International Journal of Economics, Commerce and Management
United Kingdom ISSN 2348 0386 Vol. 12, Issue 11, Nov 2024

https://ijecm.co.uk/

DEAL CHARACTERISTICS AND SHORT RUN CUMULATIVE ABNORMAL RETURNS FROM MERGERS AND ACQUISITIONS IN EMERGING MARKETS: EVIDENCE FROM LISTED FIRMS EASTERN AFRICA SECURITIES MARKETS

Beth Wangari Kariuki, PhD
Department of Business Management, School of Business & Economics,
Dedan Kimathi University of Technology, Nyeri, Kenya
beth.kariuki@dkut.ac.ke, bethkariuki05@gmail.com

Abstract

This study investigated the impact of deal characteristics on short run cumulative abnormal return from mergers and acquisitions of listed firms in Eastern Africa Securities Markets. A sample of thirty (30) listed firms in Eastern Africa securities markets involved in mergers and acquisitions for a period of twenty (20) years between 1996 and 2015 was used. The study was guided by Myers and Majluf (1984) world of asymmetric information and the signaling model of Leland and Pyle (1977). Event study approach was used in computation of shot run cumulative abnormal return. Using cross sectional regression analysis, the study finds that method of payment and target status and had a negative and significant impact on short run cumulative abnormal returns from mergers and acquisitions. A positive and significant impact was reported between deal value and short run cumulative abnormal returns while an insignificant impact was observed between diversification and short run cumulative abnormal returns from mergers and acquisition of listed firms in Eastern Africa securities markets. The study concludes that deal characteristics play an important role in explaining short run cumulative abnormal returns from mergers and acquisitions of listed firms in Eastern Africa securities markets.

Keywords: Mergers and Acquisitions, short run cumulative abnormal return, deal charateristics, Target status, Payment method, relatedness

INTRODUCTION

For the past four decades Mergers and acquisitions (M&As) remain a popular vehicle for corporate growth and diversification worldwide (Eurelich, Kopp and Fligge, 2022). Globally, corporations are increasingly pursuing mergers and acquisitions due to consequence of political, monetary and regulatory convergence (Trompenaars and Asser, 2010). Initially, the corporate restructuring trend was limited to developed countries, especially the US and UK, however, with time developing countries started to follow the same. Rosinski, (2011) posit that firms rely on three mechanisms to achieve growth: organic growth, alliances, and mergers and acquisitions and of the three mechanism M&As strategies account for the biggest percentage (Kariuki, Muturi and Ndung'u, 2016).

Theoretical proposition of Myers and Majluf (1984) word of asymmetric information urgue that value maximizing strategy adopted by firms pursuing M&A deals employ stock offers as a method of payment when an acquiring is firm possessing financial slack. On the other hand, acquiring firms will prefer financing for M & A deals with cash incases there is overvaluation. The Signaling Model of Leland and Pyle (1977) suggests that payment method act as a signaling device about the acquiring firm's stock value. Whereas cash financed M&A deals are usually interpreted as good news stock financed M&A deals on the other side are usually seen as bad news. In line with this theory, market react positively to M&A deals financed through cash offer M&A while stock offers M&A deals always trigger a negative market reaction. In simple terms cash offers acquisitions should generate abnormal return compared to stock offer M&A deals.

Shleifer and Vishny (2003) overvaluation hypothesis posit that during period of market booms there is a common tendency of overvaluation of company shares across the industries. This statement holds true when wealth creation and efficient capital hypothesis are invoked. Management is usually privy to this information. In order to protect the wealth of the shareholders from eroding due to market adjustments, firm management usually make investment and financing decisions. Such decision involves acquiring real asset and financing them using company's overvalued stock. When pursuing M&As deals, managers of overvalued firms' managers whose stocks are believed to be overvalued move concurrently to acquire companies whose stock prices are lesser valued (Depamphilis, 2010; Rhodes-Kropf & Viswanathan, 2004). The use of overvalued stock means the acquirer can issue fewer shares, resulting in less earning dilution. Reflecting the influence of overvaluation, the method of payment according to this theory would normally be stock. The overall outcome of such an investment decision is a negative net present value.

Numerous studies confirm that long term fluctuations in the market valuations and the number of takeovers are positively correlated (Dong, Hirshleifer, Richardson & Teoh, 2006).

Several studies in developed financial markets document mixed evidence on the relationship between deal characteristics such as method of payment, target status, relatedness and short run cumulative returns from mergers and acquisitions. Martynova and Renneboog (2006) research findings show that method of payment does not significantly influence profitability of corporate takeovers in the United states. On the contrary, Moeller, Schlingemann and Stulz (2005) and Pulina (2017) documented an inverse relationship between abnormal return and equity offers. Using a sample of European firm's involved in mergers and acquisitions Martynova and Renneboog (2008) reported that acquirer's returns on equity financed acquisitions were higher compared to all cash bids. Alexandridis, Petmezas and Travlos (2010) while conducting a study on gains from mergers and acquisitions around the world documented that acquirers beyond the most competitive takeover markets (the U.S., U.K. and Canada) pay lower premia and realize gains, while share-for-share offers are at least non-value destroying for their shareholders. Fu, Lin and Officer (2013) challenged recent theory and evidence that suggest that overvalued firms can create value for shareholders if they exploit their overvaluation using their stock as currency to purchase less overvalued firms. They showed that overvalued acquirers significantly overpay for their targets and these acquisitions do not in turn lead to synergy gains.

Faccio, McConnel and Stolin (2006) conducted a study on returns to U.K. acquirers of listed and unlisted companies for the period between 1996 and 2001; they reported that for private companies' acquisitions are associated with positive returns while listed company's acquirers earned negative returns though statistically insignificant. Draper and Paudyal (2006) while looking at the returns of U.K. public and private companies found that acquirer's returns are always positive when target are privately owned and slightly negative when target are publicly traded (the so called listing effect) regardless of the country. Alexandridis, Petmezas and Travlos (2010) documented that acquirers of public firms in competitive markets such as U.S., U.K., and Canada destroys value; however, beyond competitive markets they observed that acquisition of public target creates value. Similary, Isa and Lee (2011) were reported by Isa and Lee (2011). Finally, Gulobov, Yawson and Zang (2015) document that the interaction of public and all equity financed transactions is significant and inversely related to acquirer's cumulative abnormal return.

In relation to industry relatedness of the target firm empirical studies support the conclusion that investors do not benefit from unrelated diversification with some studies suggesting that the magnitude of the conglomerate discount is usually overstated (Campa &

Simi, 2002). Most studies report that most related acquisitions are more likely to experience higher financial returns (Harding & Rovit, 2004; Singh & Montgomery, 2008). Finally, the few studies that have looked at the effect of relative deal size on M&A return report a direct relationship between the two. Moeller et al. (2004) find that stock return to the acquirer around the announcement dates increases with relative deal size. Fuller, Netter, and Stegemoller (2002) and Isa and Lee (2011) also reported that relative size or deal value is positively related with market return to M&A returns. Conversely, Bayazitova, Kahl and Valkanov (2010) found that mega mergers deal, on average, destroy value. Gulobov *et al.* (2015) reported that relative size significantly and positively related to acquirer's return for occasional and frequent acquirers; however, in the full sample, the relationship was not significant.

A major conclusion by Halfar (2011) is that short run cumulative returns from mergers and acquisitions of could be explained by factors such as firm and deal characteristics. This study noted that the extant empirical evidence on impact of deal characteristics on short run cumulative returns from mergers and acquisitions have been conducted in the developed markets, particularly the U.S. and U.K. markets, and very little research has been done in the developing markets (Moeller et al. 2005; Martynova & Rennebog, 2008; Alexandridis, Petmezas & Travos, 2010; Fu, Lin & Officer, 2013; Gulobov *et al.,*2015). Hence, it begs the question of whether their findings are equally relevant to a developing market. Therefore, the current study intends to close the existing research gap by investigating the impact of deal characteristics on short run cumulative returns from mergers and acquisitions using a sample of listed firms in Eastern Africa securities markets that have been involved in mergers and acquisitions.

Objective of the Study

To establish the impact of deal characteristics on short run cumulative abnormal returns from mergers and acquisitions of listed firms in Eastern Africa Securities Markets.

Research Hypothesis

Deal characteristics does not have significant impact on short run cumulative abnormal returns from mergers and acquisitions of listed firms in Eastern Africa Securities Markets

RESEARCH METHODOLOGY

This study employed an event study approach to determine short run cumulative abnormal returns from mergers and acquisitions of listed firms in Eastern Africa Securities

Markets. Event studies examine stock returns for corporations experiencing a specific event. The aim is to measure the effect of the event on the value of a corporation (Kothari and Warner, 2007). Studies similar to the current study that has employed the use of event study design include (Arx and Zeigler, 2008; Selcuk and Yilmaz, 2011). The event study period considered 20 days before and 20 days after the merger or acquisition activity. Date zero represented the date the activity was made for a particular firm it implied different calendar dates for different firms in the sample. The event period was considered long enough to capture the all the effect of the M&A event, albeit subjecting abnormal return estimates to more noise. Actual returns were computed for all the firms included in the sample. This was followed by estimation of the predicted returns for each day t in the event period for each firm j. In line with other studies standard event methodology was used to compute the predicted returns for the sample firms involved in mergers and acquisitions over the event window (-20, +20) around the announcement date (Golubov, Petmezas & Travos, 2012).

Abnormal returns were estimated by subtracting predicted returns from the actual returns (Golubov, Yawson and Zhang, 2015). This was followed by determining cumulative abnormal returns (CAR) for each firm. This involved cumulating abnormal return for each firm over the window period (-20, +20). Finally, to cancel out noise effect from the results average abnormal returns (AAR) was computed by averaging abnormal returns across the firms. Average abnormal returns (AAR) for each day over the entire event period (-20, +20) are then cumulated for each day over the entire event period to produce the cumulative average abnormal returns (CAAR). For each performance measure that is CAR and CAAR test statistics will be computed and compared to its assumed distribution under the null hypothesis that mean abnormal return equals zero. The null hypothesis is rejected if the test statistics exceed a critical value typically correspond to 5% or 1% tail region (Kothari & Warner, 2007). Further, the study used correlation research design determine the impact of deal characteristics on short run cumulative abnormal returns from mergers and acquisitions of listed firms in Eastern Africa Securities Markets. Correlation research design examines the relation between two or more non-manipulated variables and the theoretical model that might be developed and tested to explain the resultant correlation (Miles & Shevlin, 2010). Uysal (2011) employed correlation study design while conducting a study on M&A.

The target population for the study included all the firms listed in the security markets in the three Eastern Africa countries involved in mergers and acquisitions. The study employed multi-stage sampling technique to select the final sample (Cooper and Schindler, 2011). The initial stage involved determining the number of the listed firms involved in mergers and

acquisitions. Secondly, the M&A transactions must have occurred between year 1998 and 2015. Appendix (1) presents all the listed firms that have been involved in mergers or acquisitions for period under study. In addition, all the firms selected must have all the information regarding the operationalization of the variables. Alexandridis, Petmezas and Travos (2010) and Halfar (2011) used multi-stage sampling while studying gains from acquisitions around the world and effect of mergers and acquisition on long run financial performance of acquiring companies in South Africa respectively. The final sample included only the mergers and acquisitions made by firms listed in the security markets in the three Eastern Africa countries including Kenya, Uganda and Tanzania which acquired either a public or a private target in the same countries data for the period 1998 through 2015. Issue of confounding effect in the final sample were properly addressed (McWilliams & Siegel, 1997). The final sample comprised of thirty (30) completed publicly traded M&A in Eastern Africa acquiring either a private or a public target firm for the period between 1998 through 2015. The base year (1998) coincided with the liberalization of financial service sector in many Eastern Africa countries (Kodongo, Makoteli & Maina, 2014).

Secondary data was collected from audited annual company reports, central bank reports and publications, Capital Market Authority reports and Nairobi Securities Exchange reports. The study relied of secondary data collected using secondary data collection sheet. Most studies on effect of M&A rely secondary data (Moeller *et al.* 2005; Alexandridis *et al.* 2010). Table 1 presents the summary of how all the variables were measured. Data required for event study analysis included daily securities prices; that is, the maximum and the minimum prices for the firms involved in mergers and acquisitions and the daily index for the NSE 20 share which was used as a proxy for the market for the period under study. Short run study data was collected twenty (20) days before and 20 days after M&A announcement. Deal characteristics the independent variable was measured. The deal characteristics sub variables included payment method, type of target firm, relatedness and relative size. Payment method, target status and relatedness were measured using a numerical scale. Method of payment comprised of equity denoted by an indicator variable of one (1) and zero (0) if the method of payment used comprised all cash. In case a listed firm acquired a listed (public) firm, an indicator value of one (1) was used and if the acquired firm was unlisted (private) an indicator value of zero (0) was used. Relative deal size was measured by the deal value divided by the bidding firm's equity days prior to the announcement. Relatedness was qualitative in nature; diversifying transaction was denoted by an indicator value one (1) while related transaction was denoted by an indicator of zero (0).

Table 1 Summary of the Measurement of the Study Variables

Study variable	Data type	Measurement
Payment method	Qualitative Nominal scale	Indicator variable is one (1) if the payment is comprised equity and zero (0) if the method of payment is all cash.
Type of firm acquired (target status)	Qualitative (Nominal scale)	Indicator variable is one (1) if the target is a public (listed) target and zero (0) when the target firm acquired private (unlisted) firm.
Relatedness/ Focus	Qualitative (Nominal scale)	Indicator variable is one (1) if the bidder firm and target firm are operating in different industry and an indicator variable of zero (0) for related transactions.
Relative deal size	Quantitative	Deal value divided by the market value of the bidding firm equity prior to the announcement of M&A.
Short run cumulative abnormal return	Quantitative	Daily securities for firms selected, Daily NSE 20 Share index.

Source: (Gulobov,Yawson & Zhang, 2015; Fu, Lin & Officer, 2013; Alexandridis, Petmezas & Travos, 2010; Moeller, Schlingemann & Stulz, 2005)

Descriptive statistics such as measures of central tendency; mean, mode and measure of variation; standard deviation were generated. Presentation was done using tables and interpretation done accordingly. Before subjecting data to inferential analysis, necessary diagnostic tests were carried out. The quantitative predictor variable that is deal value was tested for linearity test. The study also checked normality of the dependent variable using Kolmogorov-Smirnov (K-S) and Shapiro-Wilk tests (Shapiro and Wilk 1965; Shevlin and Miles, 2010). Data was then subjected to inferential analysis. To determine the impact of deal characteristics on short run cumulative abnormal returns from mergers and acquisitions of listed firms in Eastern Africa Securities Markets multivariate regression analysis was carried out. The model specification that guided the study is stated as follows in equation one (1).

$$Y_t = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_t \quad (1)$$

Where:

Y_t represents short run cumulative returns from mergers and acquisitions at time *t*

X_1 is a measure of the method of payment?

X_2 represents target status.

X_3 is a measure of relatedness of the merger or acquisition.

X_4 is a measure of deal value of the merger or acquisition.

α is the model intercept

β_1, β_2, β_3,β_4, are the beta coefficients for the method of payment, target status, relatedness and deal value respectively.

$\varepsilon_{i,t}$ is the error term of the model.

RESULT AND DISCUSSIONS

Descriptive results

Data for audited annual financial reports and deal characteristics concerning M&A was provided by Capital Markets Authority while daily security prices and market index data were obtained from Nairobi Securities Exchange. Deal characteristics variables that were in nominal scale were analyzed using frequencies and percentages and summarized in Table 2 below. These variables included method of payment, target status and relatedness. 66.7% of the companies which exercised M&A used cash as a method of payment to acquire their target company while the 33.3% used stock option. Results on target status shows that of the total firms involved in M&A, 76.7% acquired private companies while 23.3% targeted public limited companies. This supported the school of thought that private companies have good prospects for growth hence highly targeted for M&As. The last deal characteristic in nominal scale was relatedness. This investigated whether M&A transaction was fully diversified or related. Study results shows that 73.3% of completed M&A activities were related; that is the acquirer and target firm were in the same sector while 26.7% of M&A that were completed successfully were unrelated/diversified.

Table 2 Descriptive Statistics for Deal Characteristics

Deal characteristics	Construct	Frequency	Percent
Method of Payment	Cash	20	66.7
	Share swap	10	33.3
	Total	30	100
Type of target firm	Private	23	76.7
	Public	7	23.3
	Total	30	100
Relatedness	Relatedness	22	73.3
	Diversification	8	26.7
	Total	30	100

Further the study compared short run cumulative abnormal returns for different holding periods in relation to the deal characteristics in nominal scale. Results in Table 3 shows that

M&A firms using cash payment had an average return of 2% in the event periods [-1, +1] and [-10, +10]; while [-20, +20] and [-5, +5] window period had an average return of 4%. The highest standard deviation was achieved in the event period [-5, + 5], in addition a minimum of -15% and maximum of 65% was recorded in the same window period. Among the companies which paid using share swap, the highest return registered was within [-20, +20] event window period. Within the period ranging between [-5, +5] the minimum return was -0.48 and the maximum return was 0.17. Our findings indicate that share offers are associated with positive returns. This is consistent with Alexandridis *et al*. (2010) who found that equity offers are at least non-value destroying beyond competitive markets such as Canada, U.S and U.K.

Table 3 Method of Payment Short Run Stock Return Comparative Analysis

Method/Payment	Return	Minimum	Maximum	Mean	Std. Deviation
Cash	CAR -1, +1	-0.06	0.09	0.02	0.05
	CAR -20, +20	-0.12	0.27	0.04	0.10
	CAR -10, +10	-0.11	0.13	0.02	0.06
	CAR -5, +5	-0.15	0.65	0.04	0.17
	CAR -2,+2	-0.09	0.10	0.01	0.05
Share swap	CAR -1, +1	-0.08	0.11	0.01	0.06
	CAR -20, +20	-0.05	0.85	0.10	0.27
	CAR -10, +10	-0.03	0.08	0.02	0.03
	CAR -5, +5	-0.48	0.17	0.00	0.17
	CAR -2,+2	-0.11	0.13	0.02	0.07

Table 4 presents the comparative analysis between short run cumulative abnormal returns for various sub windows and target status. It was observed that acquisition of public targets resulted in an average loss of 0.01 while private target acquisition generated 3% positive return during the event period [-5, +5]. The average short run cumulative abnormal returns for the two (2) days that is, [-1, +1] event window was 2% for private targets and 1% for public targets acquisitions. Surprisingly, it was observed that for the entire event window period [-20, +20], both private and public targets acquisitions had average returns of 6%, though returns differed more among the private companies. These results concur with the empirical evidence that shows acquisition of private firms generates positive returns (Draper & Payday, 2006). To some extent we agree with the findings of Alexandridis et al. (2010) who documented that acquisition of public firms beyond competitive markets do not destroy value. This is supported by positive cumulative abnormal returns in three different holding periods; [1, +1], [-20, +20] and [-10, +10].

Table 4 Target Status Short Run Stock Return Comparative Analysis

Target status	Return	Minimum	Maximum	Mean	Std. Deviation
Private	CAR -1, +1	-0.08	0.11	0.02	0.05
	CAR -20, +20	-0.12	0.85	0.06	0.19
	CAR -10, +10	-0.11	0.13	0.03	0.05
	CAR -5, +5	-0.48	0.65	0.03	0.19
	CAR -2,+2	-0.11	0.13	0.02	0.06
Public	CAR -1, +1	-0.06	0.08	0.01	0.06
	CAR -20, +20	-0.06	0.27	0.06	0.11
	CAR -10, +10	-0.04	0.10	0.02	0.05
	CAR -5, +5	-0.08	0.05	-0.01	0.05
	CAR -2,+2	-0.09	0.07	0.00	0.06

Finally, to examine benefits associated with portfolio diversification principle, we performed a comparative analysis between short run cumulative abnormal returns for various sub windows and diversification or relatedness (Table 5). On average it was observed that conglomerate M&A resulted in an average loss of 1% and 0% returns for the windows period [-2, +2] and [-1, +1] respectively, this is compared to an average return of 2% each for related acquisition during the same holding period. The highest deviation of 19% was recorded in the window period [-20, +20] within firms that acquired or merged with firms in the same sector or industry. Diversified M&A transactions recorded a standard deviation of 24% in the event period [-2, +2]. The findings suggest that M&A firms do not benefit from diversified acquisitions. These findings concur with documented empirical evidence (Megginson, Morgan and Nail, 2004).

Table 5 Relatedness Short Run Stock Return Comparative Analysis

Relatedness	Return	Minimum	Maximum	Mean	Std. Deviation
Focus	CAR -1, +1	-0.08	0.11	0.02	0.05
	CAR -20, +20	-0.12	0.85	0.06	0.19
	CAR -10, +10	-0.11	0.13	0.03	0.06
	CAR -5, +5	-0.48	0.17	0.01	0.13
	CAR -2,+2	-0.11	0.13	0.02	0.06
Diversification	CAR -1, +1	-0.06	0.07	0.00	0.04
	CAR -20, +20	-0.06	0.27	0.07	0.13
	CAR -10, +10	-0.02	0.03	0.01	0.02
	CAR -5, +5	-0.09	0.65	0.06	0.24
	CAR -2,+2	-0.09	0.06	-0.01	0.06

Diagnostic Tests

Normality Test for the Dependent Variable

Kolmogorov Smirnova (K-S) test and Shapiro Wilk (1965) were employed to check for normality in the data. Both test the null hypothesis that the data is normally distributed against an alternative which assumes that the data is not normally distributed. Using the p-value, we ought to reject the null hypothesis if the p value is less than 0.05 and accept it if otherwise (Porter & Gujarat, 2009). The results in Table 6 reveal that the normality test statistics computed for CAR (-1, +1) were insignificant. The p value when using the Kolmogorov Smirnova (K-S) test is 0.2 while Shapiro Wilk p value 0.67 both of which are greater than 0.05. This indicated that the dependent variable was normally distributed (Shapiro & Wilk, 1965; Park: Shevlin & Miles, 2010).

Table 6 KolmogorovSmirnova (K-S) and Shapiro Wilk Normality test for the Dependent Variable

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
CAR -1, +1	0.093	30	0.200*	0.975	30	0.676

a. Lilliefors Significance Correction *. This is a lower bound of the true significance

Linearity Test

Deal value was subjected to linearity test. Figure 1 depicts a direct relationship between deal value and short run cumulative abnormal returns. Moreover, 13.6 % of the variation in short run cumulative abnormal returns from mergers and acquisition can be accounted for by deal value.\

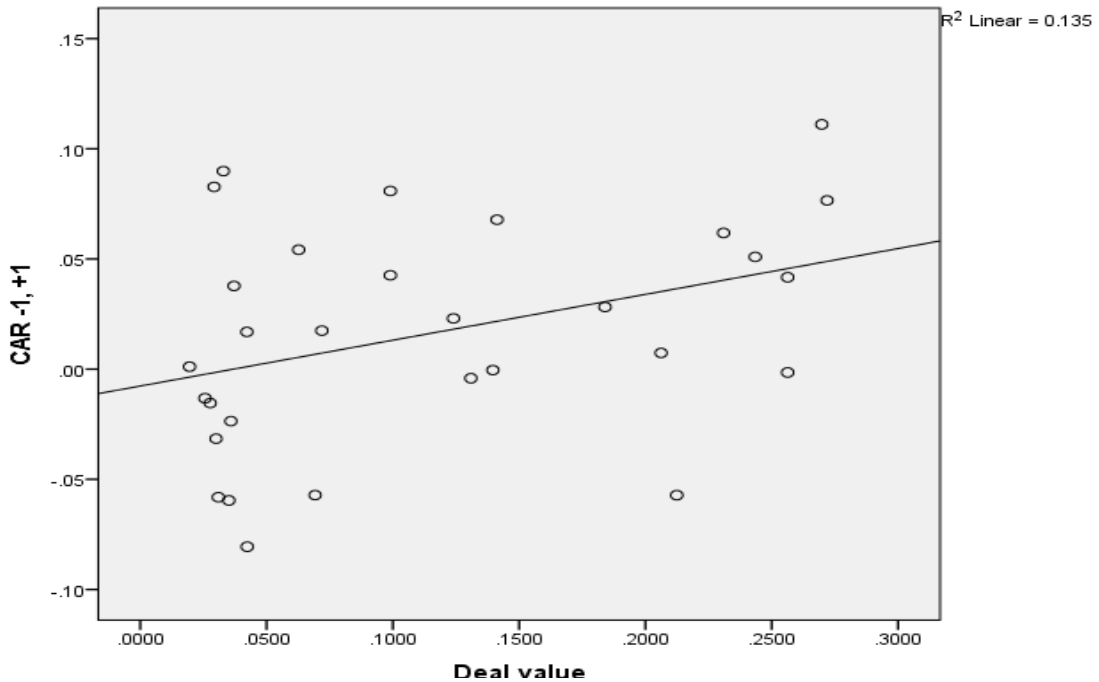

Figure 1 Linearity Test Result

Inferential Analysis

Model Summary

Table 7 shows the model summary for the effect of deal characteristics namely deal value, method of payment, target status and relatedness on short run cumulative abnormal returns from mergers and acquisitions. The results show that 63.4% of the variation in short run cumulative abnormal returns from mergers and acquisitions can be accounted for by deal characteristics namely deal value, method of payment, target status and relatedness jointly while the remaining percentage can be explained for by other factors excluded in the model.

Table 7 Model Summary for the Impact of Deal Characteristics on Short Run Cumulative Abnormal Returns from Mergers and Acquisitions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.797a	0.634	0.561	0.03279	2.14

a. Predictors: (Constant), Method of payment, Target status, Deal value, Relatedness.
b. Dependent Variable: CAR -1, +1

ANOVA Results

Table 8 presents the analysis of variance results for the hypothesized relationship between deal characteristics and short run cumulative abnormal returns from mergers and acquisitions**.** The results show that the regression relationship is significant; F statistic of 8.677 is statistically significant at 5%, the p-value is 0.000, indicating that the model was a good fit. In addition, the results indicate that the overall model is significant in predicting M&A short run cumulative abnormal returns in firms listed in Eastern Africa securities market. This means that the null hypothesis was rejected; hence the conclusion was made that deal characteristics; that is, method of payment, target status, deal value and relatedness jointly had a significant effect on short run cumulative abnormal returns from mergers and acquisitions on firms listed in Eastern Africa securities markets.

Table 8 ANOVA for the Effect of Deal Characteristics on Short Run Cumulative Abnormal Returns from Mergers and Acquisitions

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.037	4	0.009	8.677	0.000[b]
	Residual	0.022	20	0.001		
	Total	0.059	24			

a. Dependent Variable: CAR -1, +1
b. Predictors: (Constant), Method of payment, Target status, Deal value, Relatedness

Coefficients for The Regression

Table 9 presents regression model coefficients for the combined effect of deal characteristics; that is, deal value, method of payment, target status and relatedness on short run cumulative abnormal returns from mergers and acquisitions. The findings show that coefficient for the constant ∝ was 0.002 and it is statistically insignificant; p-value equals to 0.903 which is greater than 0.05. Further the result shows that the beta coefficients for method of payment, target status and deal value were significant in explaining on short run cumulative abnormal returns from mergers and acquisitions. However, relatedness was insignificant in explaining M&A announcements returns in the short run in listed firms in the Eastern Africa securities markets. Since there were two modes of payment, a dummy variable was created where cash was denoted as 0 while share swap was 1. The findings of the study showed that $\mathrm{CAR}-1,+1=0.02-0.041\,(X)$ where *x* represents method of payment with a qualitative attribute; one (1) when payment was made through share offer and zero (0) for cash offer. There was a negative and significant relationship between share swap and CAR (β = -0.039, p-value >0.05). Moreover, there was a positive and significant relationship between cash payment and CAR (β = 0.02, p-value >0.05). Further, a beta value of -0.041 implies that a unit increase in method of payment on short run cumulative abnormal returns by -0.041 units.

Secondly, there was a positive and highly significant relationship between deal value and short run cumulative abnormal returns in (β = 0.425, p-value <0.05). Moreover, a beta value of 0.425 implies that a unit change in deal value increased short run cumulative abnormal returns by 0.0.425 units. Thirdly, target status was either private or public; a dummy variable was created such that zero (0) denoted private target and one (1) denoted public target firm acquired. The results of the study showed that $\mathrm{CAR}-1,+1=0.02-0.044\,(X)$ where *x* represents target status with a qualitative attribute; one (1) when a listed firm acquired a listed (public) firm and zero (0) when a listed firm acquired an unlisted (private) firm.

Results of the study revealed that there was negative and significant relationship between public target short run cumulative abnormal returns (β = -0.042, p-value <0.05). Further, the beta value of -0.042 implies that a unit change in public company target decreased the company short run cumulative abnormal returns by 0.042 units. In contrast, there was a positive and significant relationship between private company target company and CAR (β = 0.02, p-value <0.05). Further, the beta value of 0.02 implies that a unit change in private company target increased M&A announcements returns in the short run by 0.02 units. Finally, to study diversification effect, a dummy variable was created where a diversifying transaction was denoted as one (1) while a related transaction was denoted as zero (0). The results of the study showed that $\mathrm{CAR}-1,+1=0.02-0.022\,(X)$where *x* represents target status with a qualitative

attribute; one (1) when a firm acquired another firm that operated outside its core business (diversification) and zero (0) when a listed firm acquired a firm that is within its core business of operation (relatedness). The results showed that a diversifying transaction had a negative insignificant impact on short run cumulative abnormal returns (β= -0.020, p value >0.05). Relatedness had a positive and insignificant impact on short run cumulative abnormal returns, (β= 0.02, p-value =0.205). In summary, the study findings indicate that short run cumulative abnormal returns are significantly explained by the method of payment, target status, and deal value; however, diversifying/relatedness is insignificant in explaining short run cumulative abnormal returns from mergers and acquisitions on firms listed in Eastern Africa securities markets.

Table 9 Regression Coefficients for the Effect of Deal Characteristics on Short Run Cumulative Abnormal Returns from Mergers and Acquisitions of Firms Listed in Eastern Africa Securities Markets

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.002	0.015		0.123	0.903		
	Method /Payment	-0.041	0.017	-0.397	-2.436	0.024	0.72	1.39
	Target status	-0.044	0.017	-0.384	-2.530	0.020	0.90	1.10
	Deal value	0.425	0.081	0.743	5.248	0.000	0.77	1.29
	Relatedness	-0.022	0.016	-0.200	-1.310	0.205	0.81	1.24

a. Dependent Variable: CAR -1, +1

With the study findings observed null hypothesis was rejected and a conclusion reached deal characteristics namely method of payment, deal value and target status had a significant effect on short run cumulative abnormal returns from mergers and acquisition of listed firms in Eastern Africa securities markets. On the other hand, null hypothesis that relatedness/ diversification significantly explained short run cumulative abnormal returns from mergers and acquisitions could not be rejected. On average, results for impact of deal characteristics on short run cumulative abnormal returns from mergers and acquisition are in agreement with theories and existing empirical studies. Existing empirical evidence shows that deal value is positively related to short run cumulative abnormal returns from mergers and acquisition returns in the overall analysis (Jensen & Ruback, 1983; Fuller *et al.* 2002; Moeller *et al*. 2004; Isa & Lee, 2011). Therefore, the findings of this study are in agreement with existing studies.

With regard to the method of payment, our results are in agreement with the existing hypothesis and documented empirical literature. Research evidence shows that on average M&A transactions that use cash as a method of payment yield positive returns while those that exchange their stock experience losses (Martynova & Renneboog, 2008; Alexandridis, Petmezas and Travlos, 2010; Fu, Lin and Officer, 2013). The finding of this study concur with the existing empirical literature and theoretical foundations of the Signaling Model of Leland and Pyle (1977) and Myers and Majluf (1984). The findings on the impact of target status on short run cumulative abnormal returns from mergers and acquisition show that the acquisitions of public firms destroy shareholders' wealth while private firm acquisition generates shareholders' wealth in the short run. These results are in tandem with the existing empirical literature (Conn, Cost, Guest, and Hughes 2005; Facio *et al.* 2006; Draper & Paudyal, 2006; Officer, 2007).

Alexandridis, Petmezas and Travlos (2010) documented that acquirers of public firms in competitive markets like U.S., U.K., and Canada destroy value but beyond competitive markets, public target creates value. Similarly, Isa and Lee (2011) documented that public acquisitions generate greater abnormal returns than private firm acquisitions. Though their study findings did not support proven hypothesis, they did not discount the Liquidity Hypothesis and Management Motive Hypothesis in the Malaysian context. Contrary to their findings, this study provide evidence that in an emerging market context that mergers and acquisitions of private firms generate wealth for shareholders in the short run. Finally, we find that diversification or relatedness had an insignificant impact on short run cumulative abnormal returns from mergers and acquisition in the Eastern Africa context. The results are consistent with the findings of Triki & Chun (2011). To some extent, though insignificant, the findings are in line with the suggestions of Erdorf, Hartmann-Wendels, Heinrichs and Martz (2013) that indicated that related transactions outperform unrelated /diversified firm. Moreover, Doukas and Kan (2006) state that on average, global diversification results in 18% average shareholders' loss.

SUMMARY AND CONCLUSION

The objective of the study was to investigate the impact of deal characteristics on short run cumulative abnormal returns from mergers and acquisitions of listed firms in Eastern Africa securities markets. The variable had four constructs; namely, method of payment, target status, deal value and transaction relatedness. The analysis was carried out in the short run period. The analysis results indicated that both method of payment and target status and had a negative and significant effect on short run cumulative abnormal returns from mergers and acquisition for firms listed in Eastern Africa securities markets. A positive and significant impact was reported between deal value and short run cumulative abnormal returns from mergers and

acquisition in firms listed in Eastern Africa securities markets. Finally, relatedness/ diversification had an insignificant effect on short run cumulative abnormal returns from mergers and acquisition of listed firms in Eastern Africa securities markets.

The study concludes that deal characteristics such as payment method, target status, deal value and relatedness play an important role in explaining short run cumulative abnormal returns from mergers and acquisition of listed firms in Eastern Africa securities markets. This study document that acquisitions of private firms are associated with positive short run cumulative abnormal returns while public company acquisitions are associated with negative short run cumulative abnormal returns from mergers and acquisitions. This is explained by the Liquidity and Managerial Motive Hypothesis. Further the analysis concluded that relative size of the deal value increases short run cumulative abnormal returns; thus large deal value translates to high short run cumulative abnormal returns from mergers and acquisitions. In addition, the study concluded that cash offers are associated with positive short run cumulative abnormal returns while equity offers are associated with negative short run cumulative abnormal returns, which is explained by the fact that the method of payment acts as a signaling device about the acquiring firm's stocks value. Finally, the study concludes that unrelated transactions are wealth destroying; surprisingly, the evidence contradicts diversification principle.

RECOMMENDATIONS

This study acknowledges that short run cumulative abnormal returns are influenced by the method of payment and target status. The study therefore recommends that firms should endevour to use cash offers as the method of payment when engaging in M&A due to Signalling Hypothesis. In addition, when making M&A decisions, firms should endevour to acquire private (unlisted) firms as opposed to public (listed) firms as explained by Liquidity Hypothesis. Evidence shows that listed firms in Eastern Africa securities markets do not benefit from unrelated acquisitions thus discounting the diversification principle. The study therefore recommend that when making M&A investment decisions conglomerate M&A activities should be avoided in the region.

SUGGESTIONS FOR FURTHER RESEARCH

The current study computed shortrun cumulative abnormal return using market model. It was observed that the dependent variable is highly influenced a model. Future studies should consider using two or more models when computing shot run cumulative abnormal return from mergers and acquisitions for a comparative analysis. This however should not belittle the findings of this study. This study considered listed firms in Eastern Africa securities markets

involved in M&A activities. This represented M&A activities in emerging markets therefore providing an out-of-sample data. In total, 30 M&A firms were studied; these could be considered few and hence less representative in wider jurisdictions. The choice of this geographical scope was informed by budgetary constraints facing the researcher. As a result, the applicability of the study's findings should be limited due to the small sample size. A broader study could be conducted across a larger region, such as Sub-Saharan Africa or the entire continent, to minimize potential sampling bias that may have influenced this research.

REFERENCES

Alexandridis, G., Petmezas, D., & Travos, G. (2010). Gains from mergers and acquisitions around the world: New evidence. *Financial Management Journal,* 39 (4), 1671-169.

Bayazitova, D., Kahl, M., & Valkanov, R. (2010). *Which mergers destroy value? Only mega mergers*. (Working Paper).

Campa, J., & Simi, K. (2002). Explaining the diversification discount. *Journal of Finance, 57*, 135-160.

Conn, R. L., Cost, A., Guest, P. M., & Hughes, A. (2005). Why must all good things come to an End? The performance of multiple acquirers. Working paper, University of Cambridge. Retrieved from http://ssrn.com/abstract=499310

Cooper, R. D., & Schindler, P. S. (2011). *Business Research Methods* (11th ed.). New York, United States: McGrawHill Publications.

DePamphilis, D. M. (2010). *Mergers, Acquisitions and other Restructuring Activities: A Integrated Approach*. Burlington: Elsevier.

Dong, M., Hirshleifer, D., Richardson, S., & Teoh, S. (2006). Does investor misvaluation drive the takeover market? *Journal of Finance, 61*, 725-762.

Doukas, A. J. & Kan B.O. (2006). Does global diversification affect firm value. *Journal of International Business Research Studies, 37 (3*) 352- 371.

Draper, P., & Paudyal, K. (2006). Acquisitions: Private versus Public. *European Financial Management, 12*, 57-80.

Erdorf, S., Hartmann-Wendels, T., Heinrichs, N., & Matz, M. (2013). Corporate diversification and firm value: a survey of recent literature. *Financial Markets and Portfolio Management*, *27(2),* 187-215.

Eurelich M., Kopp R., and Fligge B., (2022) Mergers and acquisitions research, A bibliometric analysis. *Elsevier, 40 (6)* 832- 846.

Faccio, M., McConnell, J. J., & Stolin, D. (2006). Returns to acquirers of listed and unlisted targets. *Journal of Financial and Quantitative Analysis, 41,* 197-220.

Fu, F., Lin, L., & Officer, M. S. (2013). Acquisition driven by stock overvaluation: Are they deals? *Journal of financial economics (forthcoming).* Retrieved from: http//dx.doi.org/10.1016/j.jfineco.2013.02.013.

Fuller, K., Netter, J., & Stegemoller, M. (2002). What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions. *Journal of Finance, 57*, 1763 - 1793.

Golubov, A., Petmezas, D., & Travlos, N. G. (2012). When it pays to pay your investment banker: New evidence on the role of financial advisors in M&As. *Journal of Finance,67*, 271–312.

Gulubov, A., Yawson, A., & Zang, H. (2015). Extra ordinary acquirers. *Journal of Financial Economics, 116,* 314-330.

Halfar, D. (2011). *The effect of mergers and acquisitions on long-run financial performance of acquiring companies.* (Unpublished MBA Research Project). Gordon Institute of Business Science, University of Pretoria, South Africa.

Harding, D., & Rovit, S. (2004). Mastering the mergers: Four critical decisions that make or break. Harvard Business School Press.

Isa, M., & Lee, S. (2011). Method of payment and target status: Announcement return to acquiring firm in the Malaysian market. *International Journal of Economics and Finance, 3(3),* 177-189.

Jensen, M., & Ruback, R. S. (1983). The market for corporate control. The scientific evidence. *Journal of Financial Economics, 11,* 5-53.

Kariuki, Muturi and Ndung'u, 2016. Firm Characteristics and Stock Market Return to Mergers and Acquisitions Announcements in Emerging Markets. Evidence from Mergers and acquisitions Firms Listedin Eastern Africa Securities Markets. *International journal of economic commerce and management, 4(12),* 200-216.

Kothari, S. P. & Warner, J. B. (2007). *Econometrics of Event Studies*: *Handbook of Corporate Finance*, eds. B. Espen Eckbo, Elsevier-North-Holland, Amsterdam.

Leland, H., & Pyle, D. (1977). Informational asymmetries, financial structure, and financial Intermediation. *Journal of Finance, 32(2),* 371-387.

Martynova, M. & Renneboog, L. (2006). The Long-term Operating Performance of European Mergers and Acquisitions: Evidence from 5th takeover wave. Working paper No. 135/2006. *Tilburg University and European Corporate Governance Institute (ECGI.)*

Martynova, M., & Renneboog, L. (2008). A century of corporate Takeovers: What have we learned and where do we stand? *Journal of Banking and Finance, 32(10),* 2148–2177.

Mcwilliams, A., and Siegel, D. (1997). Event studies in management research. Theoretical and empirical issues. *Academy of Journal Management, 40(3),* 626-657.

Megginson, W. L., Morgan, A., & Nail, L. (2004). The determinants of positive long-term performance in strategic mergers; Corporate focus and cash. *Journal of Banking and Finance, 28*(3), 523-552.

Miles, J., & Shevlin, M. (2010). *Applying Regression and Correlation. A Guide for Students and Researchers.* New Delhi: Sage Publication Inc.

Moeller, S. B., Schingemann, F. P., & Stulz, R. M. (2004). Firm size and gains from the acquisitions. *Journal of Financial Economics, 73*, 201-228.

Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2005). Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *Journal of Finance, 60*, 757-782.

Myers, S., & Majluf, N. (1984). Corporate financing and investment decisions when firms have information investors do not have. *Journal of Financial Economics, 87*, 355-374.

Officer, M. S. (2007). The price of corporate liquidity acquisition: Discount for unlisted targets. *Journal Financial Economics, 83,* 571-598.

Purina, N., (2017). Overvaluation theory and the wave effect in the 1990s us merger wave. *Journal of Business Management, 14*, 27-43.

Rhodes-Kropf, M., & Viswanathan, S. (2004). Market valuation and merger waves. *Journal of Finance, 59* (6), 2685-2718.

Rosinki, P. (2011) Global Coaching for Organizational Development. *International Journal of Coaching in Organizations,8*(2), 49-66.

Selcuk, A., & Yilmaz, A. (2011). The Impact of Acquisitions on Acquirer Performance: Evidence from Turkey. *Business and Economics Journal, 22*, 1-7.

Shapiro, S., & Wilk, M. (1965). Analysis of variance test of normality. *Biometrica, 52*(3), 591-599.

Singh, H., & Montgomery, C. (2008). Corporate acquisition strategies and economic performance. *Strategic Journal, 8*, 377-386.

Shleifer, A., Vishny, R., (2003). Stock market driven acquisitions. *Journal of Financial Economics, 70*, 295–311.

Triki, T., & Chun, O. (2011). Does good governance create value for international acquirers Africa? Evidence from US acquisitions. *Working Paper No. 143. D*evelopment research department, African Development Bank Group. http:/www.afdb.org/.

Trompenaar, F., & Asser, M. N. (2010). The Global M&A Tango, how to reconcile cultural differences in mergers, acquisitions and strategic partnerships. Oxford: Infinite Ideas Limited.

Uysal, V. B. (2011). Deviation from the target capital structure and acquisition choices. *Journal of Financial Economics, 102* (3), 602–620.

APPENDICES

Appendix 1 Study Population

a) Listed Financial and Non Financial Institutions involved in Mergers

S/no.	Institution	Merged with	Current name	Date
1	Stanbic Bank (K) Ltd	Stanbic Finance (K) Ltd	Stanbic Bank of Kenya Ltd	1996
2	National Industrial Credit Bank Ltd	African Mercantile Bank Corp	NIC Bank	1997
3	Standard Chartered Bank of Kenya	Standard Chartered Financial Services	Standard Chartered Bank of Kenya	1999
4	Diamond Trust Bank (K) ltd	Premier Saving and Finance ltd	Diamond Trust (K) Bank	1999
5	Barclays Bank of Kenya Ltd	Barclays Merchant Finance Ltd	Barclays Bank of Kenya Ltd	1999
6	Kenya Commercial Bank	Kenya Commercial Finance Co	Kenya Commercial Bank Ltd	1999
7	Cooperative Bank Ltd	Cooperative Merchant Bank Ltd	Cooperative Bank of Kenya	2002
8	CFC Bank Ltd	Stanbic Bank Ltd	CFC Stanbic Bank Ltd	2008
9	Saving and Loan (K) Ltd	Kenya Commercial Bank Ltd	Kenya Commercial Bank Ltd	2010
10	Biashara Bank Ltd	Investment & Mortgage Bank Ltd	I&M Ltd	2002
11	Pan African Insurance	Apollo Insurance Co Ltd	APA Insurance	2003
12	Kobil Kenya	Kenya Oil	Kenol Kobin	2014
13	Safaricom Ltd	Essar Telecommunication	Safaricom ltd	2014

Source: Competition Authority of Kenya, 2015; Central Bank of Kenya 2015

b) Listed Financial and Non Financial Institutions Acquisition Firms in Eastern Africa Securities Market

S/n	Acquisition Companies	Year
14	Kenya oil Acquisition of kobil oil	2007
15	Acquisition of Uganda Telecom by Lap Green company	2006
16	Equity Bank of Kenya Acquires Housing Finance	2007
17	Equity Bank of Kenya Acquires Microfinance Institution (MFI) of Uganda	2008
18	Safaricom Kenya Acquires One Com (Kenya IT Firm).	2008
19	Total Kenya acquistion of Chevron Kenya	2009
20	East African Breweries Acquistion of Serengeti Breweris of Tanzania	2010
21	East African Breweries Acquisition of Kenya Breweries	2011
22	TPS Serena group of Hotels acquires Hotel Movenpick Dareesalam	2012
23	Acquistion of Crown Berger (Crown Paint Kenya Acquisition of Crown Paint Tanzania)	2012

24	Tps Eastern Africa (Serena) Acquistion of TPS Uganda	2012
25	I&M Bank Acquisition by City Trust	2012
26	Pan African Insurance Acquisition by Hubris Holding Ltd	2012
27	Centum Inestment acquisition of Genesis Kenya Investment Management	2013
28	Scan group and Cavendish Squareholdings	2013
29	Acquisition of Getaway Insurance Company by Pan Africa Insurance Holding ltd	2014
30	Britam Acquisition of Real Insurance	2014
31	British American Investment (Britam) Kenya Acquisition of Housing Finance	2014
32	Acquistion of Phoenix Uganda by Kenol Kobil	2014
33	Barclays Bank acquires First Assurance Company	2015
34	Equity Investment Bank acquires 250,000 of Thuo and Partners Brokerage Firm	2013
35	Standard Chartered private Equity (SCPE) and ETC group.	2013
36	I&M Bank Acquisition of Giro Bank	2015
37	Equity Bank of Kenya Acquires Pro-credit Bank of Congo	2015
38	Unga Group Ltd Acquisition of Enns Valley Bakery Ltd	2014

Source: Competition Authority of Kenya, 2015; Central Bank of Kenya 2015

Appendix 2 Cumulative Abnormal Returns for Different Holding Periods in the Short run

S/N	Company Code	CAR -20, +20	CAR -10, +10	CAR -5, +5	CAR -2,+2	CAR -1, +1
1	C01	0.074	0.071	0.047	0.078	0.023
2	C02	0.018	-0.010	0.024	0.031	-0.004
3	C03	0.020	0.017	0.010	0.047	-0.001
4	C04	0.853	0.395	0.169	0.036	0.111
5	C05	0.009	0.029	0.076	0.019	0.083
6	C06	0.045	0.076	0.049	0.043	0.043
7	C07	0.208	0.325	0.158	0.104	0.081
8	C08	0.130	0.010	0.016	-0.091	-0.058
9	C09	-0.049	-0.914	-0.475	-0.872	-0.482
10	C10	-0.027	0.102	-0.059	0.045	0.077
11	C11	-0.050	-0.020	-0.091	-0.022	-0.024
12	C12	0.039	0.071	-0.079	-0.032	-0.015
13	C13	0.025	-0.028	0.009	0.065	0.0618
14	C14	0.045	0.076	0.077	0.028	0.028
15	C15	-0.116	-0.109	-0.155	-0.012	0.090
16	C16	0.024	-0.042	0.035	-0.043	-0.060
17	C17	0.021	0.007	0.044	0.134	-0.057
18	C18	-0.038	0.006	-0.023	-0.107	-0.057
19	C19	-0.010	-0.016	-0.017	0.021	0.017
20	C20	0.010	0.021	0.0158	0.017	-0.013

21	C21	0.034	-0.051	-0.030	0.027	0.017
22	C22	0.011	-0.028	0.037	0.0041	0.001
23	C23	0.050	-0.008	-0.042	0.003	0.038
24	C24	0.016	-0.004	-0.081	-0.089	0.068
25	C25	-0.053	0.132	0.152	-0.020	0.054
26	C26	0.013	0.070	0.060	-0.002	0.007
27	C27	-0.062	0.028	-0.028	0.008	-0.001
28	C28	0.270	-0.558	0.048	0.057	0.042
29	C29	0.233	2.116	0.650	1.605	-0.032
30	C30	0.050	0.051	0.087	0.054	0.051