



THE SOUTH AFRICAN STOCK MARKET REACTION TO MERGERS AND ACQUISITIONS TRANSACTION ATTEMPTS

MCOM CORPORATE FINANCE AND VALUATIONS.

STUDENT: NDAEDZO MADUME(MDMNDA001). SUPERVISOR: PROF PHILIP DE JAGER.

This is a masters by course work and mini dissertation. The course work has already been completed.

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

Plagiarism Declaration.

1. I know that plagiarism means taking and using the ideas, writings, works or inventions of another person as if they were one's own. I know that plagiarism not only includes verbatim copying, but also the extensive use of another person's ideas without proper acknowledgement (which includes the proper use of quotation marks). I know that plagiarism covers this kind of use of material found in textual sources and on the Internet.
2. I acknowledge and understand that plagiarism is wrong.
3. I understand that my research must be accurately referenced. I have followed the rules and conventions concerning referencing, citation and the use of quotations as set out in the Departmental Guide.
4. This dissertation is my own work. I acknowledge that copying someone else's assignment, or part of it, is wrong, and that submitting identical work to others constitutes a form of plagiarism.
5. I have not allowed, nor will I in the future allow anyone to copy my work with the intention of passing it off as their own work.

Name:

Signed by candidate

Student No: **MDMNDA001**

Abstract.

This study investigates the reaction of the South African stock market to M&A transaction attempts. The aim is to understand, better, how unsuccessful M&A transactions are priced in a less-competitive market. By using a South African M&A dataset for companies listed on the JSE between 1997 and 2020, this study provides empirical evidence that, on average, in South Africa, acquiring firms earn positive abnormal returns for a few days before the transaction is announced for the first time in the market but negative abnormal returns after it is announced that the M&A transaction attempt has been unsuccessful. However, around the first announcement period, the target firms earn positive abnormal returns during a 5-day event window. The study also investigated whether the market punishes both the target and the acquiring firms for engaging in M&A transactions which could not be concluded found that the target firms earn negative abnormal returns at once but in contrast, the negative abnormal returns for the acquiring firm are delayed by five days. An event study methodology was used, and the sample size comprised of 44 JSE listed firms of which 31 were acquiring firms and 13 were target firms. This study is important because it provides insights into M&A using the most recent data. Furthermore, this research helps the parties involved to understand the market reactions to failed M&A transactions and gives insights into the determination of break-fees. Also, short-term investors can determine when their returns are more likely to be optimized if they should decide to trade in M&A events. This is important for M&A practitioners, asset managers, and for both the acquiring and target firms. It is also relevant to other market participants such as pension funds.

Acknowledgements

I would like to thank my supervisor, Prof Philip De Jager, for all his guidance and patience while I was working on this paper. His expertise in the M&A space really helped me to improve my understanding of M&A transactions and their regulatory patterns. He would always take time and give me valuable feedback on my work. I am extremely grateful for that, and I feel blessed to work with someone like him who would always push me to do better. Working on this paper was the hardest thing that I have done, because I had a full-time job and a business that I needed to run simultaneously. I had very little time to do anything else. After resigning from the corporate world, I had the opportunity to work on this paper but at some point, I thought Prof De Jager was going to drop me as his student because I was taking too much time to complete it. However, he remained patient with me, and I feel relieved that I am finally concluding my master's at UCT.

I would also like to thank my mother, Mrs Martha Muelelwa Madume for always pushing me not to give up on this work. I would like to thank my daughter too, Rialivhuwa Madume, for always encouraging me to believe that I could complete this thesis and that if I believe, then it will happen. I would also like to thank Ms Lungile Zulu for helping me to manage my schedule and for making sure that this thesis is always part of that schedule while always praying for me to graduate with my master's degree. I would like to also thank Mr Lebeko Shai for always helping me with data from Bloomberg. A special thanks to Rand Merchant Bank for their interest in my thesis and for purchasing the data for me from S&P Capital IQ; this was valuable data that I could also utilize in my further studies. Also, a special thanks to the UCT Department of Finance for the opportunity to be part of this programme. I have grown so much by being a master's student at UCT and I hope to pursue my further studies with this institution: it is just the best there is on the continent.

Contents

1. Introduction	1
2. Related Theoretical Views, Literature and Empirical Evidence, and Hypotheses.	7
2.1 Theoretical Evidence.....	7
2.2 International literature and empirical evidence.....	10
2.3 South African literature and empirical evidence.	19
2.4 Hypothesis.....	20
3 Data and Method.....	22
3.1 Data.....	22
3.2 Method.	27
4 Results and Analysis.....	30
5. Limitations.....	37
6. Conclusions	37
7. Reference list	40
8. Appendix -List of Acquiring and Target Firms.....	45

THE SOUTH AFRICAN STOCK MARKET REACTION TO MERGERS AND ACQUISITIONS TRANSACTIONS ATTEMPTS

1. Introduction

The term “mergers and acquisitions” (M&A) is usually defined in the context of bringing together two separate entities (Gaughan, 2007). In these types of transactions there is usually a firm that is referred to as the acquiring firm, which is the one initiating a transaction to buy another firm. The firm that is being bought would then usually be referred to as the target firm. The acquiring firm can make a payment in cash, stock swaps or a combination of both cash and stock swaps. The objective is always that post-transaction, the newly formed firm will be more competitive, efficient, and profitable than either firm could be by itself (McBeath & Bacha, 2001). Some of these M&A transactions happen in the same line of business and are usually referred to as horizontal or vertical transactions. In some instances, these transactions happen in different industries or product lines, and these are usually referred to as diversifying (conglomerates) M&A transactions. An example of a horizontal M&A transaction would be a transaction between two firms that produce or sell the same product; this type of transaction happened when Woolworths bought David Jones in 2014. A vertical M&A is one that involves two or more companies that are in different supply chain functions of the same product or service: an example of this would be the terminated M&A transaction between Neotel and Vodacom in 2016. A diversified M&A happens when two or more companies in completely unrelated business activities engage in an M&A transaction.

M&A transactions have restructured many business organizations and, in some instances, have helped them to remain competitive in their respective industries. Furthermore, these transactions have become one of the most important sources of revenue for investment banks, hedge fund managers and asset managers, arbitrageurs, as well as countries looking to attract foreign direct investments. Allen, Jagtiani, Peristiani and Saunders (2002) stated that financial institutions such as investment banks are specialists in information production and processing, as advisors to both the target and acquiring firm in an M&A transaction. These financial institutions deploy their information gathering and processing expertise to derive and negotiate the price of the transacting counterpart; they identify potential synergistic gains as well as the risks involved in the transactions. M&A transactions are a great source of revenue for these

financial institutions. Servaes and Zenner (1996) report that, during the period between 1985 and 1993, financial institutions realized USD5.5bn in revenue from M&A advisory work. Furthermore, financial institutions play a significant role in determining break fees on M&A transactions. A break fee on an M&A transaction is the fee that is payable by the acquiring firm to the target firm in a situation where the transaction fails to conclude. One main purpose of this fee is to ensure that the acquiring firm shows commitment. Moreover, the fee is to compensate the target firm for the loss in resources spent on due diligence, information exchange and other work that the target firm had to perform for the transaction to conclude. This shows how significant these transactions are to financial institutions as a source of revenue.

Various authors have studied the factors that motivate firms to engage in M&A transactions. These motives have been documented into what are now widely known as the theories of M&A transactions. These include: the managerialism theory, transaction cost-based theory, neoclassical theory, and the resource-based theory. The managerialism theory interprets the initiation of M&A transactions as a market for competition of rights to manage corporate assets (Jensen & Ruback, 1983). The transaction-based theory explains the initiation of vertical M&A transactions with the aim of minimizing the operating costs (Jensen, 2010). The neoclassical and the resource-based theories are similar in that they both explain that the initiation of M&A transactions assumes that the combined firm will perform better than the sum of its parts if the transaction had not occurred. According to these two theories, this improvement in performance happens because of the realization of synergies assisted by economies of scale and market power for the newly combined firm. These theories are discussed in greater detail later in this study.

There are usually two events in any M&A transaction process. The first of these is for the transaction to be announced in the market for the first time, stating the intentions of the acquirer in wishing to buy the target. The second event, which is termed the transaction outcome event, is subject to three outcomes: approved, unapproved (failed/ terminated) and conditionally approved. In South Africa, these outcomes are usually decided by the Competition Commission or by the shareholders of either of the target or acquiring firm.

In the case of companies listed on the stock exchange, each of these M&A outcomes has different impacts on a company's share price movements around the time when the transaction is first announced in the market; moreover, there are share price movements around the time

when the outcome is announced in the market. These share price behaviours (stock market reactions) have been the subject of a large body of financial literature; thus, market participants and researchers have worked extensively to try to understand how share prices of targets and acquiring companies move around the key event dates of M&A transactions. Researchers and market participants have taken different angles in examining each of these M&A transactions outcomes and have arrived at different results. For example, Asquith (1983) found that shareholders of acquiring firms earn negative to modest positive returns during the acquisition announcement. In contrast other studies such as those of Dodd and Ruback (1977), Jensen and Rubak (1983) have confirmed that shareholders of target firms earn positive returns around the acquisition announcement. Faccio and Masulis (2004) investigated whether the acquirer's financial performance, corporate control threat and transaction characteristics have any impact on the choice of payment methods on M&A transactions. They found that the acquirer's financial condition, corporate control threat and transaction characteristics explain up to 23% of the cross-section variability in decisions regarding the M&A payment method. Ishii and Xuan (2013) investigated whether social ties between the executives and directors of firms involved in M&A transactions have any impact on how the stock market reacts to such transactions; they compared this to transactions that have no presence of social ties. Their study found no statistically significant evidence on returns differentials in these two instances.

International studies have examined the stock market's reaction to unsuccessful M&A transactions. These include studies such as those of Davidson, Dutia and Cheng (1989), Akhigbe, Borde and Whyte (2000), and Malmendier, Opp and Saidi (2015). All these writers were consistent in finding that when the transaction was first announced in the market, target firms would earn at least 10% within the 5-day event window. However, if the outcome of the transaction rendered the deal unsuccessful or terminated, then target firms would lose up to 5%. This finding shows that in the case of target firms, announcements of an unsuccessful M&A do not reverse all the gains experienced when the transaction was first announced in the market. In the U.S., Agrawal, Jaffe and Mandelker (1992) found that after a failed bid, shareholders of acquiring firms generally suffered a significant loss of about 10% in the subsequent five years. Malmendier et al. (2015) evaluated whether the stock market reacts differently if the M&A transactions attempts of acquiring firms involve payment in cash, as opposed to payment by stock swaps. They found that after the announcement that the transaction attempt was unsuccessful, those firms offering stock swaps showed cumulative average abnormal returns which were 15% below cash transaction attempts. Lai, Moore, and

Oppenheimer (2006) tested the Wall Street belief that it is profitable to purchase shares of companies involved in unsuccessful M&A transactions attempts because arbitrageurs dump these companies' shares in the market immediately after the transaction is terminated; they then invest the proceeds into other active M&A transactions. However, by applying a 12-months view after the transaction failure announcement, they found that there is no evidence that such an investment strategy is a profitable one.

Alexandridis, Petmezas and Travlos (2010) examined 4 577 M&A transactions in more than 39 countries between 1990 and 2007 and classified them in terms of their respective competitiveness. Their study found that the United States, United Kingdom and Canada were the most competitive M&A markets in the world. South Africa was classified as one of the least competitive markets for M&A transactions; this indicates that there are a very small number of M&A transaction taking place in South African compared to the US, UK, and Canada. The study further argued that for highly competitive M&A markets, it is common for acquirers pay higher premiums than they would in less competitive markets. Also, target firms in these highly competitive markets benefited more than those in least competitive markets when M&A transactions were announced for the first time in the market. This prediction was found to be correct, and it was shown that acquirers in M&A transactions in the most-competitive markets earned cumulative average abnormal returns of -1.5%. This implies that in less competitive markets for M&A transactions, such as South Africa, acquiring firms can also earn abnormal returns. Bhana (1999), Mushidzhi and Ward (2004) and Smit and Ward (2007) are three of the very few studies that examined M&A transactions in South Africa. All these three studies made use of data no later than 2003 which is now more than two decades ago. Their findings were in line with the international findings; thus, around the M&A announcement dates, target firms would earn double digit cumulative abnormal returns and acquiring firms would lose less than 1%.

The studies cited in the previous paragraphs give an overview of some of the main theories and literature concerning M&A transactions. However, it should be noted that most of these studies took place more than 15 years ago, especially those in South Africa. Financial markets keep evolving as time passes, leaving a gap in the M&A space for analysis of market reactions; this applies especially to a country like South Africa where there is a shortage of M&A coverage making use of recent data. The previous discussions also show that most studies of unsuccessful M&A transactions are international studies and very few are South African. This shortage represents a gap for an analysis of failed M&A transactions in South Africa. This study aims

to close that gap as far as South Africa is concerned. Indeed, the aim of this study is to analyse the South African stock market's reaction to various forms of unsuccessful M&A transactions for both the acquiring and target firms; this would include both the date on which the transaction is first announced in the market and the dates when the transaction outcome is announced as being unsuccessful. This will assist financial intermediaries such as investment banks, asset managers and arbitrageurs in South Africa to have a better basis for their advisory work; for example, in setting the price of M&A counterparts or determining break fees. Likewise, they will have a better basis for their trading or hedging strategies for firms that are undergoing M&A transactions. Furthermore, it will be self-evident from the literature covered in this study that most studies of unsuccessful M&A transactions took place in competitive markets and therefore one would expect the results to be different for a less competitive market. South Africa is a less competitive market as far as M&A transactions are concerned and this makes South Africa a good laboratory to explore the stock market's reaction to M&A transactions in less competitive markets. Moreover, the uncompetitive nature of the South African M&A market makes it interesting to note that acquiring firms are likely to pay less and thus have a greater chance of earning abnormal returns as well. This outcome forms this study's contribution to the South African literature on the stock market's reaction to unsuccessful or terminated M&A transactions attempts.

This study poses three research questions. First, by considering more-recent data on M&A transactions in South Africa, do the target firms earn, on average, significant positive cumulative abnormal returns around the dates when the transactions are announced in the market for the first time? Second, do acquiring firms earn negative abnormal returns, on average, around the M&A announcement dates? Third, does the market punish both the acquiring and the target firms for engaging in M&A attempts that subsequently fail; in other words, do both the acquiring and target firms earn negative cumulative abnormal returns, on average, after the M&A transaction fails to conclude?

Based on the research questions in above, three hypotheses were postulated, that were tested in this study. The first of these is that cumulative average abnormal returns of acquiring firms are equal to, or greater than zero, around the dates when the transaction is first announced in the market. The second hypothesis is that the cumulative abnormal returns of the target firms are less than or equal to zero around the dates when the transaction is first announced in the market. These first two hypothesis are based on the competition theory of M&A and the findings of Alexandridis et al. (2010) where it is argued that in the less competitive markets for

M&A transactions, such as South Africa, acquiring firms are not paying relatively high premiums; therefore, the general findings of international studies, to the effect that acquiring firms experience negative cumulative abnormal returns because of paying high premiums, may not hold. However, target firms in competitive markets for M&A transactions may receive high premiums and so they experience positive average abnormal returns around the dates when the transaction is announced in the market for the first time. The third hypothesis is that both the acquiring and target firms experience negative cumulative abnormal returns, on average, when the M&A transaction is announced as having been unsuccessful; this is due to the expectation that the market should punish both the acquiring and target firms for wasting resources by engaging in M&A transactions that they cannot conclude successfully.

However, the findings of this study do not support the first and the second hypotheses as stated above. Thus, in this study, the 5-day event window results show that around the first announcement date of an M&A, the acquiring firms and target firms earn, on average, cumulative average abnormal returns of -0.38% and 2.52% respectively. This could mean that in the most recent year, the M&A transactions market of South African has become more competitive that it was about 15 years ago. The results also show that when the M&A transaction outcome is announced as having been unsuccessful, the market does indeed punish both the acquiring and the target firms; this punishment is immediate for the target firm but delayed by 5 days for the acquiring firm.

This study consists of eight sections. Section 2 covers the literature review and the theoretical underpinnings, Section 3 describes the methodology while Section 4 covers the results of the study, section 5 identifies the limitations of the study and section 6 presents the conclusions.

2. Related Theoretical Views, Literature and Empirical Evidence, and Hypotheses.

2.1 Theoretical Evidence.

This subsection 2.1 focuses on some of the M&A theories discussed in Jensen (2010).

The managerialism theory predicts that the best management team will prevail. This theory motivates M&A transactions as being influenced by competition in the market for corporate control where managers pursue their own objectives of sales growth. Jensen (1986) mentioned that the managers of large firms are more likely to illustrate the validity of this theory as they have easy access to financing. The market for corporate control is an area where managers compete for the right to manage corporate assets (Jensen & Ruback, 1983). The managerialism theory of M&A is opposed, to some extent, by Jensen's (1986) free cash flow theory of M&A transactions. Free cash flow is the cash flow that is left after the cash flows required to fund all projects with positive net present values have been accounted for (Jensen, 1986). The free cash flow theory predicts which M&A transactions are not value adding. It further states that M&A transactions are sources of agency problems between the shareholders of the firm and its managers. At the same time, the theory also mentions that M&A transactions are also a solution to agency problems as much as they are the source of such problems. The free cash flow theory of M&As implies that managers of firms with unutilized credit lines and sizable free cash flows are more likely to undertake low-benefit or even value-destroying M&A transactions (Jensen, 1986).

The neoclassical theory predicts that firms enter into M&A transactions to put their scarce and valuable assets to best use (Abdollah, Parviz & Bahram, 2018). According to this theory, the motive behind M&A transactions is for firms to move their resources to where they have their highest return, and thus maximize profits (Jensen, 2010). An examination of the neoclassical theory shows a positive relationship between the acquisition rate of the institution and its life. Institutions that have been in existence for a relatively long time are more likely to have assets that are relatively valuable, and this might motivate further acquisitions where valuable assets such as good management can be passed on to manage, better, the assets of the acquired firm.

One motive for M&A transactions is based on market power, especially in terms of pricing power. This is one of the primary reasons why M&A activities are regulated in many countries and it highlights the role of competitive markets in M&As. In unregulated markets for corporate finance, M&A activities may lead to abuse of market dominance including certain types of

price discrimination, excessive and predatory pricing activities. Furthermore, M&A activities may result in job losses as big corporates may reduce the number of people they employ, by applying optimization and automation strategies. These activities may lead to high unemployment rates in many countries. Unregulated M&A markets may also lead to high barriers of entry for small businesses, and this may inhibit entrepreneurship in many economies.

In order to avoid the economic and public issues discussed above, South Africa promulgated the Competition Act No. 89 of 1998. That Act provides the legislative framework for the competition authorities to investigate and penalise anti-competitive conduct by classifying certain practices as prohibited. These prohibited practices include cartels, collusion, and price-fixing (Act 89 of 1998). That Act also prohibits the abuse of dominance such as price discrimination, excessive pricing, and predatory pricing. The Act also regulates M&As and addresses competition and public interest issues such as employment and the promotion of small businesses.

The South African Competition Amendment Bill of 2018 states that the responsibilities of the Competition Act include building three institutions: the Competition Tribunal, and the Competition Appeal Court.

Before any transaction within the jurisdiction of South Africa may be implemented, details of the transaction must be filed with the Competition Commission of South Africa. M&A transactions must be presented to the Competition Commission, which will aim to ensure fair competition in the market in which the involved firms operate and will also aim to avoid monopolies that are not fair in the respective industries. When the transaction is presented to the Competition Commission it will be reviewed by that commission while large transactions are reviewed by the Competition Tribunal for approval. Upon completion of the merger investigation, and depending on the size of the transaction, the Competition Commission or the Competition Tribunal will issue a certificate approving the transaction unconditionally, approving the transaction subject to conditions, or prohibiting/terminating the transaction.

The 'unconditionally approved' outcome is more probable whenever there are low barriers to entry. In contrast, 'conditionally approved' and 'unapproved' outcomes more likely when the post-merger market share is significantly larger, or when there is concern over coordinated effects, or when the public interest concern is raised (Grimbeek, Koch & Grimbeek, 2013).

An example of a conditionally approved transaction is the proposed merger of SABMiller's soft drink bottling operations with those of the Coca-Cola Firm and the Gutsche Family Investments. Here, the Competition Commission recommended approval of the transaction subject to the following conditions: the merged entity to invest R500m to develop downstream distribution and retail; the establishment of a R150M fund to support and train historically disadvantaged farmers and small suppliers; and the guaranteed space allocation of at least 20% for competing products in new retail outlets (Economic Development Department of South Africa, 06 May 2016). The transaction can only be implemented if approval is obtained from the CC or the Competition Tribunal.

Those transactions listed on the Competition Commission's website as unapproved had all first been presented to the Competition Commission. However, some failed transactions were never presented to the Competition Commission for various reasons; for example, the target firm shareholders might have rejected the transaction, or the acquiring firm might have decided to abandon the transaction before it was submitted to the Competition Commission. Transactions not submitted to the Competition Commission will also be examined in this study in the context of unsuccessful transactions. As a result, the term 'unapproved M&A transactions' refers, in this study, to M&A transactions terminated by the Competition Commission, the Competition Tribunal and those that were withdrawn or terminated by shareholders of either the target or acquiring firm.

Hedge funds, asset managers, other investors and investment banks have a challenge in terms of deciding how to deal with firms that are undergoing M&A transactions where the outcome of the transaction is not certain; this applies especially during the period of negotiations or hearings before the Competition Commission or the Competition Tribunal. This challenge arises partly because uncertainty about how the market will react to the transaction under each of the following possible outcomes: the transaction unconditionally approved, approved with conditions, or terminated. This issue forms part of the contribution that this study is making in the South African market; thus, in the case of a hedge fund manager or an asset manager predicting that the transaction is less likely to succeed, then the findings of this study will assist in deciding whether to keep the stock in the book before and after the outcome of the transaction has been announced.

The M&A theories, discussed above, explain why M&A transactions happen. It was argued that some of the theories, such as the transaction cost theories, are not a sound driver for M&A

activities; however, one may argue that whenever firms enter M&A transactions, at least one of the firms involved, usually the acquirer, believes that the transaction will make a positive contribution to the success of the combined firm. As indicated above, these contributions may come in the form of cost savings, synergies, reallocation of assets to their best uses, and deployment of the best managers to manage those assets that are believed to be poorly managed.

2.2 International literature and empirical evidence.

Davidson et al. (1989) examined the revaluation of shares surrounding failed mergers. The study evaluates the market reaction to M&A transactions terminated by the target firm, acquiring firm or other parties such as the Competition Commissions or regulators. The final sample size consisted of 163 matched M&A transactions that were proposed but subsequently cancelled. The firms involved had to be listed in the Centre for Research in Security Prices (CRSP). Of the 163 transactions that formed the final sample, 49 were terminated by the target firms, 57 by the acquiring firms, and 57 failed for other reasons. The initial announcement date for the proposed merger and the initial announcement date that the transaction has failed were obtained from the Wall Street Journal Index. The study used the cumulative prediction error (CPE) technique to detect abnormal returns. Transactions cancelled by target firms yielded positive and statistically significant abnormal returns for the target firm which were 2.46%, 18.5% and 17.03% over the -5 to 5, -90 to 90 and -90 to 250 event window periods respectively. For M&A transactions cancelled by acquiring firms, the CPE for target firms on day 0 is negative, which is signalling negative information about the target firm. However, over the -5 to 5 window period, the acquiring firm's CPE is -2.56% and statistically significant while the target firm's CPE is negative but not statistically significant. This means that the market punishes acquiring firms for becoming involved in merger transactions which they subsequently fail to conclude. The study further concludes that target firms that become involved in yet another M&A activity, after the cancellation, experience even more statistically significant abnormal returns than those that do not become involved again.

Akhigbe et al. (2000) examined the sources of gains and losses for target firms and their industry rivals around the time of the M&A announcements. This study evaluated the outcomes for target firms and their rivals whenever the M&A transactions were unsuccessful. The empirical question posed by the study was whether gains or losses, for targets and rivals, around the time of the M&A announcement, arose from a signalling effect, market power or competitive advantage. The study sample comprised 192 unsuccessful M&A transactions for

targets and their respective industry rivals listed on the American Stock Exchange and the New York Stock Exchange for the period between 1987 and 1996. The study found that both target firms and their industry rivals benefit when the M&A transaction is first announced in the market. However, if the transaction was unsuccessful or terminated, then the target firm experienced significant negative abnormal returns whereas the rivals experienced significant positive abnormal returns. The study showed that on average, when a transaction is first announced to the market, at 1% significance level, target firms gained 17.40% over a 2-day window period, t-1 to t0; this rose to 16.86% over a 3-day window period, t-1 to t+1. Rivals, on average, gained 0.29% and 0.28% over the 2- and 3-day window period respectively. However, when the deal became unsuccessful or was terminated, then on average and at a 1% level of significance, the target firm's 2-day Cumulative Average Abnormal Return (CAAR) was -4.94% and the 3-day CAAR was -4.83%. It is also worth noting that even though target firms lost after the deal was unsuccessful, the losses did not offset the gains realized when the deal was first announced. Furthermore, when the transaction was terminated, the rival's portfolios earned an average positive abnormal return of 0.33% and 0.41% over the 2- and 3-day window period respectively. The results support the signalling hypothesis and are inconsistent with the competitive and market power hypotheses.

Faccio and Masulis (2004) examined the choice of payment method and its determinants, using large samples of European M&A transactions. The study covered 13 European countries and included 9 935 M&A transactions that took place 1997 and 2000. The primary focus of the study was on corporate control and financial constraints of the firm. Acquirers generally have limited cash and liquid assets and so most cash acquisitions require debt to fund them. Thus, acquiring firms are faced with debt and/or equity financing options which present a trade-off between corporate control of issuing shares and rising financial distress arising from the cost of issuing debt. The study concluded that the acquirers' financial condition, corporate control threat and transaction characteristics explain up to 23% of the cross-section variability in M&A payment decisions.

Cole, Fatemi and Vu (2006), examined whether unsuccessful attempts to conclude M&A transactions create or destroy value for both the acquiring and the target firm. The sample consisted of 220 firms that were involved in unsuccessful attempts at M&A transactions between 1992 and 2001. Data obtained from CRSP. Each transaction was classified in the study as being either diversifying (conglomerate) or focusing (horizontal or vertical merger). The study also investigated signalling and synergy effects on M&A attempts. The writers argued

that if the abnormal returns gained when an M&A transaction is first announced in the market are not completely reversed when the transaction fails, then that particular M&A transaction would provide investors with a signal about the quality of the acquiring firm's management and the quality of the proposed transaction. These writers also examined the stock market's reaction to unsuccessful diversifying and focusing M&A transactions: they argued that this would enable them to differentiate between synergistic and agency mergers. The 3-day window, (-1, +1), results showed that on average, acquiring firms suffered a negative and statistically significant cumulative average abnormal returns of -2.11% when an M&A transaction was first announced in the market and a positive and statistically significant 0.81% when the transaction was terminated. The study interpreted this finding as evidence that attempts at M&A transactions do indeed provide a signal about the quality of the management of the acquiring firm and that the market punishes the acquiring firm's management for attempting to take on negative Net Present Value (NPV) investments. The results further show that contrary to the synergistic hypothesis, firms involved in horizontal mergers experience the greatest negative cumulative abnormal returns: -26.8%, when the transaction is terminated, when compared to firms attempting diversifying mergers. After the deal was terminated, vertical transaction activities experienced a cumulative CAR of -25.6% and conglomerates experienced a positive 16.3% over the 3-day event window. These results show that the market puts more value on M&A transactions that are more likely to create synergies than on transactions that are motivated by the agency hypothesis.

Lai et al. (2006) decided to challenge the Wall Street belief that it is profitable to purchase shares of companies that were involved in unsuccessful M&A transactions attempts because arbitrageurs dump these companies' shares in the market immediately after the transaction is terminated and then invest the proceeds into other active M&A transactions. Their study evaluated whether investing in cancelled targets after the termination of an M&A transaction would provide abnormal returns for portfolio managers. They also investigated whether there is any relationship between abnormal returns on target companies after cancellations, and the activities of the arbitrageurs (trading volumes). The study sample consisted of 153 terminated M&A transactions for target firms that were listed on the New York Stock Exchange, American Stock Exchange, and the Nasdaq during 1992 and 1999. The study found no statistically significant abnormal returns following the termination of the transactions, as far as portfolio managers who invest in target firms of cancelled M&A transactions are concerned. The results show that, on average, the target firms of cancelled M&A transactions had cumulative average

abnormal returns of -1.02% and -3.16%, 6 and 12 months, respectively, after the termination of the transaction. Furthermore, Lai et al. (2006), argued that if it were true that the activities of the arbitrageurs had any impact on the cumulative average abnormal returns after the cancelation of the transaction, then they would have expected to find a negative relationship immediately after the termination of the transaction; this would then be followed by a positive relationship if arbitrage selling pressure caused the stock prices of cancelled M&A target companies to drop to levels that would create abnormal returns. However, the study also found no evidence of this.

Madura and Ngo (2012) investigated the stock market's reaction towards unsuccessful M&A transactions involving listed acquiring firms and private target firms; their study concentrated on the acquiring firms' perspective. The study sample consisted of 1 655 M&A transactions that took place between 1980 and 2005. The transactions in the final sample included acquirers listed on the CRSP database. Their hypothesis dealt with the evaluation of the stock market's reaction to unsuccessful cash-financed proposals as compared to unsuccessful stock financed proposals; the writers argued that stock financed proposals would signal that the acquiring company is overvalued and the termination of this type of transaction by the target firm might mean that there are issues around the valuation of the acquiring firm. Therefore, Madura and Ngo expected worse valuation effects upon the termination of this type of transaction when compared to cash-proposed transactions. The results show that on the day when the transaction was first announced in the market, event window (0,0), on average, the acquiring firm experienced a positive CAR of 4.5% whereas on the day the transaction was terminated, the acquiring firm experienced a -2.08% CAR. These results are similar for the event window (-1, +1) where the acquiring firm experienced 7.56% and -2.02% during the first announcement and the termination announcement period, respectively. A comparison between terminated cash and stock swap transactions, for event window (-1, +1), showed that terminated cash transactions experienced -2.10%; however, terminated transactions involving stock swaps experienced only -1.25%. These findings are contrary to the study's expectations that terminated transactions involving stock swaps would lose more than terminated transactions funded by cash. One explanation could be that most of the terminated transactions involving stock swaps were terminated by the acquiring firm and not the target firm: this would signal negative information about the target firm but not necessarily negative information about the valuation of the acquiring firm.

Malmendier et al. (2015) studied the revaluation of target firms after failed M&A attempts, from the perspective of cash as opposed to stock bids. Their study sample consisted of 236 failed M&A transactions for U.S listed targets during the period between 1980 and 2008. The study found that when the deal was first announced in the market, targets earned statistically significant cumulative abnormal returns of 25% and 15% for cash and stock offers respectively. These results agree with those of Huang and Walkling (1987). However, when the deal failed, a 25-day post failure announcement event window showed that cumulative abnormal returns of stock targets were -17.6% which is 15% below the cash target returns. The study then examined possible reasons for the revaluation differences between the cash and stock targets of failed M&A transactions. The first step was to investigate whether the failed M&A attempt identified the target as being a likely target for future M&A bids where the anticipated future premium leads to a revaluation after the deal fails. Secondly, the writers investigated whether a failed M&A transaction motivated the target firm's management to make operational improvements. The results showed that both cash and stock targets reflected no differential M&A activity over a period of 20 years after the failure of the M&A attempt. This means that cash and stock targets are not subject to differential future M&A transactions in terms of their timing. Citing Safieddine and Titman (1999), Malmendier et al. (2015) argued that the target firms in failed takeover attempts tended to increase their leverage, especially if the failed transaction was a hostile takeover; this step increased their operational performance and decreased the probability of being acquired in the future. The study found no evidence of any differences between targets of cash as opposed to stock offers, as far as post-failure operational performance was concerned. Citing Rhodes-Kropf and Viswanathan (2004), Malmendier et al. (2015) concluded that the payment method in M&A transactions actually does reveal information to the market about the stand-alone value of the entities involved in the transaction. This study further recommended that future work on this area of study should account for the informational implications of the choice of payment method not just on the acquiring firm's side but also on the target firm's side.

Ishii and Xuan (2013) took a slightly different angle in their study of stock market reactions to M&A transactions around the merger announcement dates. Thus, their study investigated the impact of social ties between senior executives and directors of the acquiring and target firms on M&A merger outcomes; the study focussed on the firm's performance around the merger announcement. The sample consisted of 539 M&A transactions of U.S listed acquiring companies and targets between 1999 and 2007. Ishii and Xuan evaluated their results using

three event windows: the 3-day (-1, +1), 5-day (-2, +2) and 7-day (-3, +3). For the purpose of their study, they defined social ties in terms of the educational background and employment history of the board members and senior executives of both the acquiring and target firms. A high level of social connection was defined as the above-sample median average associations of the acquiring firm with the targeted firm. An average level of social association was defined in terms of the percentage of socially associated pairs of directors and top executives of the acquiring and target firms. A low level of social connection was defined as being the below-sample median aggregate association. The study's hypothesis was that the existence of substantial social associations between the acquiring and target firms would encourage an efficient information exchange and informed decision processes, providing a better means of efficient information exchange. The study's alternative hypothesis was that the presence of substantial social associations of the acquiring firm with the target firm would more likely result in an unsuccessful M&A transaction arising from biased and non-critically analysed decision processes, a lowering of the quality on due diligence, overestimations of synergistic gains or missed opportunities outside the networks. The study found that acquirers of high and low socially connected M&As would earn cumulative average abnormal returns of -2.96% and -0.88% respectively during the 5-day event window: this is statistically significant at 1% significance level. Ishii and Xuan (2013) then argued that the existence of social associations between the target and acquiring firm is linked with a loss of value to the acquirer's shareholders when M&A transactions are announced. In the case of targeted firms, targets of high and low socially connected M&As earned cumulative average abnormal returns of 20.42% and 20.85% respectively.

Yang, Lin, Chou and Cheng (2010) evaluated drivers of mergers and changes in the acquiring firm's shareholder wealth. Their study sample consisted of 412 M&A transactions that took place during 1994 and 2003, where the value of the transaction was more than USD500m for acquirers listed on the New York Stock Exchange, American Stock Exchange, and the Nasdaq. Their analysis was limited to the stock market's reaction to acquiring firms and not target firms. The study found that on average for the event window months (-12 to -1) stock acquirers showed cumulative average abnormal returns of 50.58% as opposed to 11.26% for cash acquirers. However, for the event window months (+1 to +12) stock acquirers earned cumulative average abnormal returns of 5.19% as opposed to -1.76% for cash acquirers. Yang et al (2010) cited prior research by Bradley and Sundaram (2004) and Shleifer and Vishny

(2003) in confirming their conclusion that firms will be more inclined to engage in M&A transactions when their stock prices are high.

Research has documented significant returns to acquirers in the event of a negative announcement when the method of payment is stock rather than cash (See, for example, Mushidzhi & Ward, 2004; Travlos, 1987; Wansely, Lane & Yang (1983); Yang et al., 2010). However, the determinants of financing decisions are generally given limited attention. As outlined above by Faccio and Masulis (2004), the main concerns about the findings of these studies are that none of them control for endogeneity in the financing decision when investigating the stock market reaction of M&A announcements while considering the method of payment.

Alexandridis et al. (2010) examined whether public acquisitions can create value for shareholders of acquiring firms in countries beyond those with the most competitive acquisitions markets. Their study used a global sample of 4 577 M&A transactions in 39 countries and covered the period between 1990 and 2007. These writers argued that value creation by acquiring firms is highly dependent on the extent of the market for corporate control competition. Citing Rossi and Volpin (2004), they argued that acquisitions premiums are higher than elsewhere in the United States, United Kingdom and Canada, where the volume of transactions and the degree of competition are higher, and the shareholder protection regime is stricter. As a result, the potential for value creation by acquirers, when buying a listed target within the most competitive markets, is limited. They further argue that acquisitions in less competitive markets for corporate control should be characterized by relatively lower premiums and a more even split of benefits between the target and acquiring firm. Alexandridis et al. (2010) concluded that M&A transactions are value destroying for acquirers in more competitive markets such as the US, UK, and Canada where the 5-day (-2, +2) event window showed statistically significant CARs of -1.43%, -1.58% and -1.54 % for these countries respectively. However, the results were different in less competitive markets where the average and statistically significant 5-day event window CAR was +2.14% for the rest of the world.

Mishra and Candra (2010) examined the impact of M&A transactions on the financial performance of Indian drug and pharmaceutical firms. The study was based on 52 listed drug and pharmaceutical firms and covered the period from January 2000 to August 2007. They made use of panel data to help in raising the sample size and hence the degrees of freedom and to also incorporate the dynamics of the firms' behaviour in the marketplace. The study

concluded that the profitability of a firm depends directly on its size, selling efforts and its export and import intensities. Market share and demand for the products were found to be inversely related to the financial performance of the firm. Furthermore, the study also mentioned that the larger-sized firms, firms with greater selling efforts, firms with greater international presence or larger proportions of imported goods realized a greater financial performance than firms with the opposite of these attributes. The study concluded that M&A transactions do not have any significant impact on financial performance in the long run.

Ismail, Abdou, and Magdy (2011) studied the impact of M&A activity on corporate performance in the emerging market of Egypt. They examined 26 ratios that measure performance aspects of profitability, efficiency, liquidity, solvency, and cash flow position. The research design was formulated to draw two important insights about the financial performance of the business. The first of these was to determine the efficiency ratios that describe how well the firms used their investments in various types of assets to produce sales. Secondly, the cash flow ratios were determined to assess a firm's financial performance with respect to strength and profitability as well as to assess a firm's liquidation risk and possibility of financial distress. The sample used in this study consisted of nine firms listed on the Cairo and Alexandria Stock Exchange between 1996 and 2003: five were in the construction industry and four in the technology sector. The study concluded that, overall, M&A activity does not have a positive impact on the financial performance of firms in Egypt. However, analysis at sector level showed that M&A activity in the construction sector has a positive impact on profitability although there was no improvement in efficiency, liquidity, solvency and cashflow position; in contrast, in the technology sector M&A activity had no positive impact at all. From the findings of this study, one may argue that industry sector is one of the factors that has an impact on the success of M&A transactions.

Sehgal, Banerjee and Desiting (2012) conducted a study to examine whether M&A announcements, together with their methods of financing, affect stock returns. The study applied an event study methodology to a sample of 214 acquiring companies that were publicly listed in Brazil, India, China, South Korea, and South Africa. The study utilized the Thomson One database. The results of the study showed positive pre-event abnormal returns in the case of five of the six countries in the sample: such returns were evident in Brazil, Russia, India, China, and South Korea but in contrast, South Africa experienced significantly negative pre-event abnormal returns. However, after the event, the study found that the position had reversed. Thus, South African M&A activity was the only instance realizing positive post-event

abnormal returns. The study further found that M&A activity does not significantly alter the trading liquidity of the firms. Finally, the study found that stock-financed M&As are value creating whereas cash financed M&As are value destroying.

Yoo, Lee and Heo (2013) studied the impact of M&A announcements on the enterprise value of the acquiring firms in the renewable energy sector. The study aimed to close the gap in M&A research in the renewable energy sector and aimed to investigate how the market reacts to focused (vertical or horizontal) M&A transactions and diversified (conglomerates) M&A transactions. The sample of the study consisted of 47 successful M&A transactions in the renewable energy sector during the period between 2008 and 2010. The data was acquired from 18 countries including the United States of America, Canada, China, and Germany. The results show that focused M&A transactions provide statistically significant cumulative average abnormal returns of 10.59% over the 26-day event window (-10, +15); these returns were three times higher than the returns of diversified M&A transactions. This supports the findings of Cole et al. (2006); thus, Yoo et al. (2013) showed that the market is in favour of focused M&A transactions as opposed to diversifying M&As. However, they also showed that in the long run, diversified M&As still show positive abnormal returns and that diversified M&A activities accounted for 70% of the total M&A transactions in the renewable energy sector. The study then argued that the market perceives renewable energy as an investment product and a long-term investment opportunity, based on internal and external factors. According to Yoo et al. (2013), unit costs of production are falling because of advances in technology, while the depletion of conventional energy sources such as oil and gas is causing an increase in prices; this results in greater price competitiveness for renewable energy. Furthermore, the expansion of the renewable energy industry is critical for reduction of carbon dioxide emissions, and this factor is adding to the increase in diversified M&A transactions in the renewable energy sector.

Khayanga and Karau (2018) conducted a study in the IT industry to evaluate the impact of M&A transactions on a company's competitive advantage. Their study used a descriptive research methodology, with a sample of 56 workers at Hewlett Packard Company (HP) in Nairobi, Kenya. Khayanga and Karau (2018), argued that the reason why M&A transactions are seen as efficient ways towards the enhancement of firm's competitive advantage is because M&As transactions are encouraged by the aspirations to realize economies of scale, improved market power, advantages resulting from merged complementary resources, utilization of excess cash and enhanced level of client service. These economic benefits are believed to be value creating following a change in control of assets through M&A activities (Pazarskis,

Vogiatzoglou, Christodoulou & Drogalas, 2006). The study concluded that factors that contributed positively to the firm's competitive advantage were external economies of scale, market power and merged complementary resources; however, possession of excess cash and idle resources did not make a significant impact on the firm.

2.3 South African literature and empirical evidence.

Bhana (1999) examined the role of pre-announcement news reports in explaining the excess returns associated with takeover announcements of target firms listed on the JSE. The study involved allocating the sample of 136 target firms listed on the JSE between 1985 and 1996 into two sub-samples: the News sample, and the No News sample. Using the market model, the study found that the News sample showed statistically significant Average Abnormal Returns (AAR) of at least 10% but in contrast, the No News sample showed no significant AAR. This indicates that the publicly available take over news are the main source of pre-takeover announcement price run-ups on the JSE.

Mushidzhi and Ward (2004) investigated the relationship between shareholder returns and method of payment in M&A transactions of companies listed on the Johannesburg Stock Exchange. They applied event study methodology to compare the stock market performance of share funded acquisitions with cash funded acquisitions. They found that abnormal returns of target firms that were acquired by cash are statistically significantly greater than abnormal returns of target firms that were acquired using stock swaps. Furthermore, there was no significant difference between the stock market reaction to cash acquirers and share acquirers. Their results also showed that target firms earned a significant +6.33% return while acquiring firms earned -0.55% over 21-day event window. Cash acquired targets in this study earned a significant +14.63% return, while share-acquired targets earned an insignificant 0.61% over 21-day event window. Those acquirers offering shares earned negative average abnormal returns of 0.28%, while acquirers offering cash earned -0.94%. These results are inconsistent with the signalling hypothesis according to which, share acquirers show that the acquiring firm is overvalued, and the cash acquiring firm is undervalued.

Smit and Ward (2007) investigated the impact that large M&A acquisitions had on the share prices and operating financial performance of acquiring firms listed on the JSE; their study examined transactions concluded between 2001 and 2003. It considered the share price performance around the date of the acquisition announcement and the impact on financial performance in the two years after the acquisition. This is one of the few studies in the literature

of M&As which measured the impact of the acquiring firm's performance over the relatively long period of two years: most studies normally investigate the impact of M&As during just a few days around the date of the acquisition announcement. To analyse the returns around the announcement date, the study used 3-day and 21-day event windows. Also, to analyse the impact on financial performance, the study used a two-year event window after conclusion of the transaction. Using the control portfolio model, the study found that around the announcement date, shareholders of acquiring firms earned a positive cumulative average abnormal return (CAAR) of 4.3% and a negative CAAR of -0.02% over the 21-day and the 3-day event windows respectively. When determining the two-year impact of M&A transactions on the firm's financial performance, the study compared the average industry-adjusted cash flow returns on assets before and after the acquisitions: it concluded that larger M&A transactions, on average, do not lead to any improvement in, or deterioration of, financial performance of the combined entity in that two-year event window after the acquisition. These findings are slightly inconsistent with the findings of Healy, Palepu, and Ruback (1992) who concluded that industry-adjusted returns on assets for M&A transactions improved slightly by 0.3% before the transaction was concluded and by 2.8% for the combined entity.

2.4 Hypothesis.

It is important to formulate a theoretical expectation on what is more likely to happen when the transaction is first announced in the market, and this requires the application of the competitive market theory for M&A transactions. As mentioned above in the international literature section of this study, South Africa is one of the least competitive markets in the M&A space; as such, one can find that the CAARs of acquiring firms around the first announcement dates of M&A transactions are not necessarily negative and that the CAARs of target firms around those first announcement dates are not necessarily positive; this was discussed by Alexandridis et al. (2010). These writers argue that, in highly competitive M&A markets such as the U.S, U.K and Canada, acquiring firms tend to pay high premiums which creates negative CAARs for those acquiring firms around the first announcement dates but positive CAARs for target firms around the first announcement dates. Thus, this study's theoretical expectation is that around the days where the transaction is first announced in the market, the CAARs of acquiring firms are not negative; this is because the acquiring firms are less likely to pay higher premiums to the target firms. Moreover, the CAARs of target firms are not positive because those firms are not receiving high premiums from acquiring firms, due to lack of competition.

M&A transactions can be terminated or withdrawn after the transaction is initiated or announced in the market for the first time. According to the discussion of theory, above, the termination or withdrawal of the M&A transaction may be initiated by the acquiring firm, target firm or organizations such as the Competition Commission, or by the regulatory bodies in which the firm operates. If the transaction is not concluded, then this suggests that the expected benefits of the transaction will no longer be realized by either of the firms. The stock market may then have to price in the loss in expected future profits that could have been realized if the transaction had been concluded successfully. It is for that reason that this study has a theoretical expectation of a negative stock market reaction towards unsuccessful M&A transactions for both the acquiring firm and the target firm. This argument is based on the outcomes when the transaction is unsuccessful. Studies such as those of Smit and Ward (2007) and Yang et al. (2010) used the average cumulative abnormal returns to measure the stock market's reaction to M&A transactions. This study will also use the same measure to assess the stock market's reaction to unsuccessful M&A transactions.

Based on the reasoning, above, this study formulates the following hypotheses for both the target and the acquiring firm.

Hypothesis 1:

- Around the dates when the M&A transaction is announced in the market for the first time, CAARs of acquiring firms > 0 .

Hypothesis 2:

- Around the dates when the M&A transaction is announced in the market for the first time, CAARs of target firms > 0 .

Hypothesis 3:

- Around the dates when the transaction outcome is announced to having been unsuccessful, CAARs of both the acquiring and target firms < 0 .

3 Data and Method.

3.1 Data

The initial sample size for this study was 10 000 M&A transactions across Africa as indicated in Table 1, below. The sample included transactions that were approved with no conditions, approved with conditions and unsuccessful transactions. The data shown in Table 1 was purchased for the purposes of this study by Rand Merchant Bank Pty (Ltd) from Capital IQ. Capital IQ is a subsidiary of S&P Global, one of the three biggest rating agencies in the world. The data presented in Table 1 involves all types of M&A transactions in Africa: for example, transactions involving only African companies, transactions of African acquiring companies acquiring non-African targets and transactions of African target companies acquired by non-African acquiring companies. Unfortunately, this data could only be obtained for the period 2012 to 2020. However, this data shows that filtering with transaction size, most active players in the M&A market in Africa are still non-African companies such as AB-InBev, Petrol Complex and Trafigura. Filtering by the number of transactions, the data shows that compared to the rest of Africa, South Africa has the greatest number of M&A transactions, led by the PIC, Investec Group, Delta Property Fund and Redefine Property Fund. This makes South Africa the most active M&A market in the African continent, which is not surprising as the Johannesburg Stock Exchange is the biggest stock exchange in Africa.

Table 1: Overview of context of study sample.

Transaction Screening Aggregates			
Number of Transactions by Status		Number of Transactions by Type	
Announced:	501	Private Placement	0
Closed/Effective/Expired:	8638	Bankruptcy	0
Cancelled/Withdrawn/Suspended:	861	Public Offering	0
Other Bankruptcy Status:	0	Shelf Registration	0
Other Investor Activism Status:	0	Buyback	0
Total Number of Transactions:	10000	Spin-Off/Split-Off	0
		Investor Activism	0
		Merger/Acquisition	10000
Number of Transactions by Sector		Number of Transactions by Region	
Energy	558	Europe	473
Real Estate	1108	Asia / Pacific	545
Materials	1561	Latin America and Caribbean	82

Industrials	1396	Africa / Middle East	8741
Consumer Discretionary	1070	United States and Canada	154
Consumer Staples	786		
Health Care	329		
Financials	979		
Information Technology	604		
Communication Services	522		
Utilities	169		
No Primary Industry Assigned	918		
Most Active Buyers/Investors by Number of Transactions		Most Active Buyers/Investors by Total Transaction Size	
Company Name	Number Of Transactions	Company Name	Total Transaction Size (\$mm)
Public Investment Corporation Limited	117	Anheuser-Busch InBev SA/NV (ENXTBR:ABI)	116120,58
Investec Group Limited (JSE:INL)	38	China Three Gorges (Europe) S.A.	35299,01
Delta Property Fund Limited (JSE:DLT)	30	Petrol Complex Pte Ltd	17591,16
Redefine Properties Limited (JSE:RDF)	29	Trafigura Group Pte. Ltd.	17591,16
Texton Property Fund Limited (JSE:TEX)	29	United Capital Partners	17591,16
Old Mutual Limited (JSE:OMU)	28	Walmart Inc. (NYSE:WMT)	16000
Protea Asset Management LLC	26	Vedanta Limited (NSEI:VEDL)	14862,58
Arrowhead Properties Limited (JSE:AHA)	25	Acorn Holdings B.V.	14371,05
Peregrine Equities (Pty) Ltd.	25	Klépierre SA (ENXTPA:LI)	12035,22
Vunani Property Asset Management Pty Ltd.	25	Steinhoff International Holdings N.V. (JSE:SNH)	11806,06
Merger & Acquisition Statistics			
Valuation Summary		Number of Deals by Transaction Ranges	

Total Deal Value(\$mm):	658625,05	Greater than \$1 billion	88
Average Deal Value:	149,41	\$500 - \$999.9mm	80
Average TEV/Revenue:	4,83	\$100 - \$499.9mm	499
Average TEV/EBITDA:	13,67	Less than \$100mm	3741
Average Day Prior Premium(%):	31,16	Undisclosed	5592
Average Week Prior Premium(%):	32,49		
Average Month Prior Premium(%):	35,20		

Table 2, below, gives an overview of the successfully concluded M&A transactions as opposed to the unsuccessful ones; in other words, those that failed to close. One can see that the numbers of unsuccessful or cancelled M&A transaction attempts are very small across the African stock exchanges. The Cairo and Alexandria Stock Exchange had the most unsuccessful M&A transaction attempts, followed by the Johannesburg Stock Exchange. Table 2 also shows that most of the M&A activity in Africa involves unlisted companies.

Table 2: Unsuccessful M&A transactions attempts in Africa, both public and private transactions.

Total number of transactions by stock exchange and transaction status from 2012 - 2020					
Exchange	Announced	Cancelled	Closed	Effective	Grand Total
AIM	1	2	14	0	17
ASX	2	9	6	0	17
BME	0	0	1	0	1
BRVM	0	1	0	0	1
BVMT	0	2	0	0	2
CASE	0	19	0	0	19
CBSE	0	2	0	0	3
JSE	9	16	1312	2	1339
LUSE	0	2	0	0	2
MUSE	0	7	0	0	7
NASE	0	1	0	0	1
NGSE	0	5	0	0	5
TSXV	0	1	0	0	1
ZMSE	0	2	0	0	2
(blank)	489	791	6863	440	8583
Grand Total	501	861	8196	442	10000

The focus of this study is on unsuccessful M&A transaction attempts where either the acquiring or the target firm is listed on a stock exchange. The sample size for these particular transaction

attempts was very small, as illustrated in the above data, obtained from Capital IQ. In view of this, a decision was taken to make use of Bloomberg data to extend the study period: that extended study period duly ran from 05 June 1997 to 21 February 2020. The data obtained from Bloomberg included M&A transactions that were first announced in the market between 05 June 1997 and 21 February 2020. Bloomberg shows 261 unapproved transactions during that time. Of the 261 identified transactions, 45 were identified as withdrawn and 217 as terminated.

The final sample was selected bearing in mind the availability of data and the precondition that the company was listed. In the case of the availability of trading data, precautions were needed to avoid co-founding effects in the estimation of beta; therefore, it was decided that each stock needed to have 440 days' worth of trading data prior to the date of the transaction being announced for the first time on the stock market. For the purpose of the study, it was necessary to know with certainty both the first announcement date and the transaction outcome date. After applying all these selection criteria, the final sample comprised 31 transactions of acquiring firms and 13 target firms, all of which were listed on the JSE between 05 June 1997 and 21 February 2020. As mentioned above, a transaction was eligible for inclusion in the sample if either the acquirer or target was listed. Transactions where both the acquirer and target were listed, were also included in the sample of this study. This explains why the number of targets is not the same as the number of acquirers. Apart from the JSE, no other stock exchanges met these selection criteria so no transactions involving other stock exchanges were not included in the final sample. Most of the transactions that did not make the final sample were due to the availability challenge of both the first announcement date and transaction outcome date. An unsuccessful M&A transaction is defined as one that is abandoned or rejected by the Competition Commission, shareholders of the target firm or the shareholders of the acquiring firm, where both the target and acquiring firm continue to exist as separate entities for at least three months after the unsuccessful outcome date.

Table 3 – Number of transactions for Final Sample

Year	Number of Acquirers	Number of Targets
1998	1	0
1999	1	0
2003	1	0
2004	2	1
2006	2	1
2008	2	1
2011	1	0
2012	1	0
2014	1	0
2015	4	1
2016	3	2
2017	5	1
2018	1	2
2019	6	4
Total	31	13

Two event dates were collected for the final sample: the ‘date the M&A transaction was first announced in the market’ and the ‘the date the M&A transaction outcome was first announced to be unsuccessful.’ The date when the transaction is first announced in the market is the date when the SENS announced the M&A transaction for the first time to the public. The date the transaction outcome was announced to be unsuccessful is the date the SENS first reported the outcome of the transaction attempt unsuccessful which is the day the transaction was reported terminated or withdrawn by the acquiring firm, target firm or the Competition Commission.

More than one acquiring firm may compete for the same target firm at the same time. An example of this, included in this study, was when both CFR Pharmaceuticals and Bidvest were striving to acquire Adcock Ingram in 2014. Since the date the transaction was first announced in the market gives an indication of the day when information about the firm’s M&A transaction is announced for the first time to the market, then target firm’s date when the transaction was first announced in the market is the date of the first M&A bid. Separate dates of first announcements are gathered for acquiring companies when they get involved in the M&A bid. For example, in the case of the Adcock Ingram merger bid, the press date for Adcock Ingram is the date when it was announced that CFR intended to acquire Adcock whereas the press date for Bidvest is the date when Bidvest also announced its intention to bid for Adcock.

It is worth noting that the press date for Adcock and Bidvest are different as CFR was the first to announce its intentions to acquire Adcock Ingram.

The outcome date for successful transactions is the same for both the target and the acquiring firms. However, this does not need to be true for unsuccessful bids. The withdrawal of one acquiring firm does not necessarily mark the end of the acquiring process for that specific target. Different acquiring firms may bid for the same target firm simultaneously. Thus, in this study, the outcome date for an unsuccessful M&A transaction is the date on which the last firm seeking to acquire the target firm cancels its merger bid. Alternatively, the outcome date is the one on which the SENS announced that the Competition Commission decided to declare the merger unapproved; after that, there must not be any other ongoing bid for at least one month.

This study used the event study approach. Here, one must identify the event window, names of the firms involved and share prices of those firms.

The first event is the press date event as defined earlier in this section. The second event is the outcome event also as defined earlier in this section. The event windows in this study are 5-day (-2, +2) for the first announcement as well as for the outcome announcement. An additional event window of 63-day (-2, +60) was added for the transaction outcome period.

3.2 Method.

The Market Model.

The market model is used to calculate the expected returns as follows:

$$\hat{R}_{it} = \alpha_i + \beta_i R_{mt} \quad (1)$$

Where

\hat{R}_{it} = the expected daily rate of return on security i on day t.

R_{mt} = daily market return on day t.

$$R_{mt} = \log\left(\frac{ALSI_t}{ALSI_{t-1}}\right) \quad (2)$$

$ALSI_t$ = JSE All Share Index on day t;

$ALSI_{t-1}$ = JSE All Share Index on day t - 1;

α_i = indicates the constant return on firm i, returns if the market does not move.

β_i = measures systematic risk of firm i .

Mordant and Muller (2003) and Bhana (1999) both conducted studies that entailed obtaining α_i and β_i estimates in order to calculate the expected returns for each event. Those studies, on average, estimated the coefficients of the market model using daily returns for the period starting 200 days before the press date. By taking this precedent into account, the market model coefficients in this study are estimated using daily returns for the period starting 240 days before the first press date; here, the intention is to avoid noise in the estimation of the market model parameters.

Excess returns are calculated as the difference between expected returns and actual returns. This is shown below:

$$r_{it} = R_{it} - \hat{R}_{it} \quad (3)$$

Where

r_{it} = excess return of security i on day t .

R_{it} = observed return on day t

$$\text{And } R_{it} = \left(\frac{P_{it} - P_{it-1}}{P_{it-1}} \right) \quad (4)$$

Where

P_{it} = price of security i at the end of period t .

P_{it-1} = price of security at the end of period $t-1$

And

R_{it} = observed return.

Abnormal returns are averaged across the number of firms in the sample to obtain average abnormal returns, AAR_T . Studies that use this approach include Bhana (1999), Smit and Ward (2007), Mutshidzhi and Ward (2004), and Yang et al. (2010).

Equation (5) is used to calculate AARs for both models and for both acquired and target firms.

$$AAR_t = \frac{1}{N} \sum_{i=1}^N r_{it} \quad (5)$$

Where:

N = number of firms in the sample.

This study measured the average cumulative effect, on the securities of the firms in the sample, regarding firm-specific information reaching the market from day t_1 to day t_2 . This is done by summing the estimates of the AAR across days. The estimator of CAAR from one period to the next is calculated as follows:

$$CAAR_{t_1,t_2} = \sum_{t=0}^T AAR_t \quad (6)$$

Where:

$CAAR_t$ = Cumulative average abnormal return at time t.

T= the number of periods being aggregated.

The t-test

This used the t-test to test the hypothesis of this study as stipulated at the end of section 2. The t-test is performed at 5% significance level. Equation (9) shows how the test statistic for the t-test is calculated.

$$t_{n_1+n_2-2} = \frac{\bar{X}_1 - \bar{X}_2 - (\mu_1 - \mu_2)}{s / \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \quad (7)$$

Where S is calculated as:
$$S^2 = \frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1+n_2-2} \quad (8)$$

Here, t is the test statistic, \bar{X} the sample mean, μ is the population mean or a specified number, S is the pooled standard deviation, s1 is sample 1 standard deviation, S2 is sample 2 standard deviation and n represents the sample size.

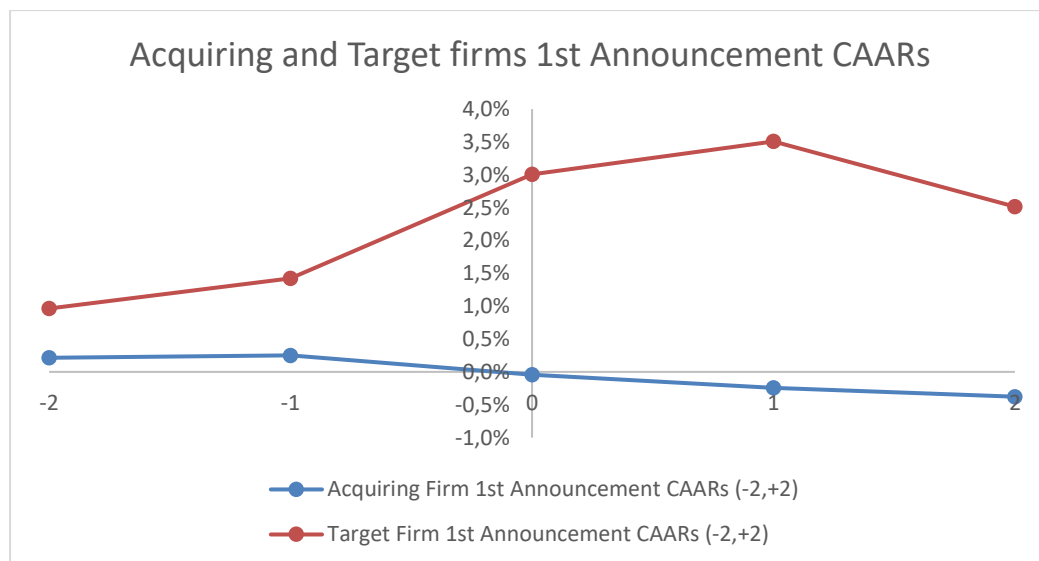
In this study, \bar{X} represents the CAAR or AAR mean with respect to how it is defined in the hypothesis being tested at that point in time, μ shows a specified figure against which the hypothesis is tested, s will show the standard deviation of the sample CAAR, or AAR and n shows the sample size; that is, the number of firms in the sample.

In order either to reject or not reject the null hypotheses, one needs the critical value which is compared with the test statistic to determine whether the test statistic falls in the rejection region. Critical values are obtained for the t-distribution table. This study made use of Excel to calculate the test statistic.

4 Results and Analysis

Figure 1, below, shows the reaction of the stock market for both the target and acquiring firms, around the first announcement date of the attempted M&A transactions. As described above in the Method section of this report, this study uses the 5-day (-2, +2) event window and the 63-day (-2, +60) event window. The results shown in Figure 1 show that in the case of the target firm, the 5-day event window CAAR is 2.52% around the date of the first transaction announcement. In the case of acquiring firms, the 5-day event window CAAR is -0.38% around the first announcement of the transaction.

Figure 1. 5-day CAAR around the first announcement.



These results are consistent with those of Davidson et al. (1989) where the target firm earned a positive CAAR of 17.4% over the 2-day (-1, 0) event window. These results are also consistent with the South African findings by Smit and Ward (2007) where the acquiring firm showed a -0.02% CAAR over a 3-day event window around the transaction's first announcement date. Furthermore, the results show that two days before the transaction is first announced in the market, both the target firm and the acquiring firms earned positive CAAR. Because South Africa is regarded as a non-competitive market for M&A transactions, these results potentially imply that information leakage is taking place prior to the announcement;

this would explain the positive CAARs for both the target and acquiring firm. A negative CAAR for the acquiring firm after the transaction is first announced in the market could mean that even in the less competitive M&A markets such as South Africa, acquiring firms are still paying high premiums. This could be the reason why target firms have positive CAARs after a transaction announcement and acquiring firms have negative CAARs.

At this point, hypotheses 1 and 2 of this study are particularly relevant. Thus, the null hypothesis for hypothesis 1 stated that in the 5-day event window around the date when the M&A transaction is announced in the market for the first time, the CAARs of acquiring firms are less than or equal to zero. From the t-test results of this study, hypothesis 1 p-value is 0.30: therefore, we do not reject hypothesis one and conclude that there is no evidence that the CAARs applicable to the first announcement for acquiring firms are statistically different from zero. The null hypothesis for hypothesis 2 stated that in the 5-day event window around the date when the M&A transaction is announced in the market for the first time, the CAARs of target firms are less or equal zero. The p-value for hypothesis 2 is 0.24 meaning that we fail to reject the null hypothesis: we conclude that there is not enough evidence that the 5-day CAARs for target firms around the M&A transaction’s first announcement are not statistically different from zero.

Figure 2. Target firm first announcement and outcome date CAAR.

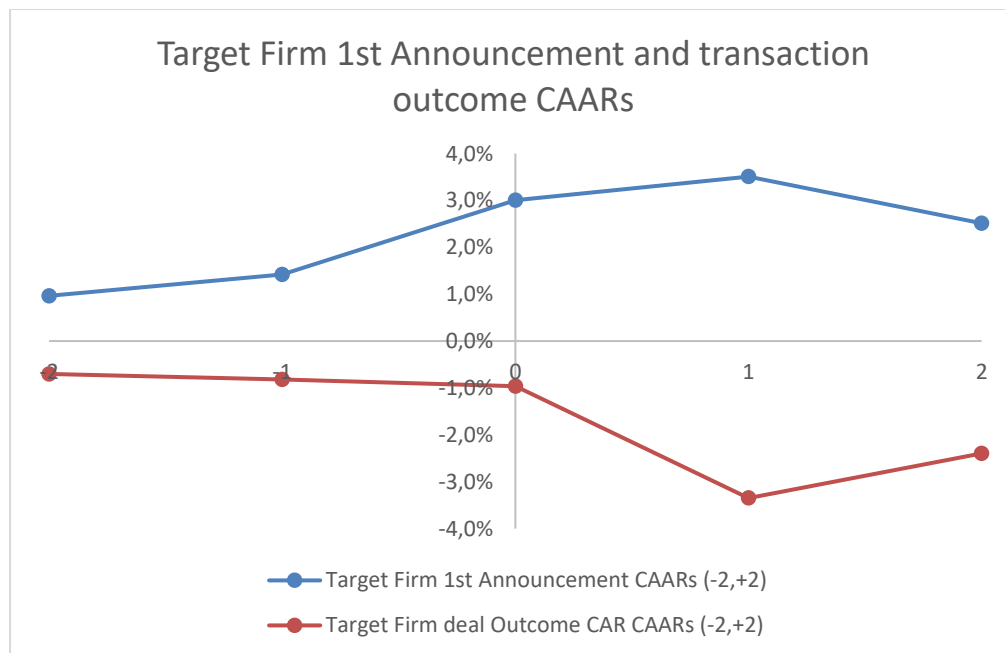


Figure 2, above, shows the CAARs of target companies around both event dates: in other words, the date when the M&A transaction was first announced in the market and the date when it was announced that the M&A transaction attempt was unsuccessful. The 5-day event window CAAR for the target firm was -2.40% around the unsuccessful outcome date. The same 5-day window CAAR for the target firm when the transaction was first announced in the market was +2.52% around the transaction's first announcement. This shows that the initial positive returns earned by the target firm around the time of the first announcement were not completely reversed when the outcome of the transaction was announced as having been unsuccessful. Although the returns are not completely reversed, the difference for all practical purposes is close to zero; this suggests that according to the market, the time spent by the target firm in engaging in these failed transactions had been wasted and could have been used for something else more useful. The scenario shown in Figure 2 could explain, partly, why in some instances, target firms require a break-fee to entertain an M&A transaction attempt by the acquiring firm; thus, the break-fee could be used to compensate for the lost time and potentially lost returns.

Figure 3. Acquiring firm first announcement and outcome date CAAR.

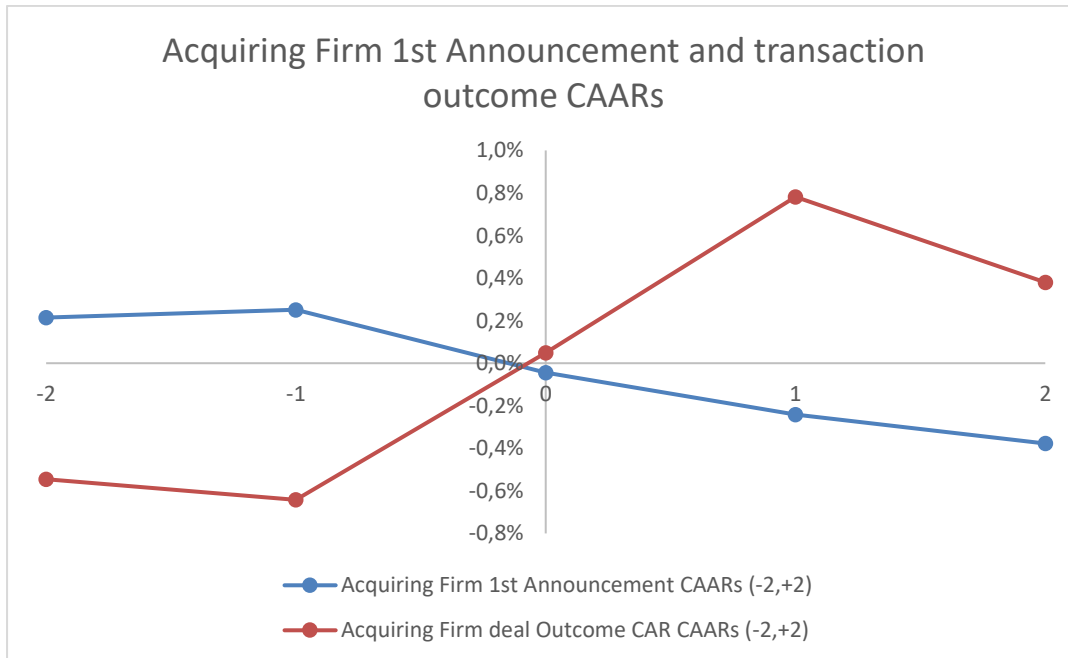


Figure 3, above, shows the CAARs for acquiring firms in South Africa around both the transaction announcement and outcome dates. Thus, towards the first announcement date, those acquiring firms have positive CAARs: this is in accordance with the managerialism theory in terms of which the best-performing managers are more likely to initiate M&A transactions to

bring better management to the assets of the target firms. However, Jensen's (1986) free cashflow theory would interpret these results as a source of agency problems. More specifically, the best-performing managers who have done well by generating sizeable free cashflows or credit lines then use those advantages to grow their respective firms beyond optimal levels; they then promote their own personal interests instead of perhaps returning the value to shareholders through dividends or a share buy-back programme. Figure 3 also indicates that after that first announcement, acquiring firms earn negative CAAR of -0.38% on the 5-day (-2, +2) event window. These results around the first announcement date are in line with the international studies such as stated in Figure 1 above.

The acquiring firm's performance around the unsuccessful outcome date was also studied. It was found that the acquiring firm earned a negative CAAR of 0.64% over a 2-day (-2, -1) event window. This suggests that the market is already pricing in an unsuccessful outcome for the transaction and could also indicate that there was leakage of information in South Africa before the unsuccessful outcome was announced in the market. However, after the outcome date, the acquiring firm started to earn positive CAAR: this conflicts with this study's expectation that the market should punish acquiring firms for engaging in M&A transactions that they failed to conclude; according to that expectation one would expect to see negative CAARs for a few days after the outcome day. One reason for this finding could be that by the time the negative outcome is announced, the market has already priced that outcome into the stock price; as such, no negative shock is noticed after the announcement because of information leakage as suggested above.

Figure 4, below, shows the cumulative average abnormal return (CAAR) for both the target and acquiring firms over the 63-day (-2, +60) event window of the outcome date. Figure 4 also shows that the post unsuccessful outcome 5-day CAAR of target firms is -2.02% worse than that of the acquiring firm. Over the 5-day window after the announcement of an unsuccessful outcome, the market only punishes the acquiring firm and not the target firm. The findings about are opposite when looking at a 63-day event window where the target firm has CAAR of 0.66% on day 60 whereas the acquiring firm has a CAAR of -4.42% on day 60. The p-value for the 63-day event window, following the announcement that the transaction was unsuccessful, was found to be 0.08 for acquiring firms and 0.37 for target firms. This means that we do not reject the null hypothesis of hypothesis 3 at the 5% significance level; instead, we may conclude that the CAARs of both acquiring and target firms are not statistically different from zero.

Figure 4. Acquiring and target firms' transactions outcome announcement CAAR for (-2, +60) event window.

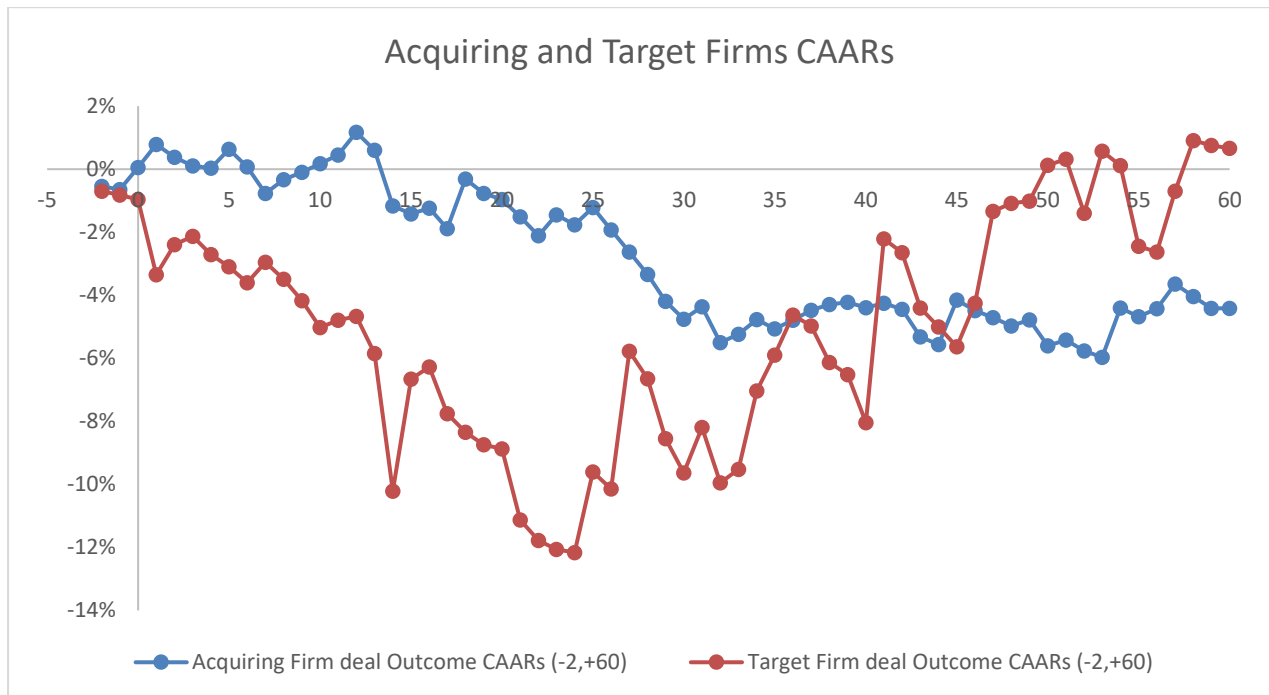


Figure 4 also presents some other interesting results outside the scope of the defined event windows of this study. For example, the maximum CAAR for the acquiring firm is 1.17%, which occurs on the (-2, +12) event window whereas the lowest return is -5.97% at the (-2, +53) event window. The target firm's maximum CAAR is 0.91% which occurs at the (-2, +58) event window whereas the lowest CAAR is -12.16% which happens at the (-2, +24) event window. The biggest spread between the CAAR of the acquiring firm and that of the target firm over the 63-day event window is 11% and this occurs at the (-2, +23) event window. As shown in Figure 4, the target firms start experiencing negative CAARs right after the announcement that the outcome was unsuccessful, and this continues up until day 50 when there seems to be a recovery. Acquiring firms, however, seem to experience negative CAARs five days after the outcome announcement, continuing until the end of the event window. The results displayed in Figure 4 are in accordance with this study's theoretical expectation that the market will punish the management of acquiring and target firms for engaging in M&A transactions that they could not complete successfully. This is also consistent with the Neoclassical theory of M&A that is described in Jensen (2010) and (Abdollah, Parviz & Bahram, 2018), that acquiring firms engage in M&A activities to achieve efficient allocation of resources, these results are confirming this in that when firms fail to conclude these

transactions, the market's expected efficiencies also fail to be realized hence the punishment of acquiring firms.

The findings reported in this section of the study provide useful information for corporate finance transactors in investment banking as well as for asset managers and hedge fund managers. In the case of corporate finance asset managers, the results help in managing the expectations of the stakeholders of both the acquiring and the target firms during the structuring of the M&A transaction. More specifically, stakeholders of the acquiring and target firms can be advised that in three-month period after the date of the acquisition outcome, then in the event of transaction failure, the acquiring and target firms can experience a negative CAAR of not more than 5.97% and 12.96% respectively. For long-only asset managers, this information helps them in deciding how much hedging they need to do should they be holding a firm that is involved in M&A transactions where the outcome is not certain.

Hedge fund managers and other market participants who are permitted to take short positions can also use the results of this study indicating that the best period to short acquiring firms of failed transactions is between day 18 and day 60 after the date of the announcement that the transaction has failed; based on the sample used in this study, the CAAR is likely to be -5.97%, at most, for those acquiring firms. For target firms, the best period to short the stock is from the day when the outcome of the M&A transaction attempt is announced as having been unsuccessful, up until day 60 after that announcement.

Furthermore, Figure 4 shows that for acquiring firms, there is a delay in the market's reaction regarding punishing the managers for bad decisions on initiating M&A transactions that could not be concluded. The initiation of these types of transactions costs money and a sizable amount of time: that money and time wasted could have been focused on other areas of the business. Acquiring firms that engage in this type of practice might start to receive negative recommendations from investment analysts especially in highly competitive markets; asset managers might then start offloading these firms from their books. However, the sell-off would not be instant because the switch from one firm to the next or the closing of the position all at once might cause market panic and might cause the stock price to fall far beyond what it should be. This delay in selling off is apparent in Figure 4, where the negative CAAR or in other words, the punishment, is only significant from day 32 after the final transaction outcome date.

In conclusion of the results and analysis section, it is worth noting the similarities and differences of the findings of this study from some of the previous studies included in the

literature review. Looking at a 5-day, (+2,-2), event window, this study showed that when the transactions are announced for the first time in the market, target firms earned +2.52% whereas acquiring firms earned -0.38%. Some of the international studies such as Akhigbe et al. (2000), Malmendier et al. (2015), and Cole, Fatemi and Vu (2006), included in literature review of this study also showed similar results. The three studies found that when the transactions are announced for the first time, target firms earn positive CAARs and acquiring firms earn negative CAAR, the key difference is that the CAARs found in these studies were double digits around the first announcement event whereas this study showed single digit CAARs around similar event windows. The above comparison to the above previous studies can also be explained by Jensen (2010)'s Managerial Theory which states that M&A activity is driven by competition in the market for corporate control where managers pursue their own objectives of sales growth hence in most cases acquiring firms earn negative statistical significant returns when transactions are announced for the first time especially in highly competitive markets, perhaps similar results could have been seen in this study had South Africa been a highly competitive market for M&A activity.

Lai et al. (2006) studied the target firms' stock market reaction 6 and 12 months after the transactions are announced to be unsuccessful and found that target firms earned CAARs of -1.02% and -3.16% for 6 and 12 months respectively. Lai et al. (2006)'s results are opposite to the 3 months results shown in this study where the 65-day unsuccessful transaction outcome announcement event window showed CAAR of +0.66%. Madura and Ngo (2012) investigated the stock market's reaction towards unsuccessful M&A transactions involving listed acquiring firms and private target firms; their study concentrated on the acquiring firms' perspective. Their sample size was 1655 firms taken from CRSP database. This sample size is 16 times that of this study. Their results were inconsistent with the results of this study. For an example, they found that when the transaction is announced for the first time in the market, over a 3day event window, acquiring firms earned CAARs of +7.56% whereas around the same event window, this study shows CAARs of -0.38%. These opposing findings for acquiring firms are also noticed when the transactions are announced to be unsuccessful.

5. Limitations

It is well known that M&A activity in South Africa is not as frequent as in other countries such as the United States. As a result, very few listed firms in South Africa engage in M&A activity when compared to highly competitive markets such as U.S, UK, and Canada. This becomes a problem for researchers in this field because they struggle to obtain enough data to conduct M&A studies in the South African context, especially when the aim is to study the South African stock market's reaction to failed M&A transactions. The researcher in this study would have liked to have seen how the South African stock market reacts to transactions terminated by the Competition Commission of South Africa; a comparison could then have been made to those terminated either by the target firms or acquiring firms. Also, does the stock market react differently to transactions withdrawn by target firms and those withdrawn by acquiring firms? Another limitation concerns the limited amount of information available regarding the role of the Competition Commission of South Africa regarding M&A activity: that Commission only started providing an M&A activity update from 2002 onwards which makes it difficult to identify with certainty those transactions that were presented to the Competition Commission prior to 2002. Using the SENS as an event date may also be a limitation in an event study such as this one because, in some instances, the transaction information may reach the market by other means before the release of the SENS, resulting in information leakage.

6. Conclusions

M&A transactions have restructured many business organizations and, in some instances, have helped them to remain competitive in their respective industries. Financial markets keep evolving as time passes, which creates a gap in the field of M&A transactions for an analysis of market reactions using most recent data; this applies especially to a country such as South Africa. One observation that can be made from this study's discussions is that most studies of unsuccessful M&A transactions are international and there are very few covering South Africa. This left a gap for an analysis of failed M&A transactions in South Africa. This study aimed to analyse the reaction of the South African stock market to various forms of unsuccessful M&A transactions. The scope of this work covered both the acquiring and target firms around the date when the transaction was first announced in the market, as well as the dates when it was announced that the transaction outcome had been unsuccessful. This study also formulated three hypothesis that were duly tested. The first of these was that the cumulative average abnormal returns of acquiring firms are equal to or greater than zero around the dates when the

transaction is first announced in the market. The second hypothesis was that cumulative abnormal returns of the target firms are less than or equal to zero around the dates when the transaction is first announced in the market. These two hypotheses were based on the competition theory of M&A transactions which mentions that in the least competitive markets for M&A transactions, such as South Africa, the acquiring firms are not expected to pay high premiums. The same applies to target firms in South Africa where target firms do not attract high premiums. This is in direct contrast to competitive markets for M&A transactions, where target firms receive high premiums and so they experience positive average abnormal returns around the dates when the transaction is announced in the market for the first time. The third hypothesis was that both the acquiring and target firms experience negative cumulative average abnormal returns around the dates when it is announced that the M&A transaction has been unsuccessful; this arises from the expectation that the market should punish both the acquiring and target firms for wasting their resources by engaging in M&A transactions that they cannot conclude.

The study used the event study methodology with reference to the market model. The sample consisted of 31 transactions of acquiring firms and 13 target firms, all of which were listed on the JSE between 05 June 1997 and 21 February 2020. The results of this study show that two days before the transaction was announced in the market for the first time, both the acquiring and the target firm earned positive CAARs which signals the probability that information about the transaction was leaked before the transaction was first announced in the market. The study found that in the 5-day event window around the first announcement dates of the M&A, the acquiring firms, on average, earned a negative cumulative average abnormal return of 0.38%. In comparison, the target firms on average earned abnormal returns of 2.52%. This could mean that even in the least competitive M&A markets, such as South Africa, acquiring firms are paying high premiums; this is evident from the acquiring firms' negative CAARs and target firms' positive CAARs around the first announcement date of the M&A transaction. The results also showed that when the M&A transaction outcome is announced as having been unsuccessful, target firms earned negative CAARs of 2.40% whereas acquiring firms earned positive CAARs of 0.38% over the 5day event window. These results are consistent to those found in Akhigbe et al. (2000), Malmendier et al. (2015), and Cole, Fatemi and Vu (2006) but inconsistent to those found in Madura and Ngo (2012). In Madura and Ngo (2012) acquiring firms earned CAARs of 7.56% when the transactions are announced for the first time in the market and -2.02% when the transactions are announced to had been unsuccessful. This is

potentially due to the fact that Madura and Ngo (2012)'s study was conducted in highly competitive markets utilizing data from CRSP data base and their sample size was much higher than the sample size of this study. This study further looked at a slightly longer event window of 65 day when the transactions were announced to be unsuccessful, it was found that over this event window target and acquiring firms earned +0.66% and -4.42% respectively.

The results of this study have a few practical implications for the South African financial markets participants such as asset managers, hedge funds managers and M&A advisory participants. For an example, if an asset manager or a hedge fund manager has make a decision on whether to invest in a stock that is most likely to undergo an M&A transaction in South African or in developed markets such as the United States, they might be better off in taking a long position on a stock that is listed in developed markets because when the transaction is announced for the first time in South Africa, the target firm earn single digit positive CAARs whereas target firms earn positive double digit CAARs in developed markets. For an M&A advisory specialist who represents South African target firms, it might be worth it to negotiate a break fee to cover for the negative CAARs that target firms experience in South Africa after the deal is announced to had been unsuccessful.

One possibility for future research would be to separate the data used in this study into failed M&A proposals that involved payment in shares and those involving payment in cash; the intention would be to determine whether the stock market responded differently to these two categories of unsuccessful M&A attempts. Another interesting angle would be to assess the stock market's reaction to the rival target when these transactions did not conclude successfully. Furthermore, a check could be performed to see whether any of the target firms received further offers within 24 months after the transaction's failure as this could give insights into whether the target was a good one or not. This research could be taken further by evaluating how the stock market reacts to transactions that were terminated by shareholders of target firms as opposed to those terminated by shareholders of acquiring firms. Likewise, insights could be gained by assessing the stock market's reaction to those transactions that were terminated by the Competition Commission of South Africa.

7. Reference list

- Abdollah, T., Parviz, S. & Bahram, B. 2018. According to agency theory and neoclassical theory: new ownership and diversity of public sector companies in corporate life cycle. *Advances in Mathematical Finance & Applications*. (1):1-16.
- Akhigbe, A., Borde, S.F. & Whyte, A.M. 2000. The source of gains to targets and their industry rivals: evidence based on terminated merger proposals. *Financial Management*. (29): 101-118. Available:
https://d1wqtxts1xzle7.cloudfront.net/41158492/The_Source_of_Gains_to_Targets_and_Their20160114-12014-38g3cx.pdf20160114-19908-efw622-with-cover-page-v2.pdf?Expires=1645302208&Signature=XSDq7URKoEqEpCMPoKDCvpY0sCbPcM-ygdF1YZ9MawcwSR~P~aTF1tIKeiVgMCWOY4UtS6VtxWIduj-txHIGSqDEq~5g5osO868IDNZ2yWdExV9G8d9Gumh~TbWI3MuOH~pJql6BGizmCUIHlCf9RNhoVUmbNInwx5IKi2uKvqtfCZeXh6uKELNRiw5YkiHk4wAemADLWIudgzwDYhAi2bErF5HeCMqD1LBLPGa5ydXWqqmUcyTRrtVa5L5oZllaeCX1cdOvr-ViOIIzM4zpeZpSmyF9Pm1AFT3arxQjhpfnNasJ18WYg1BVbhjxdrvSxB3VQg8aPqvob8HI9ZFRw__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA [2022, January 6]
- Alexandridis, G., Petmezas, D. & Travlos, N.G. 2010. Gains from mergers and acquisitions around the world: new evidence. *Financial Management*. Vol (not found): 1671-1695. Available:
<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.460.2340&rep=rep1&type=pdf> [2019, June 2]
- Allen, L., Jagtiani, J., Peristiani, S. & Saunders, A. 2002. The role of bank advisors in mergers and acquisitions. *Working Paper*. 143(1-50). Available:
<https://www.econstor.eu/bitstream/10419/60720/1/345438531.pdf> [2022, January 9]
- Agrawal, A., Jaffe, J.F. & Mandelker, G.N. 1992. The post-merger performance of acquiring firms: a re-examination of an anomaly. *Journal of Finance*. 4:1605-1621.
- Asquith, P. 1983. Merger bids, uncertainty and stockholder returns. *Journal of Financial Economics*. 11:51-83.

- Bhana, N. 1999. The impact of public news regarding potential take-overs on the share price behaviour of target firms. *Investment Analysts Journal*. 50:29-41.
- Bradley, M. & Sundaram, A. 2004. Do acquisitions drive performance or does performance drive acquisitions? *SSRN working paper*. Available: https://www.researchgate.net/publication/272248116_Do_Acquisitions_Drive_Performance_or_Does_Performance_Drive_Acquisitions/link/5a0f4b940f7e9bd1b2bdc461/download [2020, October 21]
- Cole, R.A., Fatemi, A., & Vu, J. 2006. Do mergers and acquisitions create or destroy value? Evidence from unsuccessful mergers. MPRA Paper No. 4717. Available: [Do mergers create or destroy value? Evidence from unsuccessful mergers - Munich Personal RePEc Archive \(uni-muenchen.de\)](#) [07 October 2021]
- Davidson, W.N., Dutia, D. & Cheng, L. 1989. A re-examination of the market reactions to failed mergers. *Journal of Finance*. 44: 1077-1083.
- Dodd, P. & Ruback, R. 1977. Tenders offers and stakeholder returns. *Journal of Financial Economics*. 5: 351-372.
- Economic Development Department of South Africa. Available: <https://www.gov.za/speeches/coca-cola-beverages-africa-merger-parties-and-south-african-government-reach-agreement> [2016, May 6]
- Faccio, M. & Masulis, R. 2004. The choice of payment method in European mergers and acquisitions. *Journal of Finance*. 1-57.
- Gaughan, P. A. 2007. *Mergers, Acquisitions and Corporate Restructurings*. Hoboken, New Jersey. Wiley. 1-625.
- Grimbeek, S. Koch, S. & Grimbeek, R. 2013. The consistency of merger decisions at the South African Competition Commission. *South African Journal of Economics*. 81: 561-580.
- Healy P.M., Palepu K.G. & Ruback R.S. 1992. Does corporate performance improve after mergers? *Journal of Financial Economics*. 31: 135-175.

- Huang, Y.S. & Walkling, R.A. 1987. Target abnormal returns associated with acquisition announcements: payment, acquisition form, and managerial resistance. *Journal of Financial Economics*. 19: 329-349.
- Ishii, J. & Xuan, Y. 2013. Acquirer-target social ties and merger outcomes. *Journal of Financial Economics*. 112: 344-363.
- Ismail, T. H., Abdou, A. A. & Magdy, R. 2011. Exploring improvements of post-merger corporate performance: the case of Egypt. *The IUP Journal of Business Strategy*. 8: 7-24.
- Jensen, C. 2010. Mergers and Acquisitions – The standing of theory in the quest for better institutions and policy. *ASE Network Studies & Analyses*. 401: 1-27
- Jensen, M. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*. 76:323-329. Available: https://d1wqtxts1xzle7.cloudfront.net/26383835/g32-with-cover-page-v2.pdf?Expires=1645300593&Signature=CcVM8jz6rSbj~TpqYhiHPJqsEKtKQb8FQ10BeDv4GGOAfpfsho5acrj-YVryqkwvGBnMs-S-IF7-ZoXqIAaWmd7meqBgy9udoI2B95gh2QS~pM19PpCjps7BBicksyNMqZ3gb0F~K2XG~Pfe2jCKhwMtUu4fd~xBsFtlJiuxBiKm1tch75ZoSkyK0rc2gYCtOTDaZAMHDpiE4pmrAQ2H0qTPL9GcANQDYoJAKX6nopZL8uKjCqlGolGA08Ec1HRgURwMg1c5tHwDE9gzTP~3QQ5S8HD7~tdbACKuq4leCAzC9B6P~yHhWitsla9dWxOnpRENtE20RUSgyEacwLWg_&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA [2021, August 20]
- Jensen, M.C. & Ruback, R.S. 1983. The market for corporate control. *Journal of Financial Economics*. 11: 5-50.
- Khayanga, L.E. & Karau, J.N. 2018. The effect of mergers and acquisition on a firm's competitive advantage: a case of Hewlett Packard East Africa. *International Journal of Business Management and Technology*. 2: 67-79.
- Lai, G.C, Moore, K.M & Oppenheimer, H.R. 2006. Shall one invest in cancelled targets after the termination of mergers and acquisitions? *International Journal of Business and Economics*. 5: 93-110.

- Madura, J. & Ngo, T. 2012. Withdrawals of mergers involving private targets. *Applied Financial Economics*. 1-27. Available: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.490.7717&rep=rep1&type=pdf> [2021, August 6]
- Malmendier, U., Opp, M. & Saidi, F. 2015. Target revaluation after failed takeover attempts: cash versus stock. *Journal of Financial Economics*. 119: 92-106.
- McBeath, I. & Bacha, J. 2001. Mergers and acquisitions: a consideration of the drivers and hurdles. *Journal of Commercial Biotechnology*. 8: 147-153.
- Mishra, P. & Chandra, T. 2010. Mergers, acquisitions, and firms' performance: Experience of India's pharmaceutical industry. *Eurasian Journal of Business and Economics*, 3: 111-126.
- Mordant, N. & Muller, C. 2003. Profitability of directors' share transactions on the JSE. *Investment Analysts Journal*. 57: 17-31.
- Motta, M. 2004. *Competition policy: Theory and practice*. London: Cambridge University Press.
- Mushidzhi, T. & Ward, M. 2004. Abnormal returns for cash vs share funded acquisitions. *Investment Analysis Journal*.
- Pazarskis, M., Vogiatzoglou, M., Christodoulou, P. & Drogalas, C. 2006. Exploring the improvement of corporate performance after mergers: the case of Greece. *International Research Journal of Finance and Economics*. 6: 1450-2887.
- Rhodes-Kropf, M. & Viswanathan, S. 2004. Market valuation and merger waves. *Journal of Finance*. 59: 2685-2718.
- Rossi, S. & Volpin, P. F. 2004. Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics*. 74: 277-304.
- Safieddine, A. & Titman, S. 1999. Leverage and corporate performance: evidence from unsuccessful takeovers. *Journal of Finance*. 54: 547-580.

- Servaes, H. & Zenner, M. 1996. The role of investment banks in acquisitions. *Review of Financial Studies*. 9: 787 -815.
- Shleifer, A. & Vishny, R.W. 2003. Stock market driven acquisitions. *Journal of Financial Economics*. 70: 295–311.
- Sehgal, S., Banerjee, S. & Desiting, F. 2012. The impact of M&A announcement and financing strategy on stock returns: evidence from BRICKS markets. *International Journal of Economics and Finance*. 4: 76-90.
- Smit, C.J.B. & Ward, M. 2007. The impact of large acquisitions on the share price and operating financial performance of acquiring firms on the JSE. *Investment Analysis Journal*.
- The Competition Act of 1998, Act 89 of 1998. Available: <https://www.gov.za/documents/competition-act#:~:text=The%20Competition%20Act%2089%20of,dominant%20position%2C%20and%20mergers%3B%20and&text=for%20the%20establishment%20of%20a%20Competition%20Appeal%20Court%3B%20and> [2021, December 23]
- Travlos, N.G. 1987. Corporate takeover bids, methods of payments and acquiring firms' stock returns. *Journal of Finance*. 4: 943-963.
- Wansely, J.W., Lane, W.R. & Yang, H.C. 1983. Abnormal returns to acquired firms by type of acquisition and method of payment. *Journal of Financial Management*. 17-22.
- Yang, S., Lin, L., Chou, D. & Cheng, H. 2010. Merger drivers and the change of bidder shareholders' wealth. *Service Industries Journal*. 30: 851 –871.
- Yoo, K., Lee, Y. & Heo, E. 2013. Economic effects by merger and acquisition types in the renewable energy sector: an event study approach. *Renewable and Sustainable Energy Reviews*. 26:694-701. Available: <https://www.sciencedirect.com/science/article/abs/pii/S1364032113003791> [2022, January 3]

8. Appendix -List of Acquiring and Target Firms

Acquiring firms included in the study and the CAARs.

Names of Acquiring firms included in the study				
AXL	HMN	SNH	ILE	COH
NT1	GLI	IMP	BVT	BAT
EXP	MEI	AGL	PPE	ADR
DIA	GLN	TKG	RDF	PAN
SAR	JSC	EXX	HAR	SOL
AFT	S32	TKG	SUI	OMN
MUR				

Event 1: First announcement

Days	CAAR
-2	0,21
-1	0,25
0	(0,04)
1	(0,24)
2	(0,38)

Event 2: Outcome announcement

-2	(0,55)	11	0,45	24	(1,77)	37	(4,48)	50	(5,61)
-1	(0,64)	12	1,17	25	(1,22)	38	(4,29)	51	(5,42)
0	0,05	13	0,60	26	(1,93)	39	(4,22)	52	(5,77)
1	0,78	14	(1,17)	27	(2,62)	40	(4,39)	53	(5,97)
2	0,38	15	(1,42)	28	(3,34)	41	(4,25)	54	(4,40)
3	0,11	16	(1,23)	29	(4,20)	42	(4,45)	55	(4,68)
4	0,03	17	(1,89)	30	(4,76)	43	(5,32)	56	(4,42)
5	0,63	18	(0,31)	31	(4,36)	44	(5,56)	57	(3,64)
6	0,07	19	(0,77)	32	(5,50)	45	(4,15)	58	(4,04)
7	(0,77)	20	(0,96)	33	(5,24)	46	(4,49)	59	(4,42)
8	(0,33)	21	(1,51)	34	(4,77)	47	(4,71)	60	(4,42)
9	(0,10)	22	(2,11)	35	(5,07)	48	(4,97)		
10	0,17	23	(1,45)	36	(4,79)	49	(4,78)		

Target firms included in the study and the CAARs.

Names of Target firms included in the study		
GFI	AGL	MUR
SHP	BLU	RPL
NPK	PPC	FVT
ADH	AEG	SAC
ZCL		

Event 1: First announcement

Days	CAAR
-2	0.96%
-1	1.42%
0	3.00%
1	3.51%
2	2.52%

Event 2: Outcome announcement

-2	-0,70%	11	-4,79%	24	-12,16%	37	-4,98%	50	0,13%
-1	-0,82%	12	-4,67%	25	-9,60%	38	-6,13%	51	0,31%
0	-0,97%	13	-5,85%	26	-10,14%	39	-6,51%	52	-1,40%
1	-3,35%	14	-10,22%	27	-5,77%	40	-8,04%	53	0,57%
2	-2,40%	15	-6,66%	28	-6,65%	41	-2,21%	54	0,12%
3	-2,13%	16	-6,27%	29	-8,55%	42	-2,65%	55	-2,45%
4	-2,70%	17	-7,76%	30	-9,64%	43	-4,41%	56	-2,63%
5	-3,10%	18	-8,34%	31	-8,19%	44	-5,00%	57	-0,70%
6	-3,60%	19	-8,75%	32	-9,95%	45	-5,63%	58	0,91%
7	-2,95%	20	-8,87%	33	-9,53%	46	-4,26%	59	0,76%
8	-3,49%	21	-11,13%	34	-7,04%	47	-1,33%	60	0,66%
9	-4,17%	22	-11,77%	35	-5,90%	48	-1,09%		
10	-5,03%	23	-12,07%	36	-4,63%	49	-1,01%		