The moderating role of firm characteristics on the relationship between free cash flows and financial performance of firms listed at the Nairobi securities exchange

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Abstract

This paper sought to find out the influence of firm characteristics on the relationship between free cash flows and firm financial performance. Specifically, the objectives of the study were two-fold: first, to establish the relationship between free cash flows and financial performance of firms listed at the NSE; and secondly, to determine the influence of firm characteristics on the relationship between free cash flows and financial performance of firms listed at the NSE. The firm characteristics considered in this study are firm size and age. The study used secondary panel data which was obtained from all firms listed at the NSE for the period 2006 to 2015. Regression analysis was employed in data analysis. Results indicate that free cash flows have a significant positive effect on financial performance; while firm characteristics have a negative significant moderating effect on the relationship between free cash flows and financial performance. The main academic contribution of the study is that free cash flows have a positive statistically significant effect on financial performance. The study recommends that firm managers, shareholders and practitioners should focus more on the need for firms to generate more FCF.

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1 Introduction

The primary incentive of firm owners is to maximize their wealth by improving firm value. The goals of firm managers on the other hand are varied and may include enrichment of personal wealth and status. This varying of interests sometimes leads managers to engage in insider dealings where there are no mechanisms for effective monitoring, validation and approving of managerial decisions (Wang, 2010). This personal-interest encourages wastage when FCF are present; hence, implying the FCF hypothesis.

Firm characteristics such as profitability, firm size, liquidity, leverage, sales growth, age of the firm, board structure and composition, asset growth, turnover, dividend payout and growth prospects are argued to have an influence on the relationship between FCF and firm performance (Easterbrook, 1984; Demsetz & Lehn, 1985; Subrahmanyam & Titman, 2001; Kogan & Tian, 2012 and Mukras & Nzioka, 2015).

This paper, centered on the FCF hypothesis and agency theory, seeks to explore how firm characteristics influence the relationship between FCF and performance of firms listed at the Nairobi Securities Exchange (NSE). The study focused on firm characteristics of firm size and age because literature indicates that they are the most commonly used, and also their influence on the relationship between FCF and performance seem to be more significant (Demsetz & Lehn, 1985 and Mukras & Nzioka, 2015).

1.1 Free Cash Flows
The concept of FCF, presented by Jensen (1986) refers to surplus cash available after financing profitable ventures. This is defined as net operating income minus capital expenditure (CAPEX), cost of inventory and paid out dividends. On the other hand, Brealey, Myers and Allen (2005) describe FCF as net income; add depreciation and amortization, minus CAPEX, minus change in non-cash working capital, plus net borrowing. Richardson (2006) argues that firms which have surplus funds risk wasting it in ventures that are not profitable, and that because FCF are financial resources at the managers' discretion to apportion, they are also referred to as idle cash flows.

1.2 Firm Characteristics
Zou and Stan (1998) describe firm characteristics as a firm's demographic and managerial variables which in turn comprise part of the firm's internal environment. Firm characteristics have been listed by Kogan and Tian (2012) to include firm size, leverage, liquidity, sales growth, asset growth, and turnover. Others include ownership structure, board characteristics, age of the firm, dividend pay-out, profitability, access to capital markets and growth opportunities (Subrahmanyam & Titman, 2001 and McKnight & Weir, 2008).

Vogt (1997) argues that the more a firm has FCF the more it engages into capital investment, and hence the higher the financial performance. Smaller firms gear towards rampant growth, thereby utilizing most or all the available FCF in a bid to better financial performance. The relationship between FCF and investment is stronger in small and medium firms which generally, are in the growth stage. Adelegan (2009) on the other hand notes that the effect of size is neutral and that older firms tend to rely more on internal funds to finance their corporate investments than the small and medium firms.

Firms that are new require time to adapt to the environment. A new firm needs to catch up with an older firm when the new firm's performance is lower than that of the older (existing) firm so as to be competitive in the market. Therefore, it is expected that firms that are new will show higher growth rates in productivity than the older firms as a result of high FCF. Hence, age of the firm is negatively correlated with productivity growth rate because older firms have lower FCF (Brouwe, Kok & Fris, 2005).

1.3 Financial Performance

Gleason and Barnum (1982) define firm performance as a firm's ability to achieve planned results as measured against its intended outputs. It encompasses outcomes related to shareholder return, market performance and financial performance. On the other hand, Daft (1995) defines firm performance as the ability to achieve its objectives by using resources in an efficient and effective manner. Financial performance may therefore be defined as a firm's ability to achieve its planned financial results as measured against its intended outputs.

Dyer and Reeves (1995) observe that there are no performance measures universally appropriate and multiple measures should therefore be used. Wang (2010) and Ongore and K'Obonyo (2011) use return on assets (ROA), return on equity (ROE) and Dividend Yield (DY) to measure financial performance. Szewczyk, Tsetsekos and Zantout (1996) and Mojtahedzadeh and Nahavandi (2009) have used Tobin's Q as a market-based measure of financial performance. Tobin's Q relates the market value of firms' equity with their corresponding book values. In operationalization of firm performance, the use of multiple indicator approach would be superior to the use of only a single indicator (Venkataram & Ramanujan, 1986). Hubbard (1998) observes that there is a significant positive relationship between FCF and firm performance which is manifested through prudent investment.

2 Research Problem and Objectives

The FCF hypothesis suggested by Jensen (1986) states that firm managers may invest in needless negative NPV projects when there is surplus FCF at their disposal. The hypothesis suggests that greater levels of FCF could lead to more unnecessary administrative waste and inefficiency, negatively impacting on firm performance. Empirical literature shows mixed findings regarding FCF, firm characteristics and firm performance. For instance; Nekhili, Amar, Chtioui and Lakhal (2014) found increased agency costs emanating from the presence of FCF. Similar findings are recorded by Jensen (1993), Brush et al. (2000), Wu (2004) Ferris and Yan (2009), Mojtahedzadeh and Nahavandi (2009) and Njuguna and Moronge (2013). On the contrary, Gregory (2005) established that mergers with higher FCF were performing better than mergers with lower FCF. These findings invalidate the FCF hypothesis. Similarly, Szewcyzk et al. (1996) and Chang et al. (2007) find that investors favored firms with both substantial FCF and profitable investment opportunities in stock valuation.

Demsetz and Lehn (1985) find that in the presence of substantial FCF, large firms tend to have fewer growth opportunities than smaller ones, which could lead to an overinvestment problem, thereby negatively impacting on firm performance. On the other hand, Brouwer et al. (2005) investigated whether age of the firm accounted for productivity differences and the results showed very few signs of a relationship between productivity (performance) and age. Both growth rate and level of productivity varied between sectors and also differed with size of the firm. There was also no indication that productivity growth rate was related to the age of the firm.

The Brouwer et al. (2005) study did not fully exploit the panel structure of the dataset that was available. On the other hand, Wang (2010) and Lin and Lin (2014) excluded CAPEX and net borrowings in their operationalization of FCF. This study included both CAPEX and net borrowings in the definition of FCF. These measures of FCF and agency costs are more robust. Since the results of empirical studies on the FCF hypothesis are inconsistent, the intent of this study was to determine how FCF would affect performance of firms listed at the NSE using a more robust definition of the FCF variable. The broad objective of this paper was to determine whether firm characteristics significantly influence the relationship between FCF and performance of firms listed at the NSE. More specifically, the study sought to:

Establish the relationship between free cash flows and financial performance of firms listed at the Nairobi Securities Exchange.

Determine the influence of firm characteristics on the relationship between free cash flows and financial performance of firms listed at the Nairobi Securities Exchange.

3 Literature Review

3.1 Free Cash Flows and Firm Performance

Wang (2010) studied the impact of FCF on financial performance with empirical data from Taiwan Stock Market for the period 2002 to 2007. Using a sample of 505 firms, regression analysis was employed in data analysis. The study found that FCF had statistically significant effects on financial performance. These effects were however conflicting. On the one hand, the presence of high FCF escalated imprudent expenditures that consequently lowered financial performance. The results were however conflicting. On the one hand, the findings show that the presence of high FCF escalated imprudent expenditures that consequently lowered financial performance. The results indicated on the other hand that FCF were generated due to managers' efficiency in operations, implying that there is a positive correlation between FCF and financial performance.

The findings by Wang (2010) are partially consistent with results by Gregory (2005) who studied the long run abnormal performance of UK acquirers and the correlation between FCF and financial performance. Gregory (2005) established that mergers with greater FCF achieved better than those with lesser FCF. While testing the hypothesis, the study used "long term returns" and also "analyzed announcement month return". However, the study did not include daily returns around announcement, which could probably yield different results. Furthermore, the study focused on financial performance outcomes only.

Brush et al. (2000) studied the proposition that sales growth in firms with FCF were less lucrative than sales growths for firms with lower FCF. Data was obtained from firms in the USA; covering eight years, 1988 to 1995 and used Tobin's Q to ascertain whether firms had positive NPV projects available to determine FCF. Returns to shareholders were used as a performance measure. The use of shareholder returns was criticized by Bromiley (1990) because it assumes capital market efficiency, which argues that the returns to a large extent reveal surprises to the market. Therefore, if the markets expect firms' sales growths and profitability, even very profitable sales growths should not be reflected in shareholder returns in the periods in which they arose. The study found that firms with higher FCF achieve lower from sales growth than those without or with lower FCF. These findings support the argument that FCF negatively affects financial performance.

The findings by Wang (2010) and Gregory (2005) on the one hand and Brush et al. (2000) on the other hand reveal inconsistencies. In this study, a more robust measure of FCF was adopted. For instance, Wang (2010) measured FCF as net operating income before depreciation, minus tax expense, minus interest expense, minus share dividends; scaled by net sales. In this study, FCF are defined as in Brealey et al. (2005) as net income add amortization and depreciation, minus

CAPEX, less change in non-cash working-capital, plus net borrowing. The study is therefore expected to yield more reliable and robust results.

3.2 Free Cash Flows, Firm Characteristics and Firm Performance

Demsetz and Lehn (1985) studied the firm characteristics that included structure of corporate ownership and firm size using 511 firms in the USA. Size of the firm was measured by the mean annual common stock market value, and the study period was 1976 to 1980. Ordinary least squares (OLS) regression estimates were employed in data analysis. The findings suggest that in the presence of substantial FCF, large firms tend to overinvest; thereby yielding relatively lower financial performance. Large firms tended to have fewer growth prospects than smaller firms and in the absence of good growth prospects; an overinvestment problem is likely to arise, thereby negatively impacting on the financial performance. However, the choice of a five-year study period seems too short. Literature indicates that 7 to 10 years' study period is preferred (Brush et al., 2000 and Nekhili et al., 2014).

Brouwer et al. (2005) investigated whether age of the firm accounted for productivity differences. Data was obtained for the period 1994 to 1999, and the focus was on Dutch firms. Although the dataset included firms from all age cohorts (0-4 years and 5-9 years) the study focused more on firms of at least 10 years of age. Using regression methods, the results showed very few signs of a relationship between productivity (performance) and age. Both growth rate and level of productivity varied between sectors and also differed with size of the firm. There was also no indication that productivity growth rate was related to the age of the firm. On productivity level, there were very few signs of the effects of age. The Brouwer et al. (2005) study did not fully exploit the panel structure of the dataset that was available. The explicit techniques of estimation that take account of this structure, such as multilevel or panel data estimation techniques are expected to be more effective.

Conversely, Power (1998) found a negative relationship between the growth rate of productivity and age at a certain phase in the firms' lifespan. Power (1998) examined the relationship between plant age and productivity for firms in the manufacturing industry of the USA for the period 1972 to 1988. The study found that productivity growth rates decline with age, which was credited to the effects of learning.

3.3 Hypothesis of the Study

H_1: Free cash flows have a significant effect on the financial performance of firms listed at the Nairobi securities exchange.

H_2: Firm characteristics have a significant moderating effect on the relationship between free cash flows and financial performance of firms listed at the Nairobi securities exchange.

4 Research Methodology and data Analysis

The positivist approach effectively rendered itself to this study, because the study is centered on existing theory and it develops hypotheses which can be verified. The research design adopted for this study was cross sectional descriptive survey of all firms listed at the NSE. Secondary data was obtained from published financial statements for the period 2006 to 2015. Data was analyzed using inferential statistics generated from statistical software, using 95% confidence interval as in Aiken and West (1991). The study employed panel data regression analysis using the OLS method where the data includes time series and cross-sectional data that is pooled into a panel data set and estimated using panel data regression.

4.1 Effect of Free Cash Flows on Financial Performance
In establishing the effect of FCF on firm performance FCF is the independent variable, while financial performance is the dependent variable. In the specification, the standard errors are clustered by firm and year. The regression model for hypothesis 1 is as follows:

$$\bar{Q}_{it} = \acute{\alpha} + \beta FCF_{it} + € \text{--} (1)$$

Where: $\bar{Q}$ = Financial performance (Tobin's Q); $\acute{\alpha}$ = Constant term; β = Beta Coefficient; FCF_{it}= Free cash flows and $€$ = Error term.

4.2 Firm Characteristics on the Relationship between Free Cash Flows and Financial Performance

In measuring hypothesis 2 the relevant variables are FCF (independent variable), firm characteristics (moderating variable) and financial performance (dependent variable). The regression model is as follows:

$$\bar{Q}_{it} = \acute{\alpha} + \beta_1 FCF_{it} + \beta_2 AGE_{it} + (\beta_3 AGE_{it}) * (\beta_4 FCF_{it}) + € \text{-------------------------} (2a)$$

$$\bar{Q}_{it} = \acute{\alpha} + \beta_1 FCF_{it} + \beta_2 SIZ_{it} + (\beta_3 SIZ_{it}) * (\beta_4 FCF_{it}) + € \text{----------------------------} (2b)$$

Where: SIZ_{it} = Firm size; AGE_{it} = Age of the firm

Equation 2a and 2b represent the moderation model. For purposes of avoiding possible high multicollinearity, the variables were centered and an interaction term added. If the predictor variable (FCF) and moderator variable (firm characteristics) are not significant with the interaction term, then complete moderation has happened. Otherwise if the predictor and moderator variables are significant with the interaction term, then moderation has happened, but the main effects are also significant (Aiken & West, 1991 and Mackinnon et al.,2002). In

(equations 2a and 2b) above, the variables associated with coefficients $\boldsymbol{\beta}_3$ through $\boldsymbol{\beta_4}$ were added into the model to quantify the effect of moderation. The effect of moderation variables; size and age of the firm is characterized statistically as an interaction that affects the strength and/ or direction of the relation between explanatory variable (firm performance) and the predictor variables (Baron & Kenny, 1986). The term * in the model does not signify multiplication; rather, it implies moderation.

Table 1: Summary of Statistical Tests of Hypotheses

Objective	Hypothesis	Analytical Model	Interpretation
i. To establish the relationship between FCF and financial performance of firms listed at the NSE	$\mathbf{H_1}$: FCF have no significant effect on the financial performance of firms listed at the NSE	Panel data regression model Test of assumption (normality and multi-collinearity)	Relationship exists if $\boldsymbol{\beta}$ is significant Relationship will be determined based on R^2
ii. To determine the influence of firm characteristics on the relationship between FCF and financial performance of firms listed at the NSE	$\mathbf{H_3}$: Firm characteristics have a significant moderating effect on the relationship between FCF and financial performance of firms listed at the NSE	Panel data regression model Test of assumption (normality and multi-collinearity)	The intercept of the regression model will be used to tests the influence of firm characteristics on the relationship between FCF and financial performance. Regression co-efficient and R^2 will be used to affirm the effect of agency cost on the relationship between FCF and financial performance.

4.3 Pre-estimation Diagnostics
The study used OLS to estimate regression models 1 through 2. The use of OLS is based on normality, linearity, internal consistency and sampling adequacy of variables used in the regression model. Therefore normality, linearity and internal

consistency of these variables were required for the application of OLS. To test whether the variables were normally distributed Shapiro Wilk test for normality was used. The test has a null hypothesis that the data does not come from a population that is normally distributed. Field (2013) recommends use of a visual inspection of histograms or Quantile – Quantile (Q-Q) plots. These plots are presented below:
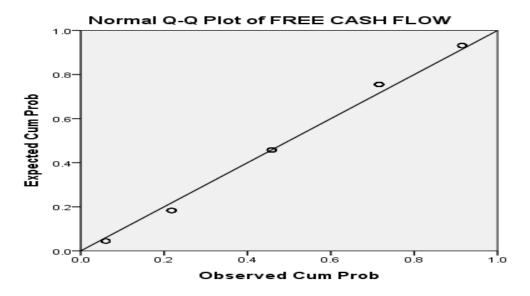

Figure 1: Q-Q Plot of Free Cash Flows

The results of the Q-Q plot in figure 1 above exhibits normality because most of the observations seem to be in a straight line, with a few cases appearing to be far away from the line. Tabachnick and Fiddel (2013) argue that large data tends to exhibit non - normality and thus tend to require transformation, which makes data difficult to interpret. Thus they suggest that large data sets can be analyzed even if some variables do not meet normality assumptions. Outliers were investigated and corrected or eliminated where necessary. The null hypothesis that the data does not come from a population that is normally distributed was rejected.

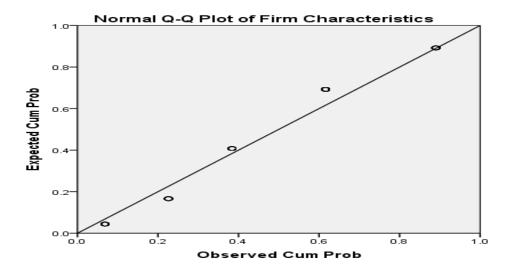**Normal Q-Q Plot of Firm Characteristics**

Figure 2: Q-Q Plot of Firm Characteristics

The Q-Q plot for firm characteristics in figure 2 above indicates almost all the observations being on a straight line. This implies normality of the data. Outliers were investigated and corrected or eliminated where necessary. Therefore, the null hypothesis that the data does not come from a population that is normally distributed was rejected.

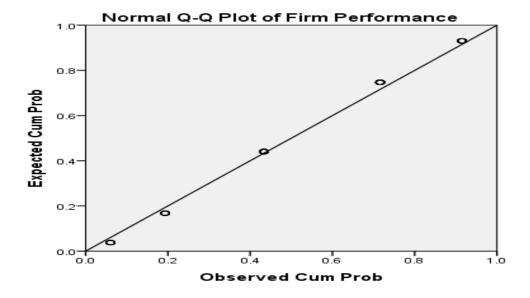**Normal Q-Q Plot of Firm Performance**

Figure 3: Q-Q Plot of Financial Performance

The results of the Q-Q plot in figure 3 above reveals that data for financial performance exhibits normality since a large majority of the observations are lying along the straight line. Outliers were investigated and corrected or eliminated where necessary. As in all the other data observations for FCF and firm characteristics above, the null hypothesis that data for financial performance is not normally distributed was rejected.

4.3.1 Reliability Tests

Reliability tests were carried out through Cronbach's alpha tests in Statistical Package for the Social Sciences (SPSS) with the results presented below. The study results reveal that average reliability scores for the variables was 0.745 which is more than 0.700 the accepted score for reliability, thereby showing that the research instrument was deemed good as supported by Bonett and Wright (2014).

Table 2: Reliability Scores for Individual Variables

Variable Item	Cronbach's Alpha
Free Cash Flow	0.737
Firm characteristics	0.801
Firm Performance	0.690

4.3.2 Test for Linearity

To test whether the variables were linearly associated, correlation analysis was used. The test had a null hypothesis of no linear association. Table 3 below shows the test statistics for linear associations between the predictor variables and financial performance (explanatory variable).

Table 3: Linearity Test

Reference Variable: Firm Performance	Correlation Coefficient	P-Value
Free cash flows	0.539	0.000
Firm characteristics	0.584	0.000

Table 3 above shows that p-values for the correlation coefficients are less than 0.01. Therefore, all the predictor variables have significant positive correlation with financial performance at 5 per cent level of significance. That is; the predictor variables and financial performance move in the same direction implying linear relationship. The significant and positive correlation implies that the

signage coefficients of the predictor variables in the regression models are positive.

4.3.3 Bartlett's Test of Internal Consistency

The study tested the consistency of the items used in the structured questionnaire to measure the various variables used in the study using Bartlett's test of sphericity. The test has a null hypothesis of no internal consistency (intercorrelated). Failure to reject the null hypothesis means that the principal components that measure a particular section have to be found through principal component analysis. However, rejection of the null hypothesis means that all the items are internally consistent and their composites can be used to measure the variables concerned. The test statistics for each of the sections involved in the linear regression analysis are shown in table 4.

Table 4: Bartlett's Test

Variable	Degrees of freedom	Test statistic	
		Chi Square	**P value**
Free cash flows	21	447.7	0.000
Firm characteristics	10	154.3	0.000
Firm Performance	10	279.1	0.000

Table 4 above shows that the null hypothesis that the variables in question are not intercorrelated in each of the sections is rejected at 5 per cent level of significance. This implies that there is internal consistency.

4.3.4 Multicollinearity Test

Multicollinearity occurs if there is a strong relationship between two or more independent variables in a regression model. To test whether the level of multicollinearity in the estimated models could be tolerated, Variance Inflation Factor (VIF) was used. The rule of the thumb is that a value of VIF that is less than 10 means that the level of multicollinearity can be tolerated (Robinson & Schumacker, 2009). Since multicollinearity test is only applicable for multivariate regressions, only VIF statistics are reported since the regressions involve more than one independent variable.

Table 5: Multicollinearity Test

Variables	VIF
Free Cash Flows	2.26
Firm Size	1.09
Firm Age	1.68
Financial Performance	2.35

Table 5 above shows that the VIF for all the models estimated ranged from 1.09 to 2.35 showing that the VIF results are between the acceptable ranges of 1 to 10. This shows that the variables did not exhibit multicollinearity and regression analysis could then be carried out.

5 Findings

5.1 Free Cash Flows and Performance of Firms Listed at NSE.
The study sought to identify the effect of FCF on financial performance. The hypothesis tested was as follows:

H_1: FCF have no significant effect on the financial performance of firms listed at the NSE

In the first instance, tests were carried out to determine the type of model to be used (random or fixed effects). This was carried out through Chaw and Hausman tests with results indicating significance of p-value less than 0.05 thus allowing the use of fixed effect panel modelling (see table 6 (a) below.

Table 6: Panel Data Results for Free Cash Flows and Financial Performance
Test Statistics

Test	Number	Statistics	Statistics Value	Degree of Freedom	Significance
Chaw	600	F	3.5280	(104,593)	0.003
Hausman	600	Chi-Square	42.551	8	0.00

The results in Table 6(b) below indicate that FCF explains 28% of the variability in firm financial performance. This contribution is significant at p value = 0.03, meaning that 72% variation in financial performance is explained by other factors not captured by the study. The F statistic is 0.0016 meaning that the model had weak explanatory power. Since the p value = 0.05, the study rejected the null hypothesis implying that FCF have a significant effect on financial performance of firms listed at the NSE.

$\bar{Q} = 0.0421 + 0.235FCF + €$

Where:

$\bar{Q}$ = Firm financial Performance

FCF = Free Cash Flows

€ = Error term

<div align="center">Regression Coefficient Table</div>

Variable	Coefficient	p-values
FCF	0.235	0.03
Constant	0.421	0.04
F-Statistic	Prob > Chi2 = 0.0016	
R-Squared	28%	

5.2 Free Cash Flows, Firm Characteristics and Firm Performance

The study sought to identify the effect of firm characteristics on the relationship between FCF and financial performance. The hypothesis tested was as follows:

H$_2$: Firm characteristics have a significant moderating effect on the relationship between FCF and financial performance of firms listed at the NSE

The study results are presented in table 7 below:

Table 7: Panel Data Results for Free Cash Flows, Firm Characteristics and Firm
Performance

Test Statistics

Test	Number	Statistics	Statistics Value	Degree of Freedom	Significance
Chaw	600	F	3.380	(103,596)	0.024
Hausman	600	Chi-Square	35	8	0.000

The test employed the use of panel data and used the Hausman test to determine
the most suitable model. Table 7(a) above shows the results from the Hausman
test. The Chi-square test statistic is 35 with a significant probability of 0.000
which is significant at 5 percent level of significance, meaning that the fixed
effects model is suitable.

Regression Co-Efficient

Variable	Coefficient	p-values
FCF	0.113	0.016
Firm Age	-0.201	0.045
Firm Size	0.105	0.012
Constant	-0.03	0.028
F-Statistic	Prob > chi2 = 0.024	
R-Squared	19%	
R-Squared Change	8%	

From the study findings, the intercept (constant) is negative and significant. This
is indicated by the coefficient of -0.03 and the p value of 0.028.   Firm
characteristics exhibit a statistically significant negative moderating effect on the
relationship between FCF and firm performance. Firm size has a coefficient of
0.105 with p value of 0.012 which is significant at 5 percent level of significance.
Firm age has a coefficient of -0.201 with a significant p value of 0.045. The
overall negative effect is attributed to the greater negative effect of firm age on the
other mediating variable (firm size).

From the findings, the effect of firm characteristics on the relationship between FCF and firm performance explains 19% variation in performance of listed firms. This implies that 81% of variation in performance of the NSE listed firms is not explained by the regression model. The null hypothesis was therefore rejected, implying that there is a statistically significant moderating effect of firm characteristics on the relationship between FCF and performance of firms listed at the NSE. The regression model that explains the variation in financial performance as a result of the moderating effect of firm characteristics is shown below:

$\bar{Q}$ = -0.03 + 0.113FCF - 0.201AGE + 0.105SIZ + €

Where: $\bar{Q}$ = Firm financial performance

FCF = Free cash flows

AGE = Firm age

SIZ = Firm size

€ = Error term

Table 8: Summary of Tests of Hypotheses, Results and Conclusions

Hypothesis	R^2	(p-value)	F-statistic	Conclusion
H_1: FCF have no significant effect on performance of firms listed at the NSE	0.28	0.03	3.528	Null Hypothesis rejected
H_2: Firm characteristics have no significant moderating effect on the relationship between free cash flows and financial performance of firms listed at the Nairobi securities exchange	0.19	0.028	0.024	Null Hypothesis rejected

6 Summary, Conclusion and Recommendation

6.1 Summary of Findings

This study was founded on the premise that FCF have an influence on financial performance, and that the relationship between the two is moderated by firm characteristics costs. The first objective of the study was set to find out the relationship between FCF and financial performance of firms listed at NSE. The findings reveal that FCF have a positive effect on financial performance. The effect of FCF was found to be statistically significant and hence the null hypothesis was rejected. The second objective was to determine the influence of firm characteristics on the relationship between FCF and financial performance of firms listed at the NSE; Results indicate that firm characteristics have a negative significant moderating effect on the relationship between FCF and financial performance of firms listed at the NSE. The study therefore rejected the null hypothesis.

6.2 Conclusion

FCF have a positive significant effect on financial performance. On the other hand, firm characteristics have a negative significant moderating effect on financial performance. The findings imply that NSE listed firms have effective control and oversight mechanisms which have allowed managers to make good investment decisions that are geared towards maximizing shareholders' wealth. Therefore, increasing FCF improves the financial performance of the NSE listed firms. This could be attributed to improved firm monitoring and CG which seem to have achieved the objective of aligning the interests of firm managers and those of shareholders (maximizing shareholders' wealth).

Finally, firm characteristics have revealed negative moderating effects on the relationship between FCF and financial performance. This is attributed to age of the firm (which revealed a negative moderating effect as opposed to firm size that indicated a positive effect). The negative effect of age outweighs the positive effect of size. It is therefore clear that there exists a linkage between FCF, firm characteristics and financial performance.

6.3 Limitations of the Study

The major theoretical motivation underlying this study is the FCF hypothesis. Traditionally, the board of directors keenly monitors decision makers who tend to divert resources to their own personal interests. The findings support this view and offer evidence that proper CG mechanisms yield higher firm financial performance. However, a probable limitation of the study is that it does not integrate an alternative for the board of directors' views, such as influencing managers' actions through an advisory role.

Secondly, the study focused on firms listed at the NSE which operate in a unique environment. Unique factors such as regulatory environment, culture and demographics limit the generalizability of the study results to other countries or markets. Lastly, the study used only two measures of firm characteristics (age and

size). Integrating other characteristics such as liquidity, growth prospects and dividend pay-out may yield different results. However, these limitations did not undermine the robustness and / or the rigor employed in the study.

6.4 Recommendations and Suggestions for Further Research

The findings show that there exists a positive relationship between FCF and financial performance. The study therefore recommends that firm managers, investors and other practitioners should focus more on the need for firms to generate FCF. Positive FCF indicate that the firm is generating more cash than is used to run the firm and reinvest to grow the business. Such excess funds can be distributed back to shareholders through dividends or share repurchase programs in cases where the firms have limited growth potential and the cash could not be better invested elsewhere.

The negative moderating effect of firm characteristics, particularly firm age points out to policy makers the need for policies, regulations and prudential guidelines that protect and strengthen older firms. This study employed cross sectional descriptive study design. Further studies should be conducted with a focus on longitudinal study design. Secondly, the study employed financial aspect of firm performance only. Further studies need to be conducted integrating both financial and non-financial outcomes. Lastly, the study targeted NSE listed firms only. Further studies should be conducted on private firms, parastatals, and/ or other agencies.

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