

# **FIRM CHARACTERISTICS AND STOCK MARKET RETURN FROM MERGERS AND ACQUISITIONS ANNOUNCEMENTS AMONG FIRMS LISTED IN EASTERN AFRICA SECURITIES MARKETS**

**Beth W. Kariuki** 

Department of Economics, Accounting and Finance, School of Business,  
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

[bethkariuki05@gmail.com](mailto:bethkariuki05@gmail.com)

**Willy M. Muturi**

Department of Economics, Accounting and Finance, School of Business,  
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

[mmuturi2001@gmail.com](mailto:mmuturi2001@gmail.com)

**David N. Kiragu**

Department of Accounting and Finance, School of Business Management and Economics,  
Dedan Kimathi University of Technology, Nyeri, Kenya

[drkiragu@gmail.com](mailto:drkiragu@gmail.com)

## **Abstract**

*In this paper, we investigate whether motives behind Mergers and Acquisitions explains short run cross sectional return in emerging markets. We use 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. The study was guided by the Hubris theory, Free Cash Flow hypothesis and overvaluation Theory. Event study approach was employed to compute cumulative abnormal return. The predictors were tested for linearity using graphical analysis, multicollinearity using Variance Inflation Factors (VIF), independence using Durbin Watson d Statistics and the response variable for normality using Kolmogorov- Smirnova and Shapiro Wilk Labda statistics. Further, the model residuals were tested for homogeneity using Breusch-Pagan Chi- test. Using cross sectional regression analysis, we find a significant positive*

*relationship between firm size and both Cumulative Abnormal Return (CAR) and Tobin Q, our proxy for firm value. In line with other studies, we document a negative association between free cash flow and cumulative abnormal return supporting the free cash flow hypothesis. In this respect our findings suggest that firm size, Tobin Q and free cash flow significantly explains cumulative abnormal returns in the short run among firms in Eastern Africa Securities Markets.*

*Keywords: Mergers and Acquisitions, Cumulative Abnormal Return, firm size, Tobin Q, Free Cash Flows*

## **INTRODUCTION**

In light of the challenging economic conditions and the dynamic business environment, corporations must re-position themselves in the market accordingly in order to remain competitive. As a consequence, many firms are resulting to corporate restructuring strategies with Mergers and Acquisitions (M&As) transactions accounting for the biggest percentage world over. UNCTAD (2014) report show that global M&A increased by 58% to a value of US\$1600 trillion. During the same period, Africa recorded a high value of US\$ 58 trillion in M&A activities. The reported statistics depict that companies will continue engaging in M&A investment decisions amidst the fluctuating and erratic market conditions. Interestingly and most importantly, a new trend is emerging; there is a growing demand of increased shareholder scrutiny on post M&A performance. The overall agenda of the shareholder is to either maintain or even grow shareholder value. Shareholder scrutiny is therefore a critical factor in filtering valuable future M&A activities in a corporation of interest (KPMG, 2010). The last decade witnessed a rising shareholders scrutiny during M&A process. However, as to whether these efforts translate into improved shareholders' wealth is both a fundamental and controversial issue that has sparked heated debate in academia (Liu & Wang, 2013).

Researchers over the years have advanced several theories in an attempt to justify the occurrence of M&A in firms. However, among the many theories of M&A activities, three theories appear to be relevant for this study. They include: Hubris Hypothesis, Free Cash Theory and Overvaluation hypothesis. Hubris hypothesis of Roll (1986) implies that manager's look for acquisition firms for their own potential motives and that the economic gains are not the only motivation for an acquisition. As a result of hubrian Hypothesis, managers believe that their own valuation of a target company is superior to the market valuation, this tendency may result in such bidders overpaying for target firms because of over optimism in evaluating synergies (Depamphilis, 2010). On other hand Free Cash Flow hypotheses of

Jensens (1986) postulates that managers with free cash flow at their disposal are more likely to engage in empire building activities rather than focusing on maximizing the shareholders wealth. Invoking wealth creation and efficient capital hypothesis, Shleifer and Vishny (2003) argue that during market booms company shares become overvalued. In most cases management is usually aware of this and they may wish to protect the shareholders from wealth loss following market adjustment. This is usually achieved through acquisition of real assets with their overvalued shares. The overall outcome of such an investment decision is a negative Net Present Value.

At empirical level, the question of whether the motives behind mergers and acquisitions explain the announcement return has been one of the unresolved subject issue of several studies since the first review paper on corporate takeovers by Jensen & Ruback (1983). However, despite the extensive research conducted in developed financial markets, variation in announcement return remains largely unexplained (Gulobov, Yawson & Zhang, 2015). Masulis, Wang & Xie (2007) using a sample of U.S acquirers from 1990 through 2003, documented that their extensive list of determinants could only explain about 6.4% of variations in cross sectional returns. This was revealed by the Adjusted  $R^2$  reported. In an interesting study of post acquisition performance of U.S acquiring firms from 2001 to 2005, Deng & Litgterink (2012) documented that their list of determinants of announcement return could explain a high of 25.11% of the variations evidenced by the R squared reported. In another study, Bouzgarrou & Louhichi (2014) used a sample of listed French acquirers for the period between 1997 to 2008 reported that the list of drivers they investigated explained only 10.2% of the variations in announcement return, exhibited by the adjusted  $R^2$  reported.

Research work on the factors explaining stock market return from M&As announcements is scanty in Eastern Africa and Africa in general (Triki & Chun, 2011). This could partially be attributed to non-availability of reliable data within the region. Most studies in Africa have limited themselves to either short run market reaction to M&As announcements (Viljoen (2013) for South Africa (Barde & Salisu, 2015) for Nigeria, (Kariuki, Muturi & Kiragu, 2016) for Eastern Africa region)) or long term financial performance of acquiring company (Halfar, 2011) with notable exception of Ndadza & Mokoalelei – Mokoteli (2014) who conducted study to find out whether South Africa mergers and acquisitions deals create value to the shareholders and also assessed the impact of M&As deals on employment.

From the literature review, it is crystal clear studies seeking to explain the determinants of stock market return from mergers and acquisitions announcements in Eastern Africa are fairly limited. This paper therefore, is an attempt to fill this void in M&A literature. We attempt to establish if there exist clear linkage between firm characteristics and stock market return from

M&As announcements. Specifically, the study investigates the effect of firm size, Tobin Q, our proxy for firm value and free cash flow on stock market return from M&As announcements.

We chose to examine the firm characteristics as an independent variable contrary to the developed financial markets studies that control for firm characteristics (Masulis, Wang & Xie, 2007; Gulobov, Petmezas & Travos 2012; Harford, Humphery-Jenner and Powel, 2012). We use standard event methodology to compute stock market return from M&As announcements and employ cross sectional regression analysis to examine the relationship between the firm characteristics and stock market return from M&As announcements. Our results suggest that Cumulative Abnormal Return (CAR) for the event period was significant at 10%. Further, the findings depicted a positive and significant relationship between firm size and CAR. Similarly, a positive association was reported for Tobin Q. On the other hand, Free Cash Flow had a negative and significant effect on CAR.

The remainder of the paper is organized as follows; section 1 describes determinants of stock market return from M&As Announcements, section 2 describes the methodology, section 3 describes our data, section 4 present the findings, section 5 concludes the paper, section 6 gives recommendation while section 7 states the limitations of the study.

## **DETERMINANTS OF STOCK MARKET RETURN FROM M&As ANNOUNCEMENTS**

Several studies show that firm characteristics have some possible effect on stock market return from M&As announcements (Moeller, Schingemann & Stulz, 2004; Masulis, Wang & Xie, 2007; Alexandridis, Petmezas & Travlos, 2010). Guided by influential and recent studies in the developed markets we investigate the effect of firm size, free cash flow and Tobin Q on stock market return from M&As announcements using firms listed in Eastern Africa securities market that have been involved in M&A activities.

### **Firm size**

Empirical evidence presented acknowledge firm size (commonly referred to as acquirer size) as one of the most robust determinant of M&As announcements return (Gulobov, Yawson & Zhang, 2015). Mule, Mukras, & Nzioka (2015) defines firm size as the amount and variety of production capacity and ability a firm possesses or the amount and variety of services a firm can provide to its customers. It therefore refers to how big or small a firm is and it's a key determinant of financial performance of an entity (Muigai, Nasieku & Muhanji, 2016).

Larger firms are usually more diversified hence associated with more returns and less risk. In addition, they have access to capital markets which offers them access to investment opportunities (Serrasqueiro & Nunes, 2008; Yang & Chen, 2009). Well, in line with economies of

scale concept, a positive relationship is postulated between firm size and M&A announcement return, however, managerialism hypothesis suggest that large firms come under the empire building managers who will undertake M&A activities for selfish reasons (Gorton, Kahl & Rosen, 2009). Several studies report a negative association between firm size and M&A announcement return (Moeller, Schlingemann, & Stulz, 2004; Masulis et al. 2007; Bouzgarrou & Louhichi, 2014). To test this hypothesis, we measure firm size by the logarithm of total assets and expect a negative coefficient between firm size and M&A announcement return.

### **Free cash flow**

The free cash flow hypothesis advanced by Jensen (1986) postulates that free cash flow is inversely related to stock market return from M&As announcements. Jensen argues that managers with un-used borrowing power and large free cash flow are more likely to undertake low or even value destroying M&As transactions. Conversely, Masulis Wang & Xie (2007) argue that higher free cash flow in a firm can also be a proxy for better recent performance predicting a positive association between free cash flow and Cumulative Abnormal Return. In their study, this expectation was confirmed. However, Gulobov, Yawson and Zhang (2015) observe a negative correlation between the two supporting the findings of Harford (1999). To determine free cash flows, we deduct depreciation, common and preference dividends from earnings before interest. A negative relationship between free cash flow and stock market return from M&As announcements is expected.

### **Firm value**

We also examine the influence of firm value on stock market return from M&As announcements. In the current study the variable (Tobin q) is used as a proxy for firm value. The variable reflect firm attitude toward investments or growth opportunities. A high q ratio firm signifies overvaluation which is likely to trigger negative stock market reaction.

Previous studies reveal that Tobin q has a seemingly ambiguous effect on M&A announcement. Lang, Stulz & Walkling (1989) and Servaes (1991) demonstrate that abnormal returns are lower for acquisitions by firms with low tobin q. Surprising, on the other hand DeLong (2003) and Moeller, Schingerman & Stulz (2004) find a inverse relationship between the same variables. We measure Tobin q using a ratio of bidder firm asset's market value divided by its book value of asset. In light of recent empirical evidence Gulobov, Yawson & Zhang (2015), we also expect a negative relationship.

## METHODOLOGY

We followed the standard event methodology to determine our response variable that is Cumulative Abnormal Returns (CARs) one (1) day before and one (1) day after the announcement of a merger or an acquisition (see, e.g., Kariuki, Muturi & Kiragu, 2016; Golubov, Petmezas & Travos, 2012; Harford, Humphery-Jenner & Powel, 2012). Significance of the Cumulative abnormal returns was tested using parametric t test (Kothari & Warner, 2007). To determine the relationship between stock market return from M&As announcements and firm characteristics (firm size, Tobin Q and free cash flow) among firms listed in Eastern Africa securities markets, the statistical model presented in Equation (1) was used.

$$Y_i = \alpha + \beta_1 X_{1,i} + \beta_2 X_{2,i} + \beta_3 X_{3,i} + \varepsilon_i \quad (1)$$

In Equation (1),  $y$  is a measure of stock market return from M&As announcements represented by (CAR [-1,+1]) while  $X_1$ ,  $X_2$  &  $X_3$  are the independent variables that is firm size, free cash flow, Tobin Q, our proxy for firm value respectively. In addition  $\beta_1$ ,  $\beta_2$  &  $\beta_3$ , are the sensitivity coefficient for firm size, free cash flow and Tobin Q respectively. Similarly,  $\alpha$  is the constant while  $\varepsilon_i$  is the error term. Diagnostic test were carried out and regression analysis was used.

This study examined the relationship between firm characteristics and stock market return from M&As announcements among firms listed in the securities markets in three Eastern Africa countries. Stock market return from M&As announcements was denoted by cumulative abnormal return that is CAR [1+1]. Purposive sampling method was employed. The sample for the study comprised of listed firms in three Eastern Africa countries' securities market which either merged or acquired a public or a private firm within the Kenya, Uganda and Tanzania for the period 1998 through 2015. The total sample was made up of thirty (30) completed publicly traded M&As in Eastern Africa acquiring either a private or a public target firm for the period same period.

## ANALYSIS AND FINDINGS

### Descriptive Statistics

Cumulative abnormal return for the event period [-1+1] are presented in Table 1. The finding shows that CAR [-1, +1] had a p-value of 0.089 which was significant at 10%. It was therefore concluded that M&As announcements by firms listed in Eastern Africa securities markets led to an improvement in shareholders wealth.

Table 1: Showing Cumulative Abnormal Returns for the Event Period [-1, +1]

	T	Df	Sig. (2-tailed)	90% Confidence Interval of the		
				Mean Difference	Lower	Upper
CAR [-1 + 1]	1.762	29	.089*	.01631	-.0026	.0352

The findings of the descriptive statistics are presented in Table 2. The minimum stock market return from M&As announcements recorded considering CAR [-1 + 1] was -0.08 with a maximum of 0.11. The data spread measured using both skewness and kurtosis coefficient showed the data was normally distributed. In the short run, firm size value was high with an average value of 16.96 while free cash flow had a high value 14.54. Following Moeller et al. (2005) highly valued firms had a Tobin Q value of more than one (1). Our findings shows that Tobin Q mean value was 0.58 signifying that in the short run firm valuation was on average thus not high.

Table 2: Descriptive Statistics for the Firm Characteristics and Cumulative Abnormal Return

	Min	Max	Mean	Std. Dev	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
CAR -1, +1	-0.08	0.11	0.02	0.05	-0.12	0.43	-0.79	0.83
Tobin Q	0.15	0.99	0.58	0.28	-0.03	0.43	-1.43	0.83
Firm size	15.24	19.67	16.96	1.09	0.42	0.43	0.05	0.83
FCF	13.32	15.97	14.64	0.86	0.30	0.43	-1.36	0.83

### Diagnostic Tests

The diagnostic tests carried on the data included normality test for the dependent variable, linearity test, multicollinearity test, heteroscedasticity test and autocorrelation test. The diagnostics test results confirmed that data was fit for regression analysis. To begin with normality for the dependent variable data was tested using both numerical Kolmogorov Smirnova (K-S) test and Shapiro Wilk (1965). Both test the null hypothesis that the data is normally distributed against an alternative which assumes that data is not normally distributed. Table 3 presents the numerical normality test. The results reveals 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 a p-value of 0.05. These two statistics point that the dependent variable was normally distributed (Shapiro & Wilk 1965; Park, 2008; Shevlin & Miles, 2010).

Table 3: Kolmogorov Smirnova (K-S) and Shapiro Wilk Normality Test for Dependent Variable

	Kolmogorov-Smirnov			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.

Second, graphical analysis was used to test for linearity between two bivariate variables. Results in Figure 1 shows that there was a positive relationship between firm size and cumulative abnormal return. Moreover, 21.4% of the variations in stock market return from market to M&As announcements can be accounted for by firm size. The pictorial presentation in Figure 2 shows that there was a positive relationship between Tobin Q and cumulative abnormal return. Moreover, 18.9% of variations in stock market return from M&As announcements can be attributed to Tobin Q. Finally, linearity test between free cash flow and cumulative abnormal return was conducted. The findings are presented in Figure 3 depicting an inverse relationship between free cash flow and cumulative abnormal return in the short run. Moreover, an R squared of 15% shows that free cash flow explains 15% only of the variations in stock market return from M&As announcements.

Figure 1: Relationship between Firm size and Market Return to M&A Announcement in the Short run

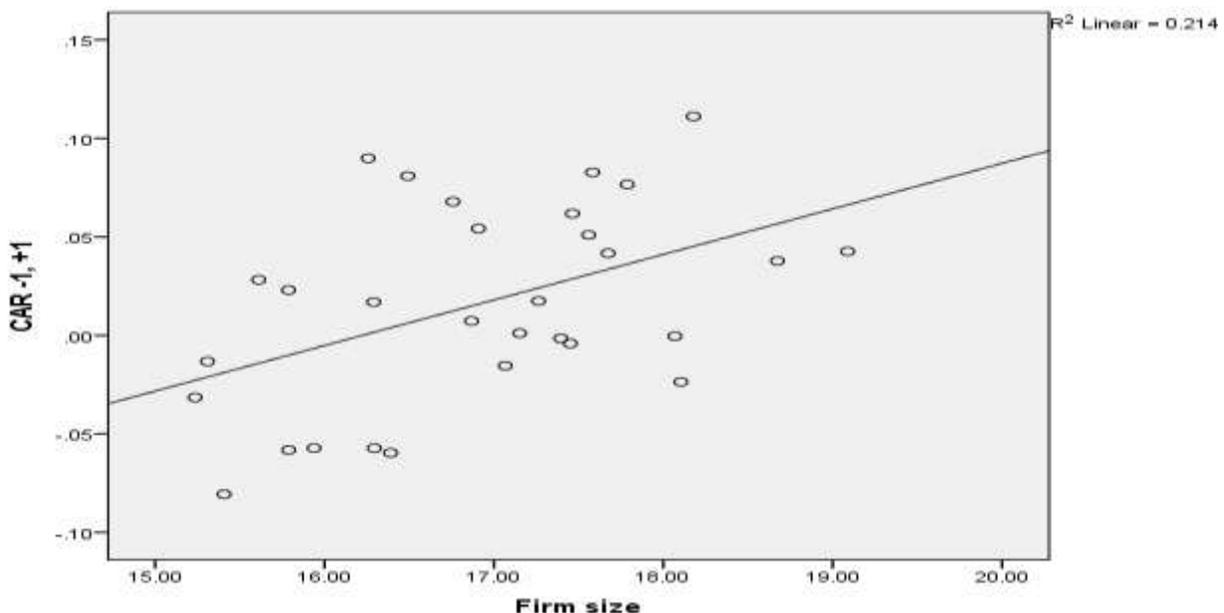


Figure 2: Relationship between Tobin Q and Market Return to M&A Announcement in the Short run

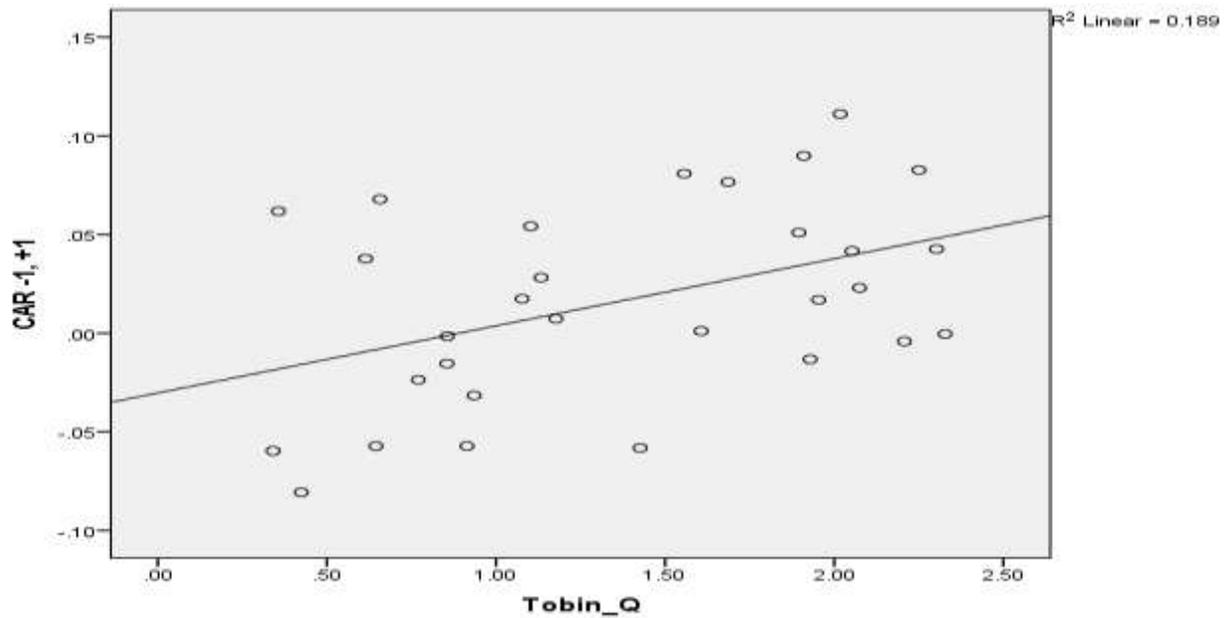
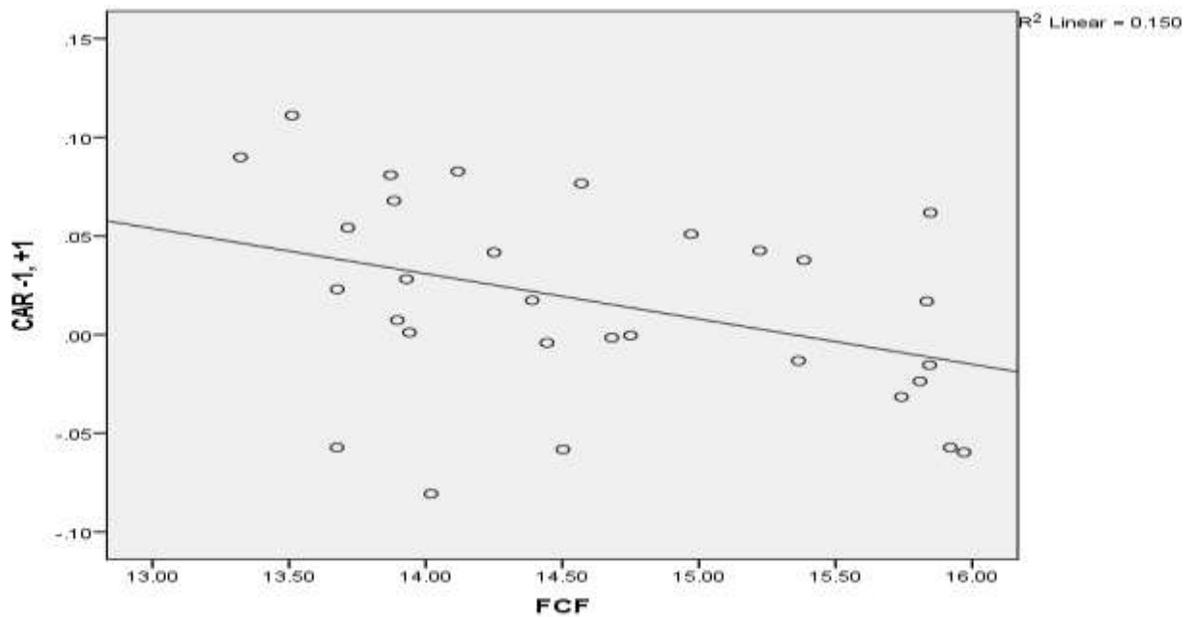


Figure 3: Relationship between Free Cash Flow and Market Return to M&A Announcement in the Short run



Third, Variance Inflation Factor (VIF) and Tolerance limits (Tol) were used to test for the presence of multicollinearity among the independent variables. If the VIF is greater than 10 or tolerance is less than 0.1 then there is multicollinearity (Porter & Gujarat, 2009). The results are

presented in Table 4. Our test results show that multicollinearity among the independent variables was not a concern since none of the coefficients exceeded the acceptable threshold as suggested by Hamilton (2006).

Table 4: Multicollinearity Test Using VIF and Tolerance for the Study Variables

Variable	VIF	1/VIF (Tolerance)
Firm size	1.62	0.62
Tobin q	2.41	0.42
FCF	1.43	0.70

Fourth, Durbin Watson  $d$  statistics was used to assess the presence of autocorrelation in our independent variables. Gujarat (2009) explains that autocorrelation occurs when the error terms are correlated with each other. The test assumes that the data has no autocorrelation if the DW coefficient ranges between 1.5 to 2.5 (Garson, 2012; Porter & Gujarat, 2009). The results are presented in Table 5. Since none of the regression model coefficient was outside the recommended ranges, then it was concluded that there was no autocorrelation.

Table 5: Durbin Watson Test Results

Independent Variable	DW (Durbin Watson)
Tobin Q	2.32
Firm size	1.65
FCF	2.02

Finally, the study checked for heteroscedasticity in the study variables using Breusch-Pagan/ Cook-Weisberg test. The results are presented in Table 6. Since the p-value was greater than 0.05, we conclude that there was uniform variance among the error term. Chi square value can be used to detect the presence of heteroscedasticity. If Chi-Square value is greater than 9.22 confirms problem of heteroscedasticity. In our study, chi square value was 0.012 confirming that heteroscedasticity was not a concern.

Table 6: Breusch-Pagan Test for Heteroscedasticity

Ho	Variables	chi2(1)	Prob > chi2
Constant variance	FC	0.012	0.460

## Regression Results

### *Model Summary*

Table 7 presents the model summary for the effect of firm characteristics on stock market return from M&As announcements in the short run. The findings shows that the three variables that is firm size, Tobin q and free cash flow together explains 79.6% of the changes in stock market return from M&As Announcements (CAR [-1, +1] ) while the remaining percentage can be explained by other factors excluded in the model.

Table 7: Model Summary for the Effect of Firm Characteristics on Stock Market Return from M&As Announcements in the Short run

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.892 <sup>a</sup>	0.796	0.770	0.060

a. Predictors: (Constant), Free cash flow ,Tobin Q, Firm size

b. Dependent Variable: CAR -1+1

### *ANOVA Results for the Effect of firm Characteristics on Stock Market Return from M&As Announcements in the Short run*

Table 8 presents the analysis of variance results for the hypothesized relationship between firm characteristics that is firm size, firm value, free cash flow and stock market return from M&As announcements in the short run. The results show that the regression relationship is significant; F statistic is 29.958 is statistically significant since the p-value is 0.000. The results indicate that the overall model is significant in predicting stock market return from M&As announcements in the short run in firms listed in Eastern Africa securities market. Based on our research findings, null hypothesis was rejected. It was therefore concluded that firm characteristics that is firm size; Tobin Q and free cash flow jointly had a significant effect on stock market from M&As announcements in the short run return in firms listed in Eastern Africa securities.

Table 8: ANOVA Results for the Effect Firm Characteristics on Market Return to M&A Announcement in the Short run

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.321	3	0.107	29.958	0.000 <sup>b</sup>
	Residual	0.082	23	0.004		
	Total	0.403	26			

a. Dependent Variable: CAR -1,+1

b. Predictors: (Constant), Free cash flow, Tobin Q, Firm size.

### **Regression Coefficients of Firm Characteristics and Stock Market Return from M&As Announcements**

Table 9 present the regression coefficient for the effect of firm characteristics that is firm size, Tobin Q and free cash flow on Stock market return from M&As announcements in the short run. The findings show that coefficient for the constant is 0.046 which is significantly different from zero with a p value of 0.004 hence significant. Further the result shows that the beta coefficients for firm size, Tobin Q and free cash flow are significant in explaining stock market return from M&As announcements in the short run. A significant positive relationship between firm size and stock market return from M&As announcements in the short run was reported ( $\beta_1 = 0.059$ ,  $t = 4.364$ ,  $p\text{-value} = 0.000$ ), Tobin Q and stock market return from M&As announcements in the short run ( $\beta_2 = 0.086$ ,  $t = 7.919$ ,  $p\text{-value} = 0.000$ ). However, an inverse relationship between free cash flow and stock market return from M&As announcements in the short run was depicted, ( $\beta_3 = -0.079$ ,  $t = -5.731$ ,  $p\text{-value} = 0.000$ ). The findings exhibited that stock market return from M&As announcements in the short run is significantly explained the three firm characteristics. Further, the findings implies that a unit increase in firm size and Tobin Q increases stock market return from M&As announcements in the short run by 0.059 units, 0.086 units respectively while a unit increase in free cash flow decreases stock market return from M&As announcements in the short run by 0.079 units. Since the coefficient for firm size, Tobin Q and free cash flow were significant null hypothesis was rejected and a conclusion was made that the three firm characteristics; firm size, Tobin Q and free cash flow had a significant effect on stock market return from M&As announcements in the short run.

Table 9: Regression Coefficient Results for the Effect Firm Characteristics on Stock Market Return from M&As Announcements in the Short run

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	
	B	Std. Error	Beta	T		
	(Constant)	0.046	0.014		3.195	0.004
1	Firm size	0.059	0.014	0.507	4.364	0.000
	Tobin Q	0.086	0.011	0.752	7.919	0.000
	Free cash flow	-0.079	0.014	-0.669	-5.731	0.000

a. Dependent Variable: CAR -1+1

b. Predictors: Firm size, Tobin Q and Free cash flow

Our results for the effect of size on stock market return from M&As announcements in the short run disagree with the existing empirical literature. Several studies have reported a significant negative association between firm size and stock market return from M&As announcements supporting managerialism / hubris hypothesis (Moeller, Schingemann & Stulz, 2004, 2005; Masulis, Wang & Xie, 2007; Bouzgarrou & Louhichi, 2014; Gulobov, Yawson & Zhang, 2015). Our results indicate a positive relationship between firm size and cumulative abnormal return. We note that these studies have been conducted in the developed financial markets. In addition, these studies have considered an extensive list of determinants that could possibly have some effect on cumulative abnormal return. From the literature review, we failed to identify a study that has focused on effect of firm characteristics on stock market return from M&As announcements only. We are therefore unable to compare our findings on influence of firm size on cumulative abnormal return with those reported in the developed markets. That said and done our findings present new evidence that management in M&A firms in Eastern Africa securities markets which is in the category of emerging market make acquisition decision with an aim of maximizing shareholders return and that excessive overconfidence or selfish reason do not influence their acquisition decision in the short run. Our result therefore neither supports existing empirical literature nor the management overconfidence or the managerialism hypothesis that has been widely supported. We however do not discount the empirical evidence reported on effect of firm size on stock market return from M&As announcements.

The result shows that tobin q is positively and significantly correlated with stock market return from M&As announcements in the short run. In the short run tobin q the proxy for firm value is average and therefore a positive relationship is postulated, therefore the findings confirm our expectation and moreover, in tandem with the empirical findings of other studies (DeLong, 2003; Jensen, 2003; Moeller et al. 2005). Similar to other studies the findings support overvaluation hypothesis. Finally, the results for the effect of free cash flow on stock market return from M&As announcements in the short run indicates a significant negative association. The findings concur with the research findings of Harford (1999), Moeller et al. (2004) and). However, our result contradicts the research findings of Fu, Lin & Officer (2013), Bouzgarrou & Louhichi (2014) and Gulobov et al. (2015) who found an insignificant inverse relationship. Moreover, our results disagrees with the findings of Masulis et al. (2007) who documented an insignificant positive relationship, while defending their findings they urged that presence of free cash flow indicated better recent performance. Our findings support on effect of free cash flow on stock market return from M&As announcement supports free cash flow hypothesis advanced by Jensen (1986) postulates that free cash flow is inversely related to M&A announcements

return and managers with unused large free cash flow at their disposal undertake low or even value destroying M&A transactions.

## **CONCLUSIONS**

The study concludes that firm characteristics play an important role in explaining stock market return from M&As announcements in firms listed in Eastern Africa securities markets. These firm characteristics include firm size, free cash flow and Tobin Q our proxy for firm value. Firstly, it was observed that firms that engaged in M&A activities in East African securities market are large and the results indicated that firm size was positively correlated with stock market return from M&As announcements both in the short run; discounting hubris hypothesis for the M&A firms in Eastern Africa security markets.

Secondly, Tobin Q findings depict a positive relationship with stock market return from M&As announcements in the short run. This is explained by the overvaluation signaling hypothesis that postulates overvalued firm makes poor acquisitions decision that exhibit worse abnormal returns. The descriptive statistics postulated that M&A firms in Eastern Africa were undervalued in the short run; this explains the positive relationship exhibited.

Finally, the study concluded that free cash flow decreases M&A announcements return in firms listed in Eastern Africa security markets. From the descriptive statistics, free cash flows mean was high and this explained the negative association. This is an indication that perhaps the management of these large firms hold large amount of free cash flows at their discretion, consequently, they engage in empire building hypothesis.

## **RECOMMENDATIONS**

Following the study findings and conclusion, two recommendations regarding firm characteristics as possible determinants of stock market return from M&As announcements are made. First, most of M&A activities are motivated by managerialism where managers make acquisition to build their own sphere of influence, we note managers operating in listed firms in Eastern Africa securities markets which are in the category of emerging markets segment are exceptional. Our evidence indicates that firm size is positively related to M&A, this indicates that the management of these firms make acquisition decision to maximize shareholders return. Therefore study recommends that firm management should endeavor to maximize shareholders wealth when making M&A decisions. Further, firms should utilise their borrowing power to the capacity in order to reduce free cash flow at the disposal of the management.

## LIMITATIONS

The study employed secondary data that was obtained from financial statements of the firms selected. Therefore, the researcher acknowledges that secondary data gathered from audited financial statements and annual reports of listed firms could have undetected errors; thus, the study results were subject to the inherent limitations of firm financial statements as reported to the general public. Secondly, the 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. Therefore the applicability of the study findings should be restrictive given the small size of the sample. An extended study could therefore be carried out within a larger jurisdiction such as Sub-Saharan Africa or Africa as whole to reduce potential sampling bias that may have impacted this study.

## REFERENCES

- Alexandridis, G., Petimezas, D., & Travos, G. (2010). Gains from mergers and acquisitions around the world: New evidence. *Financial Management Journal*, 39 (4), 1671-169.
- Barde, M., & Salisu, M. (2015). Short-term effects of mergers and acquisitions in the Nigerian banking industry. Paper Presented during the 11th International Business and Social Science Research Conference, Dubai.
- Bouzgarrou, H., & Louhichi, W. (2014). Does the financing decision help to understand market reaction around mergers and acquisitions? *The Journal of Applied Business Research*. 30(2) 465-478.
- DeLong, G. (2003). Does long term performance of mergers match market expectations? *Business & Economics Strategic Management Journal*, 20, 711-727.
- Deng, Q., & Ligterink, J.E. (2014). The post-acquisition performance of acquiring firms: An examination of long-run anomaly. Master thesis, Amsterdam Business School, University of Amsterdam.
- DePamphilis, D.M. (2010). *Mergers, Acquisitions and other Restructuring Activities: A Integrated Approach*. Burlington: Elsevier.
- Fu, F., Lin, L., & Officer, M. S. (2013). Acquisition driven by stock overvaluation: Are they deals? *Journal of financial economics*. Retrived from: <http://dx.doi.org/10.1016/j.jfineco.2013.02.013>.
- Garson, D. (2012). *Testing Statistical Assumptions: Statistical*. Associate Publishing.
- Gujarati, D. (2009). *Basic Econometrics (4 Edition)*. New Delhi, DN: McGraw Hill.
- Gulubov, A., Yawson, A., & Zang, H. (2015). Extra ordinary acquirers. *Journal of Financial Economics*. 116, 314-330.
- Gorton, G., Kahl, M., & Rosen, R. J. (2009). Eat or be eaten; A theory of mergers and firm size. *Journal of Finance*, 64(3), 1291-1344.
- Halfar, D. (2011). The effect of mergers and acquisitions on long-run financial performance of acquiring companies. Published Master Thesis. Gordon Institute of Business Science, University of Pretoria.
- Hamilton, L.C. (2006). *Statistics with stata*. Cengage: Belmont, CA.
- Harford, J. (1999). Corporate cash reserves and acquisitions. *Journal of Finance*, 54, 1969-1998.

- Harford, J., Humphery-Jenner, M., & Powell, R. (2012). The sources of value destruction in acquisitions by entrenched managers. *Journal of Financial Economics*, 106, 247–261.
- Jensen, M. (1986). Agency cost of free cash flow, corporate finance and takeovers. *American Economic Association Papers and Proceedings*, 323-329.
- Jensen, M., & Ruback, R.S. (1983). The market for corporate control. The Scientific Evidence. *Journal of Financial Economics*, 11, 5-53.
- Kariuki, B., Muturi, W. & Kiragu, D. (2016). Stock market reaction to mergers and acquisitions announcements in emerging markets; Evidence from mergers and acquisitions firms listed in Eastern Africa Securities markets. *Research Journal of Finance and Accounting*, 7(22), 130-141.
- Lang, H. P. Stulz, R. M., & Walkling, R. (1991). A test of the free cash flow hypothesis: The case of bidder returns. *Journal of Financial Economics* 29, 315–336.
- Liu, Y., & Wang, Y. (2013). Performance of mergers and acquisitions under corporate governance perspective. *Open Journal of Social science*, 1(6), 17-25.
- Masulis, R. W., Wang, C., & Xie, F. (2007). Corporate governance and acquirer returns. *Journal of Finance*, 62, 1851-1889.
- 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.
- Muigai, R.G., Nasieku, T., Muhanji, S. (2016). Effect of capital structure on financial distress of non-financial companies listed in Nairobi Securities Exchange. PhD Thesis, Jomo Kenyatta University of Agriculture and Technology, Kenya.
- Mule, R. K., Mukras, M. S., & Nzioka, O. M. (2015). Corporate size, profitability and Market value: An econometric panel analysis of listed firms in Kenya. *European Scientific Journal*, 11(13), 376 - 396.
- Ndadza, E. T., & Mokoaleli-Mokoteli, T. (2014). Beneficiaries of mergers & acquisitions in South Africa. Master of Finance and Investment Research Project, Faculty of Commerce, Law and Management, University of the Witwatersrand.
- Park, H. M. (2008). *Univariate Analysis and Normality Test Using SAS, STATA, and SPSS*. Working Paper. The University Technology Services Centre for Statistical and Mathematical Computing, Indiana University. retrieved March 23 2015.
- Poter, C., & Gujarati, D. (2009). *Basic Econometrics (5th ed.)*. New York, The McGraw-Hill Companies, Inc.
- Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of Business*, 59, 197-216.
- Serrasqueiro, Z. S., & Nunes, P. M. (2008). Performance and size: Empirical evidence from Portuguese SMEs. *Small Business Economics*, 31(2), 195-217.
- Servaes, H. (1991). Tobin's q and the gains from takeover. *Journal of Finance*, 46, 409–419.
- Shapiro, S., & Wilk, M. (1965). Analysis of variance test of normality. *Biometrika*, (52 (3), 591-599.
- Shleifer, A. & Vishny, R. (2003). Stock market driven acquisitions. *Journal of Financial Economics* 70, 295–311.
- Tyre, H., & Lindsay, L. (2012). *Africa Alert: Recent Development in Cross Border Legal Issues*. Washington D.C., Nixon Peabody LLP.
- UNCTAD. (2010). *World Investment Report*. Geneva: United Nations Conference on Trade and Development. Retrieved from [www.unctad.org/fdistatistics](http://www.unctad.org/fdistatistics). Accessed on 15th May 2015.

UNCTAD. (2014). World Investment Report. Geneva: United Nations Conference on Trade and Development. Retrieved from [www.unctad.org/fdistatistics](http://www.unctad.org/fdistatistics). Accessed on 14th May 2015.

Viljoen, G. (2014). The impact of cross border mergers and acquisition on the operating financial and short term share price performance of acquiring companies listed on the Johannesburg Stock Exchange. MBA Research Project, Gordon Institute of Business Science, University of Pretoria.

Yang, C. H., & Chen, K. H. (2009). Are small firms less efficient? *Small Business Economics*, 32(4), 375-395.