M&A activity on jobs in the South African context. We conduct linear regressions of the annual employment activity from various formal non-agricultural sectors against annual M&A activity. We assume a linear relationship between employment activity and M&A activity for simplicity and analyse the significance of the coefficients to determine the relationship. The number of deals and number of employees in each sector are normalized so that index is equal to 1 in 2002.

$$\hat{y}_{it\ sector} = \hat{\alpha}_i x_{M\&At} + \hat{\beta}_i + \hat{\epsilon}_{it}$$

Where:

$\hat{y}_{it\ sector}$ is the employment activity is sector *i* and $x_{M\&At}$ is the M&A activity in year *t*. These variables are measured as follows:

$$\hat{y}_{it\ sector} = \frac{no.of\ emplyees\ in\ sector\ i\ for\ year\ t}{no.of\ employees\ in\ sector\ i\ in\ the\ base\ year}$$

$$x_{M\&At} = \frac{no.of\ M\&A\ deals\ in\ year\ t}{no.of\ M\&A\ deals\ in\ the\ bases\ year}$$

Chapter Summary

This chapter gives an overview of data sources and the type of data considered in this research. Thereafter the deal selection criteria research is discussed followed by the research design, giving a description of the methods and calculations performed. The method for determining the impact of M&A activity on jobs is also discussed in this chapter.

Chapter 4: Presentation of Results

4.1 Introduction

This chapter presents the descriptive analysis and empirical results of the data sample. The data sample features for both acquiring and target firms are discussed in Section 4.2. The empirical results for the full period (2002-2013) and two sub periods are (2002–2007) and (2008-2013) respectively. The results are presented in section 4.3 and section 4.4. Section 4.5 presents the results of the regressions for the employment activity in each sector and the total non-agricultural employment activity against M&A activity. Section 4.6 presents the results for the full period (2002-2013) based on the market-adjusted model. The chapter summary concludes the chapter.

4.2 Sample Characteristics

4.2.1 Distribution of Sample Transactions by Method of Payment.

Table 2 below shows that there were more than five times as many M&A cash transactions than stock transactions. However, in monetary terms, these deals are not proportioned as such as the value of cash transactions far exceeds that of stock transactions. This data does not support decisions to merge or acquire on the basis of perceived mispricing of acquiring companies stocks by financial markets. Therefore sellers prefer cash over the possible synergy that comes with ownership from other means of payment such as stock.

Table 2: M&A deals by method of payment

Method of Payment	Deal count	Value [*US* mil.]	Total value %
Cash	1265	111 353.37	67%
Stock	219	30 940.34	19%
Cash and Stock	210	13 321.61	8%
Undisclosed	646	5 006.82	3%
Cash or Stock	19	4 832.42	3%
Cash, Stock & Debt	2	1 186.85	1%
Cash and Debt	8	451.24	0%
Debt	2	23.77	0%
Stock & Debt	3	14.10	0%
Grand Total	2374	167 130.52	100%

4.2.2 Distribution of Sample Transaction by Years and Payment Method

Table 3 gives an indication of the number of deals done in each year of the period under consideration. The number of cash deals is greater than that of other forms of payment for

any given year. Cash and undisclosed deals constitute approximately 53% and 27% respectively (80% when combined) of the total number of deals considered. The number of deals declined by as much as 41% in 2009 from 255 deals in 2008 to 150 deals in 2009. The decline in merger activity for this period is coincidental with the economic growth slowdown experienced in South Africa. Over this period, GDP dropped to 1.8% in the 4th quarter of 2008, 3.9% in the 3rd quarter, and dipped to -0.6% in the 4th quarter of 2009. The economy recovered in 2010 with GDP at 2.3% in the 1st quarter of 2010 (Statistic South Africa SA Quarterly reports). In conjunction with these events, the value of cash deals declined in 2008 and 2009, whilst the value of other forms of payment increased in 2008 (Table 4).

Table 3: M&A activity by year and payment mode

Deal count by year and method of payment					
Year	**Cash**	**Undisclosed**	**Stock**	**Cash and Stock**	**Other**
2002	60	59	10	18	3
2003	106	63	22	20	2
2004	89	58	19	14	5
2005	88	58	17	12	2
2006	126	50	18	27	5
2007	124	55	18	41	2
2008	131	69	22	31	2
2009	85	30	19	14	2
2010	97	43	27	11	2
2011	114	54	20	7	3
2012	114	60	9	7	3
2013	131	47	18	8	3
Total Count	1265	646	219	210	34

Table 4: M&A value by year and payment mode

Deal values by year and method of payment [US mil.]					
Year	**Cash**	**Undisclosed**	**Stock**	**Cash and Stock**	**Others**
2002	2 928	1 147	411	2 361	78
2003	4 322	219	3 034	953	2
2004	4 937	334	1 411	79	596
2005	11 374	732	421	508	218
2006	18 551	953	2 022	3 091	774
2007	17 531	525	2 781	831	273
2008	6 220	693	5 041	2 850	1 092
2009	3 300	-	6 243	438	259
2010	11 513	111	3 420	1 575	2 127
2011	8 777	272	2 914	177	270
2012	12 189	20	2 238	198	319
2013	9 713	-	1 005	260	501

Total	111 353	5 007	30 940	13 322	6 508

4.3 Do South African Firm Related Mergers & Acquisitions Create Value For Shareholders?

4.3.1 Target Firms' Excess Returns

Table 5 below presents the statistics (mean, t-value and p-value) for the aggregate excess returns for target firms in the (-10, 10) event window. The sample data for the period 2002-2013 contains 255 target firms.

Table 5: Target firms performance during the period 2002-2013

Target firms' performance statistics for 2002-2013			
Day	**Mean – μ**	**t-value**	**p-value**
-10	0.0027	0.5582	0.2886
-9	0.0006	0.2975	0.3831
-8	-0.0028	-1.3971	0.9182
-7	-0.0056	-1.0273	0.8474
-6	-0.0041	-1.1610	0.8766
-5	0.0025	0.7037	0.2411
-4	0.0140	1.6754	0.0475**
-3	-0.0004	-0.2922	0.6148
-2	0.0012	0.6951	0.2438
-1	0.0086	1.5378	0.0627*
0	0.0761	4.3391	0.0000***
1	0.0408	2.6429	0.0044***
2	0.0039	1.1869	0.1182
3	0.0099	0.9293	0.1768
4	-0.0006	-0.2344	0.5926
5	0.0056	1.1697	0.1216
6	-0.0037	-1.1376	0.8718
7	-0.0025	-1.3996	0.9186
8	-0.0043	-1.5803	0.9424
9	0.0013	0.5033	0.3076
10	0.0060	0.4934	0.3111

* denotes significance at 90% confidence level.
** denotes significance at 90% and 95% confidence levels.
*** denotes significance at 90%, 95% and 99% confidence levels.

To access the impact of the deals on target firms' stock, emphasis is placed on the sign of the mean of excess returns as well as its significance. Table 5 above shows that target firms on aggregate, experienced significant positive returns (effects) on some days from the M&A deals done for the period 2002-2013. There are days within the period with significant effects prior to the day of the event which may be a cause of concern on the efficiency of the market.

However, these effects are small compared to the effects realized on the event day and could be likely attributed to some other event not related to the announcements given that they did not persist. Figure 1 and Figure 2 present a pictorial view of the average and cumulative abnormal returns, respectively, for target firms.

Figure 1: Average Excess Returns for Target Firms for period 2002-2013

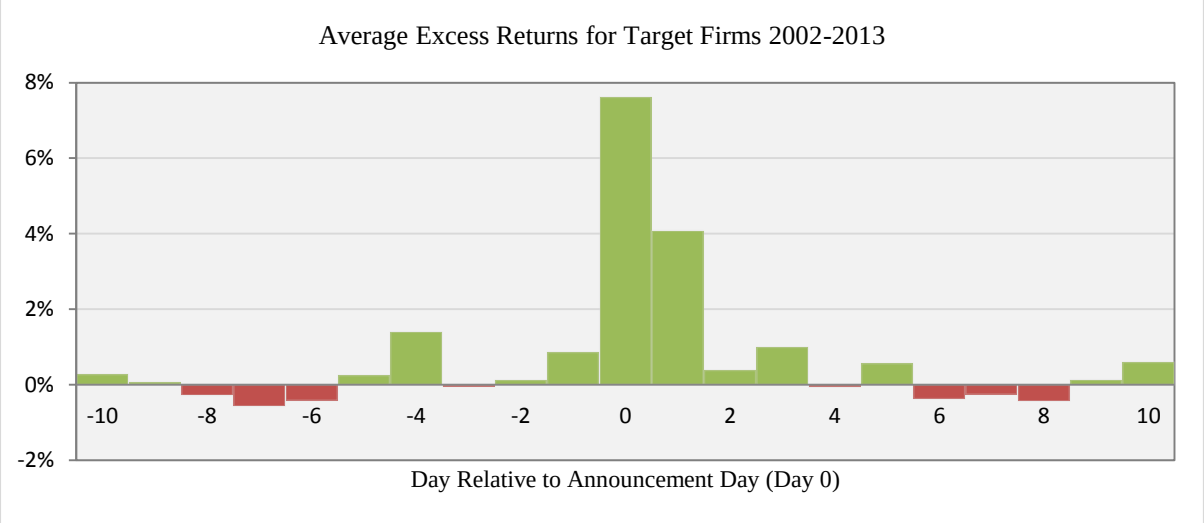
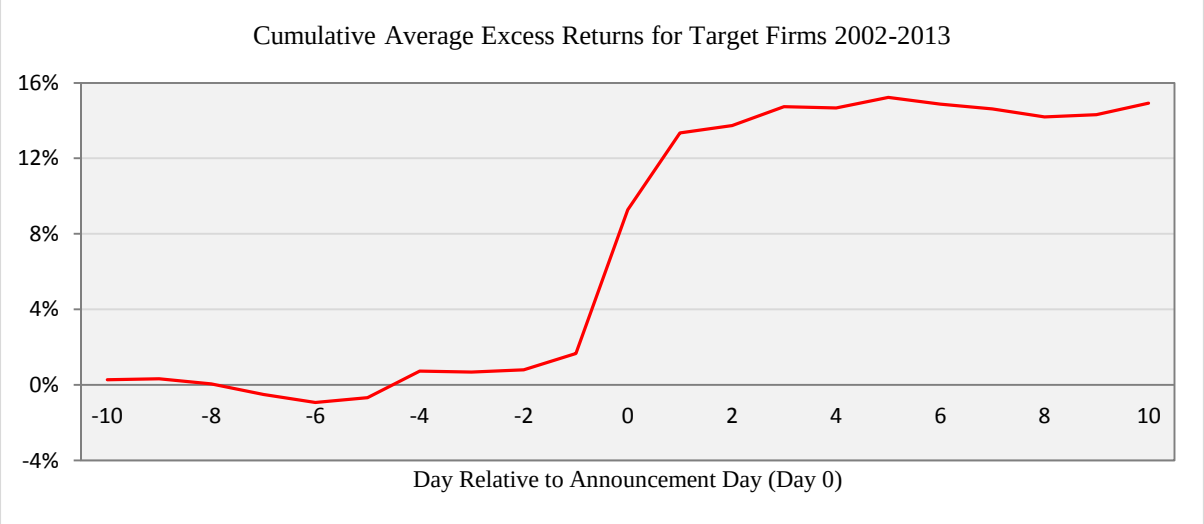


Figure 2: Cumulative Average Excess Returns for Target Firms for the period 2002-20013



The effects of M&As on target firms indicate that there were positive effects on some days in the event window and thus we reject the null hypothesis that M&A announcements have significant negative or no effects on the stock price of target firms in any given day around the time of the announcement. We are caucious to accept the alternative hypothesis because of the unexpected positive effects realised prior to the event day. Albeit, the results indicate that target firms do experience positve effects on the day of a merger announcement. Figure 2

above indicates that the market reactions, to the news were, are instant and efficient. Therefore we reject the null hyphothesis and accept the alternative hypothesis which states that:

M&A announcements have a significant positve effect on the stock price of target firms in any given day around the time of the announement.

4.3.2 Acquiring Firms' Excess Returns

Table 6 below presents the statistics (mean, t-value and p-value) of the aggregate excess returns for acquiring firms in the (-10, 10) event window. The sample data for the period 2002-2013 contains 1 370 target firms.

Table 6: Acquiring firms' performance during the period 2002-2013

Acquiring firms' performance statistics for 2002-2013			
Day	**Mean**	**t-value**	**p-value**
-10	-0.0031	-2.3733	0.9911
-9	-0.0024	-1.8685	0.9691
-8	-0.0014	-0.9398	0.8263
-7	0.0004	0.1809	0.4282
-6	0.0094	0.9501	0.1711
-5	-0.0017	-0.9205	0.8213
-4	0.0068	1.0923	0.1374
-3	-0.0011	-0.8992	0.8157
-2	0.0005	0.3446	0.3652
-1	-0.0028	-2.2023	0.9861
0	0.0122	3.1908	0.0007***
1	0.0020	1.1666	0.1218
2	-0.0002	-0.1573	0.5625
3	0.0016	0.5818	0.2804
4	0.0004	0.2466	0.4026
5	-0.0001	-0.0520	0.5207
6	-0.0022	-1.5316	0.9371
7	-0.0015	-1.0171	0.8454
8	-0.0028	-1.9027	0.9714
9	-0.0027	-2.0510	0.9798
10	-0.0011	-0.8485	0.8019

* denotes significance at 90% confidence level.
** denotes significance at 90% and 95% confidence levels.
*** denotes significance at 90%, 95% and 99% confidence levels.

Table 6 above shows that acquiring firms on aggregate did not experience any significant effects on any given day except on the day of the announcement from the M&A deals done for the period 2002-2013. This indicates that the difference between the average actual

stocks' returns and their estimates is roughly zero on all other days except on the day of the announcements. Although these shareholders experienced positive and negative effects on some days, these are all insignificant at all the three confidence levels considered. The event day effect is significantly positive at all the confidence levels considered.

Figure 3: Average Excess Returns for Acquiring Firms for period 2002-2013

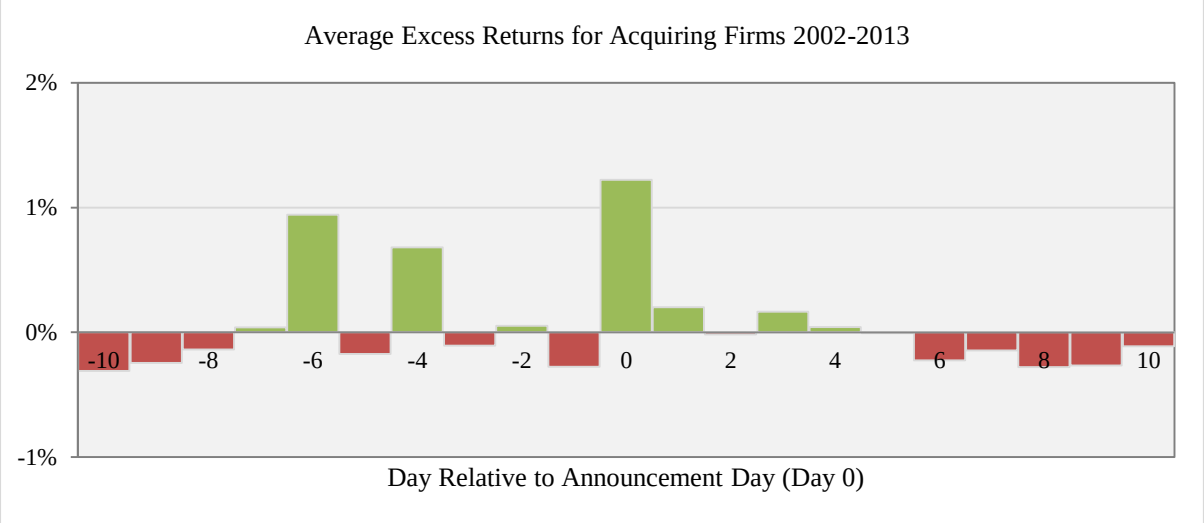
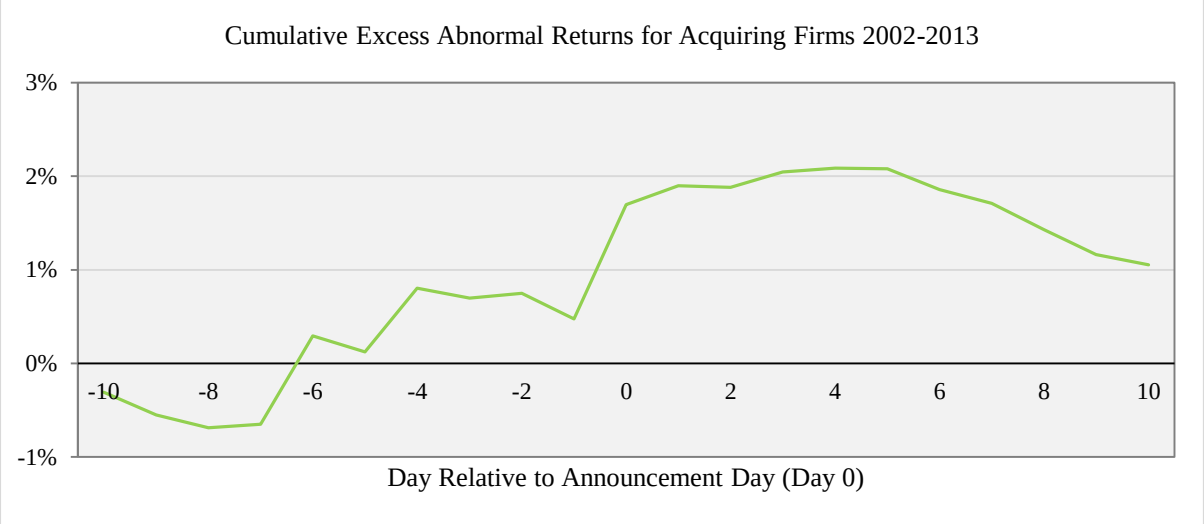


Figure 4: Cumulative Average Excess Returns for Acquiring Firms for the period 2002-2013



The effects of M&As on acquiring firms indicate that we reject the null hypothesis. The results indicate that the effects that acquiring firms experience on the day of merger announcement are both positive and statistically significant. We therefore reject the null hypothesis accept the alternative hypothsis which states that:

M&A announcements have significant positive effects on the stock price of acquiring firms in any given day around the time of the announcement.

This indicates that on aggregate, acquiring firms experience little (positve or negative) to relatively positive returns from M&A deal announcement over the specifed period.

4.4 Are Performances Different for the periods?

4.4.1 Target Firms' Excess Returns 2002-2007

Table 7 below presents the statistics (mean, t-value and p-value) for the aggregate excess returns for target firms in the (-5, 5) event window. The sample data for the period 2002-2007 contains 170 target firms.

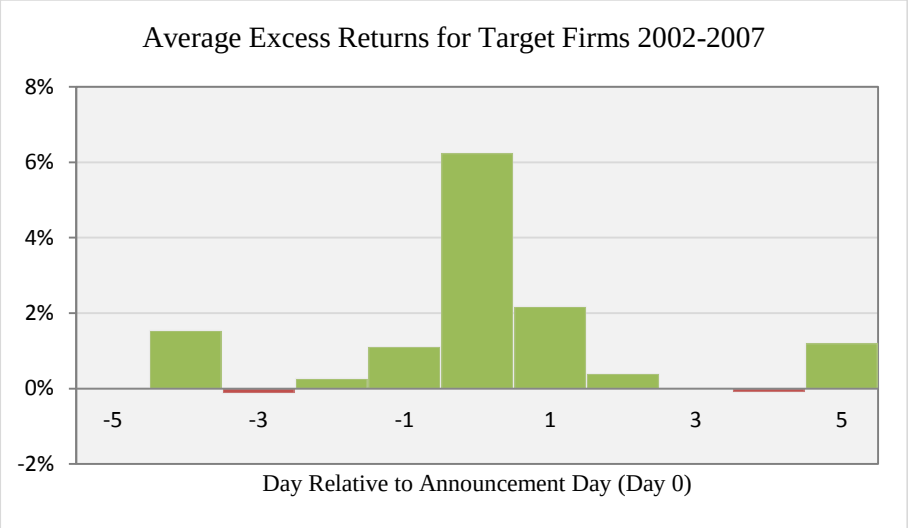
Table 7: Target firms' performance during the period 2002-2007

Target firms' performance statistics for 2002-2007			
Day	**Mean - μ**	**t-value**	**p-value**
-5	0.0000	0.0043	0.4983
-4	0.0153	1.3715	0.0860*
-3	-0.0012	-0.9381	0.8252
-2	0.0026	1.1515	0.1256
-1	0.0110	1.3413	0.0908*
0	0.0624	3.0503	0.0013***
1	0.0217	1.8435	0.0335**
2	0.0039	0.8371	0.2019
3	0.0001	0.0181	0.4928
4	-0.0009	-0.5591	0.7116
5	0.0119	1.7592	0.0402**

* denotes significance at 90% confidence level.
** denotes significance at 90% and 95% confidence levels.
*** denotes significance at 90%, 95% and 99% confidence levels.

The effects of M&A deals in the period 2002-2007 on target firms are significantly positive for some days in the (-5,5) event window. The positive effects around the event day are in line with the expectations covered in the literature. These effects are more pronounced on the event day and the day after the announcement. The effects on days prior to the event are unexpected but do not seem to capture effects of anticipated deal announcements seeing that they are not prolonged up to the event day. This could be attributed to the nature of the deals.

Figure 5: Average Excess Returns for Target Firms for period 2002-2007



4.4.2 Acquiring Firms' Excess Returns 2002-2007

Table 8 below presents the statistics (mean, t-value and p-value) for the aggregate excess returns for target firms in the (-5, 5) event window. The sample data for the period 2002-2007 contains 861 acquiring firms.

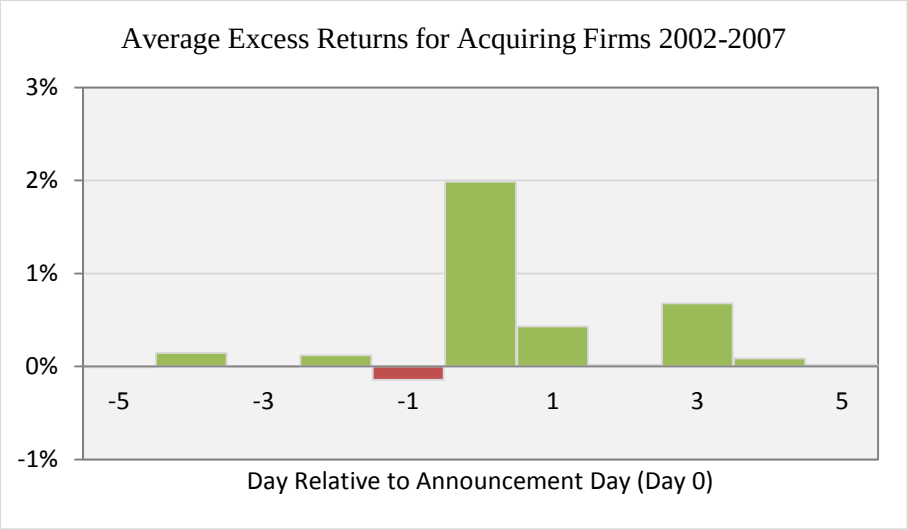
Table 8: Acquiring firms' performance during the period 2002-2007

Acquiring firms' performance statistics for 2002-2007				
Day	Mean - μ	t-value	p-value	
-5	-0.0001	-0.0848	0.5338	
-4	0.0015	0.9080	0.1821	
-3	0.0000	-0.0243	0.5097	
-2	0.0012	0.7857	0.2161	
-1	-0.0014	-1.1187	0.8682	
0	0.0199	2.8112	0.0025	***
1	0.0043	2.2365	0.0128	**
2	0.0002	0.1254	0.4501	
3	0.0068	1.3532	0.0882	*
4	0.0009	0.4477	0.3273	
5	0.0002	0.1882	0.4254	

* denotes significance at 90% confidence level.
** denotes significance at 90% and 95% confidence levels.
*** denotes significance at 90%, 95% and 99% confidence levels.

The table above indicates that acquiring firms experienced significant positive gains on announcements of deals and the day after for the period 2002-2007. The effects for the other days in the event window are small and insignificant.

Figure 6: Average Excess Returns for Acquiring Firms for period 2002-2007



4.4.3 Target Firms' Excess Returns 2008-2013

Table 9 below presents the statistics (mean, t-value and p-value) for the aggregate excess returns for target firms in the (-5, 5) event window. The sample data for the period 2008-2013 contains 85 target firms.

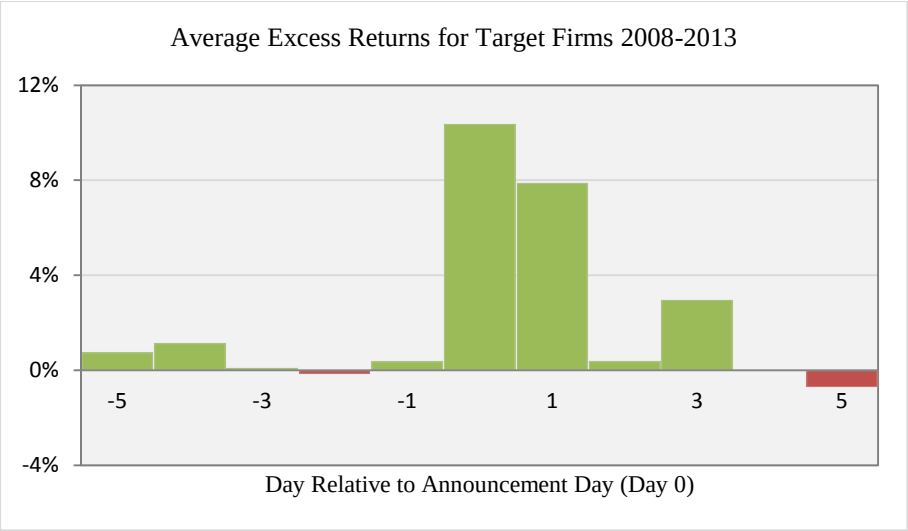
Table 9: Target firms' performance during the period 2008-2013

Target firms' performance statistics for 2008-2013				
Day	**Mean - μ**	**t-value**	**p-value**	
-5	0.0075	0.8225	0.2066	
-4	0.0113	0.9918	0.1621	
-3	0.0012	0.3257	0.3727	
-2	-0.0014	-0.5044	0.6924	
-1	0.0037	1.1802	0.1207	
0	0.1036	3.1301	0.0012	***
1	0.0788	1.9875	0.0251	**
2	0.0039	1.1746	0.1218	
3	0.0297	0.9428	0.1743	
4	0.0000	-0.0006	0.5002	
5	-0.0069	-1.4389	0.9230	

** denotes significance at 90% and 95% confidence levels.
*** denotes significance at 90%, 95% and 99% confidence levels.

The effects of M&A deals on target firms for the recent 5-year period are better (larger excess returns on event day) than those in the period 2002-2007. However, there were twice as many firms in the period 2002-2007 and effects are significantly positive in both cases.

Figure 7: Average Excess Returns for Target Firms for period 2008-2013



4.4.4 Acquiring Firms' Excess Returns 2008-2013

The table below presents the statistics (mean, t-value and p-value) for the aggregate excess returns for target firms in the (-5, 5) event window. The sample data for the period 2008-2013 contains 869 target firms.

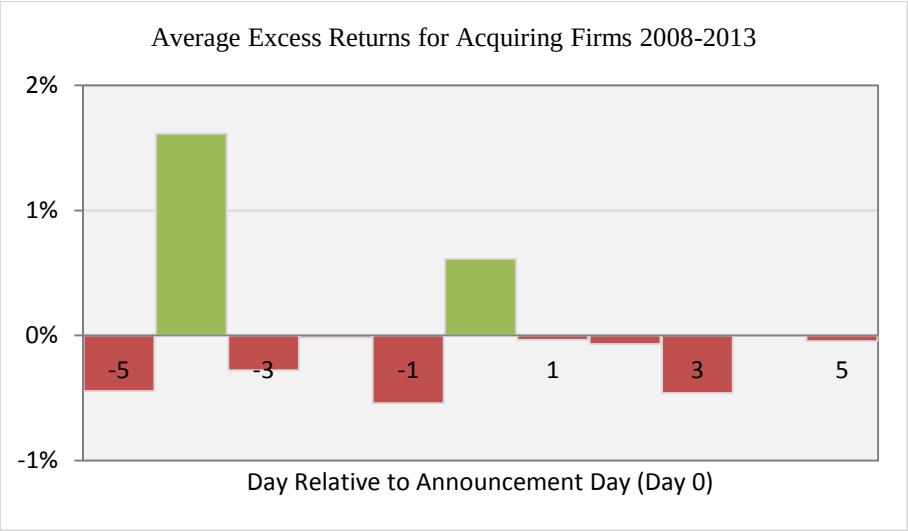
Table 10: Acquiring firms' performance during the period 2008-2013

Acquiring firms' performance statistics for 2008-2013				
Day	**Mean - μ**	**t-value**	**p-value**	
-5	-0.0033	-0.9323	0.8243	
-4	0.0121	0.9837	0.1628	
-3	-0.0021	-0.9819	0.8368	
-2	-0.0001	-0.0470	0.5188	
-1	-0.0041	-1.8971	0.9709	
0	0.0046	1.5514	0.0606	*
1	-0.0003	-0.0918	0.5366	
2	-0.0005	-0.3147	0.6235	
3	-0.0034	-1.2961	0.9024	
4	0.0000	-0.0048	0.5019	
5	-0.0003	-0.1204	0.5479	

* denotes significance at 90% confidence level.

Table 10 above indicates that acquiring firms did experience significant positive gains on the day of deal announcements in 2008-2013. The effects on the other days in the event window are small and insignificant. The unexpected positive effect 4-days prior to the event is statistically insignificant but appears to be quite significant given that the effect is larger than that of the other days. Also the effect on the event for the period 2002-2007 is higher indicating that acquiring firms for the recent period fared much better.

Figure 8: Average Excess Returns for Acquiring Firms for period 2008-2013



4.5 Impact of Mergers & Acquisition Activity on Employment

The table below presents the results of the regressions of the employment activity in each sector against merger activity from 2002 to 2013.

Table 11: Employment activity regressed against M&A activity for 2002-2013

Sector Activity	Adj. R^2	Coef.	SE Coef.	t-value	p-value
Mining	0.2386	-1.1587	0.5495	-2.1087	0.0612
Manufacturing	0.0197	-0.6151	0.5567	-1.1048	0.2951
Utilities	-0.0966	0.0462	0.2622	0.1763	0.8636
Construction	0.2946	1.7976	0.7600	2.3652	0.0396
Trade	0.7366	3.6944	0.6555	5.6360	0.0002***
Transport	-0.0288	0.3128	0.3761	0.8317	0.4250
Finance	0.7045	1.3919	0.2667	5.2179	0.0004***
Services	0.6344	3.1440	0.7014	4.4822	0.0012***
Private House Holds	0.5643	1.8978	0.4860	3.9049	0.0029***
All Sectors	-0.0234	-0.2912	0.3366	-0.8649	0.4074

*** denote significance of the regression coefficient at 99% confidence level.

The results indicate that there is a negative relationship between employment activity in the labour intensive sectors namely, Mining and Manufacturing sectors. However, the strength of this relationship is both weak (low adjusted R-squared) and insignificant (coefficient is insignificant). There is no evident relationship in between M&A activity and employment activity in the Utilities, Construction and Transport sectors either. However, there is a significant positive relationship in the Trade, Finance, Services and Private house hold sectors. The impact is non-existent given that there is not relationship between M&A activity and total non-agricultural employment activity. The negative R–squared anomalies observed

can be a result of the small sample size and the inaptness of the leaner model considered. Therefore we fail to reject the null hypothesis which states that:

The level of M&A activity is not related to the level of employment.

4.6 Market-Adjusted Model

4.6.1 Target Firms' Excess Returns

Table 12 below presents the statistics (mean, t-value and p-value) for the aggregate excess returns for target firms in the (-10, 10) event window.

Table 12: Target firms performance during the period 2002-2013

Target firms' performance statistics for 2002-2013			
Day	**Mean - μ**	**t-value**	**p-value**
-10	0.0040	0.8338	0.2026
-9	0.0032	1.6583	0.0492*
-8	-0.0004	-0.2014	0.5797
-7	-0.0065	-1.1953	0.8835
-6	-0.0032	-0.9305	0.8235
-5	0.0044	1.2073	0.1142
-4	0.0154	1.8090	0.0358*
-3	0.0016	0.9910	0.1613
-2	0.0022	1.2709	0.1025
-1	0.0095	1.6722	0.0478*
0	0.0768	4.3613	0.0000***
1	0.0418	2.6945	0.0037*
2	0.0051	1.5328	0.0633
3	0.0115	1.0707	0.1427
4	0.0011	0.4690	0.3198
5	0.0071	1.4814	0.0699
6	-0.0031	-0.9297	0.8233
7	-0.0013	-0.6837	0.7526
8	-0.0033	-1.2056	0.8854
9	0.0023	0.8904	0.1871
10	0.0069	0.5652	0.2862

* denotes significance at 90% confidence level.
** denotes significance at 90% and 95% confidence levels.
*** denotes significance at 90%, 95% and 99% confidence levels.

Table 12 above shows that target firms on aggregate, experienced significant positive returns on some days from the M&A deals done for the period 2002-2013.

4.6.2 Acquiring Firms' Excess Returns

Table 13 below presents the statistics (mean, t-value and p-value) of the aggregate excess returns for acquiring firms in the (-10, 10) event window.

Acquiring firms' performance statistics for 2002-2013			
Day	**Mean**	**t-value**	**p-value**
-10	-0.0041	-6.8378	1.0000
-9	0.0001	0.1602	0.4367
-8	0.0017	1.9771	0.0269**
-7	0.0029	1.5514	0.0637*
-6	-0.0007	-0.0703	0.5279
-5	0.0032	3.1402	0.0014***
-4	0.0017	0.2331	0.4083
-3	0.0008	1.1500	0.1279
-2	-0.0024	-1.9835	0.9735
-1	-0.0012	-1.3991	0.9159
0	0.0033	0.9061	0.1847
1	0.0080	6.1227	0.0000***
2	0.0009	0.9055	0.1848
3	-0.0007	-0.2780	0.6089
4	-0.0001	-0.1068	0.5423
5	0.0021	2.4245	0.0096***
6	0.0024	2.7202	0.0045***
7	-0.0014	-1.5974	0.9416
8	-0.0001	-0.0938	0.5372
9	0.0013	2.1172	0.0197**
10	0.0015	2.2886	0.0133**

* denotes significance at 90% confidence level.
** denotes significance at 90% and 95% confidence levels.
*** denotes significance at 90%, 95% and 99% confidence levels.

Table 13 above shows that acquiring firms on aggregate, experienced significant positive returns on some days from the M&A deals done for the period 2002-2013. The findings are consistent with those for which the expected returns were estimated using Mean-adjusted returns.

Chapter Summary

This chapter presents the M&A deals characteristic for the period 2002-2013, and presents the values and numbers of the methods of payment for deals for each year in this period. The effects of mergers and acquisitions on target and acquiring firms are also presented for various periods. The results of the impact of M&A activity on jobs (including employment activity in the non-agricultural sectors) in the South African context are presented. Lastly, the effect of mergers and acquisitions on target and acquiring firms are also presented using the second method for estimating the expected returns.

Chapter 5: Discussion and Conclusion

5.1 Introduction

This chapter concludes the thesis and outline the discussion based on the findings from the research. The chapter is structured as follows: Section 5.2 presents a discussion on the hypotheses and summary of findings. Section 5.3 provides the conclusions derived from the study and the insights into further studies.

5.2 Discussions of Findings

The results from this research indicate that South African firm related M&As did create value for shareholders for the period 2002-2013. The average excess return on target firms' stocks is roughly 8% on the day of announcement and roughly 4% the following day. Additionally, the average excess returns of acquiring firms on the day of announcement are much smaller than that of target firms, acquires realized significantly positive excess returns as well. We did not cluster our deal sample according to the method used to finance deals or the relative sizes of acquires and targets. Therefore we cautiously draw conclusions based on the findings and not on general deal characteristics.

These findings indicate that the market perceives M&A deals to be driven by economic fundamentals which can be classified under synergy, creating competence and expansion (Cartwright et al., 1993; Mantravadi & Reddy, 2008). It is also worth noting that most of the deals for the period were cash based, further supporting the results from Fuller et al. (2002) and Chatterjee (2000) given that the stock prices of acquiring firms were not adversely affected, but were rather positively affected or unchanged around the time of deal announcements.

We find that target firms benefit the most from M&As, these results are consistent with the findings of Fowler et al. (1988). The results indicate that target firms' shareholders did not make economic gains at the expense of acquiring firms' shareholders but rather both parties realized positive gains.

We find the average acquires excess returns in the period of 2002-2007 are much higher than the excess returns realized by acquires in the period 2008-2013. Contrast to this finding, target firms realized higher returns in the period of 2008-2013 than in the period of 2002-2007. We are not making inferences on the value transfer effects of the deals considered in

the two periods given that the deal selection criteria was not based on matched deals (hence asymmetric number of targeted and acquiring firms).

We do not make inferences on the impact of M&A activity on jobs but simply uncover how employment has changed throughout the years with M&A activity. However, there is a significant positive relationship in the Trade, Finance, Services and Private house hold sectors. However, deriving an actual relationship could be more complex than a linear relationship. The results for these sectors indicate that in the periods for which M&A deals increased (or decreased), employment also increased (or decreased). This relationship doesn't hold when considering total non-agricultural employment activity. Thus we failed to reject the null hypothesis which states that there level of M&A activity is not related to the level of employment. We do not dispute the findings of Gugler and Yurtoglu (2004); Lehto and Bockerman (2008) who find that M&A deals negatively affect employment. We found evidence of this this relationship only in the trade, finance, services and private house hold sector.

5.3 Conclusion

The purpose of this research is to uncover the impact of M&As shareholder wealth, particularly on days surrounding the announcement of these deals in the South African context. Moreover, we extended the scope by also accessing the impact of M&A activity on jobs. The conclusion is that both target and acquiring firm shareholders benefit from their respective firms decisions to engage in mergers and acquisitions and the impact on the jobs is observed in certain industries but not others but overall, M&A activity does not have a significant impact on employment activity.

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