



Effect of Firm Characteristics on Financial Performance of Listed Firms in Nairobi Securities Exchange

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ABSTRACT

This study examined the effect of firm characteristics on financial performance of listed firms at the Nairobi Securities Exchange (NSE). The study was guided by the following objectives; to establish the relationship between financial leverage, liquidity, company size, and company age and financial performance of companies listed at the NSE. The study was designed to use quantitative research method utilizing data collected from companies listed at the NSE. To achieve the aims of this study, the study employed multiple linear regression analysis to observe the relationship between the dependent and independent variable. Questionnaires were used to collect primary data from finance officers of companies listed at NSE. The data collected was analysed by use of descriptive and inferential statistics. The study carried out the analysis of data with the help of statistical packages for SPSS and MS-Excel in analysing the data. A correlation and regression analysis was carried out to determine the effect of firm characteristics on financial performance of listed firms at the NSE. The findings revealed that variables (Company Age, Company Size, Leverage and Liquidity) contributed 68.8% to the total variability in the dependent variable (Financial Performance). From the findings the study concluded that firm characteristics have a direct effect on financial performance of listed firms in the NSE. Based on these findings, the study recommends that, policy makers and other stakeholders in the institutions under study focus on the discussed firm characteristics as they were found to have a significant effect on financial performance of listed firms in Kenya.

Keywords: financial leverage, liquidity, company size, Nairobi Securities Exchange

INTRODUCTION

Firm characteristics have become a focus of attention in the corporate world, research, and investment. The specific area of concern has been to establish if firm characteristics have an impact on firms' performance. A plurality of studies have been done to investigate the effect of certain firm characteristics on financial performance but many of the researches have focused on few characteristics and used others as control variables even though results for studies have established that the other characteristics have significant effect on financial performance of firms (Nunes, et al. 2009; Dogan, 2013). Some studies on the effect firm characteristics on firm performance have focused on specific segments of Nairobi Securities Exchange (NSE).

Globalisation and liberalisation of economies and free movement of capital has led to stiff and unprecedented competition in the capital markets of the world with developing countries being the main losers (Schmukler, 2004). This has led to declining returns to investment as capital moves freely over the globe. According to Ocloo, et al. (2014), various stakeholders have interests in the performance of firms: shareholders expect returns to their investment; creditors are keen to have their resources repaid as scheduled, workers are keen to work with stable firms, government interest is to have firms making profits so that they can pay taxes to finance its operations.

Financial Performance

Financial performance is the process of measuring the results of a company's policies and operations in monetary terms (Erastus, 2008). It identifies the financial strengths and weaknesses of a firm by establishing relationships between the items of the balance sheet and income statement. Erastus (2008) notes that profitability, return on equity and liquidity ratios among others provide valuable tools or measures to stakeholders to evaluate the past and current financial performance of a firm. For this study, Return of Assets and Return on Equity have been used as measures of financial performance of firms listed at the NSE.

Statement of the Problem

Performance of companies is a subject that has attracted much attention and interest from investors, investment experts, financial experts, researchers, the general public as well as the management of corporate entities. Literature on the relationship between firm characteristics and firm performance have come up with divergent conclusions. Studies focusing on firm leverage, liquidity, firm size and firm age on performance of listed companies have been scant.

As for leverage, Jensen and Meckling (1976), Brandes and Lewis (1986), Grossman and Hart, (1983) and Jensen (1986) claim that there is a positive effect of leverage on firm performance. On the other hand, studies by Fama and French (1993), Sharpe (1964), Lintner (1965), and Carhart (1997). Cai and Zhang (2011), Mwangi et al. (2014; Dogan, 2013; Nunes et al., 2009) conclude that there is a negative relationship between leverage and profitability.

On liquidity, Almajali, Alamo and Al-Soub (2012) established that there is a positive effect between liquidity and financial performance, while Binti and Binti (2010), found a negative effect of liquidity on firm performance.

On the relationship between firm age and firm performance (Durand & Coeuderoy, 2001) Coad et al. (2013); Ismael, Che Rose, Abdullah and Uli (2010); Gaur and Gupta (2011); and Ericson and Pakes (1995) support positive relationship. On the other hand, Agarwal and Gort (2012) conclude that there is a negative relationship between company age and performance.

Studies on causal relationship between size and profitability have been widely tested with inconclusive results. Some studies suggest that a positive relationship exists between company size and profitability (Lee and Giorgis, 2004; Raven Scaft, 1983; Samiee and Peters, 1990; Ural and Acavci, (2006). Amato and Burson (2007) examined firm size-profit relationship for firms operating in the financial services sector. The study revealed a negative influence of firm size on its profitability. These contradicting findings on the effect of firm characteristics; leverage, liquidity, company size and company age; and the moderating effect of corporate social responsibility on effect of firm characteristics on performance of firms form the basis for this study. This study, therefore sought to establish the effect of firm characteristics on financial performance of listed firms in NSE. The characteristics examined are leverage, liquidity, company size and company age.

LITERATURE SUMMARY

Over years, studies have been carried out employing various theories and models to explain how firms maximize their profits and the effect of firm characteristics on firm performance. The theories and models have sought to explain how leverage, liquidity, company size and company age impact performance of companies. Similarly, the impact of corporate social responsibility in enhancing competitiveness of firms has received considerable analytical literature.

Organizational Theory

This theory focuses on explanation of the association between firm size and firm age and performance. Findings from past studies devoted to establish the impact of firm size and firm age on firm performance have been inconclusive. Baumann and Kaen (2003) came up with an organizational theory that explains firm size in relation to profitability as well as organizational transaction costs, agency costs and span of control costs. Dean et al. (1998), explains that there is a relationship between company size and

performance because of sunk costs, concentration, vertical integration and overall industry profitability. Daft (1995) explains the importance of firm size in assessing financial performance. In the study, the researcher argues that large firms have multi-layer levels of management, greater number of departments, have more specialized skills and greater formalization and management controls. This institutional hierarchy established over time, makes larger firms highly hierarchical than small firms. Stinchcombe (1965) concludes that older and larger firms are more experienced and therefore enjoy above average performance. Shepherd, (1986) argues that size and age of the firm are correlated with market power and along with market power inefficiencies are created which becomes a source of inferior performance. Hannan and Freeman, (1984); Aldrich and Austen, (1986); Meyer and Zuker, (1989); and Miller and Chen (1994) have linked firm size and firm age to potential inertia. They have defined inertia as an inadequate or slow adaptation to change or resistance to fundamental changes, which often make firms miss out on profitability opportunities. According to Penrose (1959) large firms are able to generate superior performance because of their level of operation which includes diversified capabilities, ability to fully exploit economies of scale and scope. Accordingly, large size firms have formal procedures of conducting business, which ultimately makes implementation of operations, more effective. Leibensten (1976); and Shepherd (1986), hold a different view. They opine that firm size is corrected with market power and along with market power inefficiencies are created leading to inferior performance. These divergent views of the impact of company size and age on performance of firms inspired this study.

Financial Performance

Financial performance is often measured accounting by key performance indicators. These include Return on Assets (ROA), Operating Profit Margin, Earnings Before Interest and Income Tax, Return on Capital Employed, Return of Equity (Itter & Larker, 1997; Fraquelli & Vannoni, 2000; Crabtree & DeBusk, 2008). The advantage of using these measurements is that they are readily available. All profit-oriented businesses are required to produce annual financial statements where these measurements can be obtained from (Chenhall & Euske, 2007; Langfield – Smith, 2007).

RESEARCH METHODS

The study was designed to use quantitative research method utilizing data collected from companies listed at the NSE. To achieve the aims of this study, the study employed multiple linear regression analysis to observe the relationship between the dependent variable (financial performance) of firms listed at NSE and the independent variables (Questionnaires were used to collect primary data from finance officers of companies listed at NSE. The data collected was analysed by use of descriptive and inferential statistics. The study carried out the analysis of data with the help of statistical packages for SPSS and MS-Excel in analysing the data. A correlation and regression analysis was carried out to determine the effect of firm characteristics on financial performance of listed firms at the NSE.

RESEARCH FINDINGS

Response Rate

A sample of 237 respondents was used for the study. The study managed to collect 193 questionnaires out of which 186 were duly filled. However, after cleaning for outliers, 172 questionnaires remained, which represented a response rate of 72.6% of the sampled 237 respondents. While most scholars do not seem to agree on the acceptable level of response rate to form the basis for data analysis, Nachmias and Nachmias (2004) have posited that survey researches face a challenge of low response rate that rarely goes above 50%. They however suggest that a response rate of 50% and above is satisfactory and represents a good basis for data analysis.

Diagnostic Tests

Normality & Descriptive Statistics

The factor analysis of all the variables was done taking into account the recommendations by Leech, Barrett and Morgan (2014) that variable items should be retained if they are consistent with the theoretical labels and have factor loadings greater than or equal to 0.4. All the variables had a factor loading of greater than 0.4.

Reliability Check on the Variables

Cho and Kim (2015) assert that Cronbach's alpha is the most common measure of internal consistency (Reliability). The authors add that Cronbach's alpha is most commonly used when you have multiple Likert questions in a questionnaire that form a scale and you wish to determine if the scale is reliable. The study carried out a reliability test taking into account a value of 0.7 or higher as being sufficient (Bonett & Wright, 2015). From the results presented in Table 1.1, all the variables found to be reliable at Cronbach's Alphas were higher than the threshold of 0.7.

Table 1.1: Reliability Analysis of the Variables

Variable	Reliability Statistics	
	Cronbach's Alpha	N of Items
CSR	.919	10
Leverage	.914	8
Liquidity	.867	6
Company Size	.875	6
Company Age	.873	6
Firm Performance	.881	8

Normality Check for the Dependent Variable (Firm Performance)

Normality checks are used to determine if a data set is well-modelled by a normal distribution (Faraway, 2016). Ghasemi and Zahediasl (2012) poised that a test of normality is done by inspecting the output of the normal Q-Q plot for the dependent variable. A normality check was done by generating a Normal Q-Q plot from the data of the dependent variable (Firm Performance) using the SPSS software. From the findings, the scatter dots fell within the line of best fit as shown in Figure 1.1, and this led the study to conclude that the dependent variable was normally distributed.

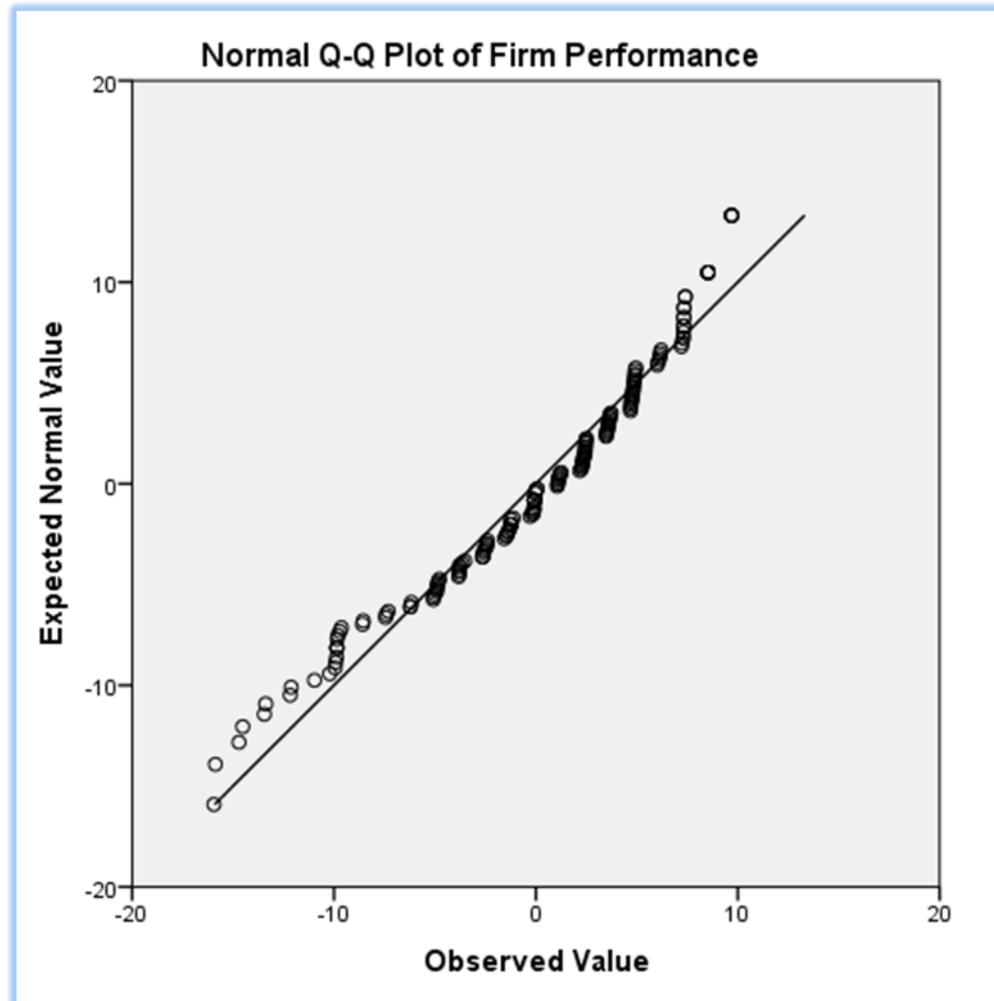


Figure 1.1: Normal Q-Q Plot of the Dependent Variable

Checking for Multicollinearity between the Dependent, Independent and the Moderating Variables

According to Yoo *et al.* (2014), multicollinearity results in the estimate of one variable impacting on the dependent variable while controlling for other variables tends to be less precise than if predictors were uncorrelated. Variance inflation factor (VIF) method is used to test for multicollinearity (Montgomery, Peck & Vining, 2015). The study sought to find out if multicollinearity existed between the variables. According to Allison (2015), the general rule of thumb is that VIFs exceeding 10 are signs of presence of multicollinearity requiring correction. From Table 1.2, there was no multicollinearity between the variables as none had a VIF exceeding 10.

Table 1.2 Multicollinearity Check between the Variables Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	Leverage	.193	5.188
	Liquidity	.175	5.703
	Company Size	.343	2.913
	Company Age	.490	2.041
2	Leverage	.169	5.934
	Liquidity	.173	5.772
	Company Size	.335	2.987
	Company Age	.476	2.102
	CSR	.304	3.291

a. Dependent Variable: Firm Performance

Autocorrelation between the Variables

The study carried out an analysis to determine whether there was presence of autocorrelation between the variables. Durbin-Watson test was used to check for the presence of autocorrelation between variables. According to Gujarati (2014), Durbin-Watson statistic ranges from 0 to 4. A value near 0 indicates presence of positive autocorrelation while a value close to 4 indicates presence of negative autocorrelation. A value ranging from 1.5 to 2.5 indicates that there is no presence of autocorrelation between the variables. The results presented in Table 1.3 indicated that there was no autocorrelation between the variables since the Durbin-Watson coefficient was 2.166.

Table 1.3 Autocorrelation Between the Dependent and Independent Variables

Model Summary ^b	
Model	Durbin-Watson
2	2.166 ^a

a. Predictors: (Constant), Company Age, Company Size, Leverage, Liquidity, CSR

b. Dependent Variable: Firm Performance

Descriptive Statistics for Leverage

The study generated a table for the Leverage from SPSS data and the findings were summarised in Table 1.4. From the table, 47.1% agreed that their company’s current bank is flexible when financing is needed in financial distressed times, 48.8% agreed that to a large extent increasing cost of external capital limits investment, 42.4% agreed that in the presence of low growth opportunities increasing managerial share ownership increases the magnitude of the leverage-investment relationship, 41.3% agreed that providers of external capital recognize the potential of their investment, 41.3% agreed that they can scale investments projects with a different risk in a different category, 42.4% agreed that increasing external share ownership decreases the magnitude of the leverage-investment relationship, 50.6% majority agreed that in the presence of low growth opportunities the relationship between leverage and debt is negative, while 41.3% agreed that the magnitude of the overinvestment problem differs from the magnitude of the underinvestment problem in their company

Table 1.4: Descriptive Statistics for Leverage

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The company's current bank is flexible when financing is needed in financial distressed times	1.2%	3.5%	20.9%	47.1%	27.3%
To a large extent increasing cost of external capital limits investment	0.6%	5.8%	22.1%	48.8%	22.7%
In the presence of low growth opportunities increasing managerial share ownership increases the magnitude of the leverage-investment relationship	0.6%	5.2%	23.3%	42.4%	28.5%
Providers of external capital recognize the potential of our investment	1.7%	7.0%	21.5%	41.3%	28.5%
We scale investments projects with a different risk in a different category	1.2%	3.5%	22.7%	41.3%	31.4%
Increasing external share ownership decreases the magnitude of the leverage-investment relationship	1.2%	4.1%	16.9%	42.4%	35.5%
In the presence of low growth opportunities the relationship between leverage and debt is negative	2.9%	5.8%	22.7%	50.6%	18.0%
The magnitude of the overinvestment problem differs from the magnitude of the underinvestment problem	1.2%	5.8%	23.8%	41.3%	27.9%

Descriptive Statistics for Liquidity

The descriptive statistics for the Liquidity were generated from SPSS data viable table and the results were summarised in Table 1.5. The table shows that a majority (40.1%) agreed that the board has established liquidity policies, 43.0% agreed that liquidity policies and procedures are adequate, 43.6% agreed that appropriate risk limits have been established in their organization, 44.8% agreed that the person or committee charged with oversight have the experience and competence to monitor liquidity, 50.6% agreed that strategic plans are integrated with liquidity monitoring, 47.1% agreed that there is adequate liquidity management in their organization.

Table 1.5: Descriptive Statistics for Liquidity

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The board has established liquidity policies	1.2%	1.7%	22.7%	40.1%	34.3%
Liquidity policies and procedures are adequate	1.2%	9.9%	18.0%	43.0%	27.9%
Appropriate risk limits have been established in our organization	0.6%	5.8%	18.6%	43.6%	31.4%
The person or committee charged with oversight have the experience and competence to monitor liquidity	0.6%	5.2%	22.7%	44.8%	26.7%
Strategic plans are integrated with liquidity monitoring	1.7%	3.5%	25.6%	50.6%	18.6%
There is adequate liquidity management	1.7%	5.8%	27.3%	47.1%	18.0%

This finding is in line with that of Almajali, Alamo and Al-Soub (2012) who established that there is a positive effect between liquidity and financial performance. Also, Siregar and Utama (2005) found out that a firm with great total assets shows that the firm has good or positive cash flow and it is considered to have good prospects in the long term. It also reflects that the firm is relatively more stable and better able to generate profits than a firm with small total assets.

Descriptive Statistics for Company Size

The study sought to determine the descriptive statistics for Company Size. From Table 1.6, 45.9% agreed that their firm size gives them more market power that provides them the possibility to charge higher prices and earn higher profits, 46.5% agreed that due to their firm size they are able to cope better with changes and they have better chances to offset random losses due to market uncertainties, 44.2% agreed that as a result of their firm size they have favourable financing conditions, 54.1% agreed that their firm size allows them economies of scale due to their bargaining power over supplies, 39.5% agreed that their firm size gives them advantage in the R&D process which leads to a superior ability to exploit the outcomes of the study, while 39.0% agreed that they have a higher asset turnover ratio as a result of the size of their firm.

Table 1.6: Descriptive Statistics for Company Size

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Our firm size gives us more market power that provides us the possibility to charge higher prices and earn higher profits	1.7%	5.2%	23.8%	45.9%	23.3%
Due to our firm size we are able to cope better with changes and we have better chances to offset random losses due to market uncertainties	2.3%	5.2%	22.7%	46.5%	23.3%
As a result of our firm size we have favourable financing conditions	3.5%	6.4%	19.2%	44.2%	26.7%
Our firm size allows us economies of scale due to our bargaining power over supplies	3.5%	3.5%	27.3%	54.1%	11.6%
Our firm size gives us advantage in the R&D process which leads to a superior ability to exploit the outcomes of study.	4.1%	12.2%	28.5%	39.5%	15.7%
We have a higher asset turnover ratio as a result of the size of our firm	2.3%	9.3%	21.5%	39.0%	27.9%

In a similar study, Hvide and Moen (2007) concluded that larger firms are more competitive than smaller firms in harnessing economies of scale and enjoy a higher level of profit.

Descriptive Statistics for Company Age

A descriptive statistics table for Company Age was generated. The results were summarized as shown in Table 1.7. From the table, 51.2% agreed that their company has been able to enjoy superior performance due to the experience and skills acquired over the years it has existed, 41.9% agreed that new firms are unable to achieve economies of scale and they rarely have the sufficient managerial resources and expertise, 43.0% strongly agreed that old firms are not flexible enough to make rapid adjustment and hence face barriers to innovate and make profit, 53.5% agreed that older firms own antiquated machines, plants and equipment that limit their capability to innovate, 52.3% agreed that older firms have the ability to innovate positively due to accumulated experience and knowledge, while a majority (47.1%) agreed that New firms are hampered by their need to make search processes in the prelude to every new problem they counter

Table 1.7: Descriptive Statistics for Company Age

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Our company has been able to enjoy superior performance due to the experience and skills acquired over the years it has existed	0.6%	4.1%	15.1%	51.2%	29.1%
New firms are unable to achieve economies of scale and they rarely have the sufficient managerial resources and expertise	0.6%	2.3%	25.6%	41.9%	29.7%
Old firms are not flexible enough to make rapid adjustment and hence face barriers to innovate and make profit	0.0%	4.1%	18.6%	34.3%	43.0%
Older firms own antiquated machines, plants and equipment that limit their capability to innovate	0.0%	1.7%	12.2%	53.5%	32.6%
Older firms have the ability to innovate positively due to accumulated experience and knowledge	0.0%	2.9%	19.2%	52.3%	25.6%
New firms are hampered by their need to make search processes in the prelude to every new problem they counter	0.0%	2.9%	18.0%	47.1%	32.0%

Descriptive Statistics for Firm’s Financial Performance

The study sought to find the descriptive statistics of Firm’s Financial Performance. The findings were summarized in Table 1.8. From the table, 48.8% said their Asset Base was good, 48.3% rated their Gross Profit Margin as good, 44.8% said their Return on Assets was good, 48.3% rated their average revenue as good, 48.8% rated their company’s operating margin as good, 49.4% rated their company’s Return on Equity as good, 38.4% rated return on capital employed in their company as good, while a 44.8% majority said Net Profit was good.

Table 1.8: Descriptive Statistics for Financial Performance

	Poor	Fair	Average	Good	Very Good
Asset Base	0.6%	1.2%	19.2%	48.8%	30.2%
Gross Profit Margin	0.6%	4.1%	14.0%	48.3%	33.1%
Return on Assets	1.7%	7.6%	34.3%	44.8%	11.6%
Average revenue	0.0%	4.7%	20.9%	48.3%	26.2%
Operating margin	0.0%	5.2%	16.9%	48.8%	29.1%
Return on Equity	0.0%	2.3%	18.6%	49.4%	29.7%
Return on capital employed	0.6%	4.7%	14.0%	38.4%	42.4%
Net Profit	0.0%	5.2%	14.5%	44.8%	35.5%

Inferential Statistics

Correlation between the Variables

The study generated a correlation matrix between the variables. The findings were presented in Table 1.9. The table shows that all the variables had an above average positive and statistically significant correlation with firm performance.

Table 1.9: Correlation between the Variables

		Correlations					
		Firm Performance	Leverage	Liquidity	Company Size	Company Age	CSR
Firm Performance	Pearson Correlation	1	.679**	.682**	.692**	.792**	.672**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	172	172	172	172	172	172
Leverage	Pearson Correlation	.679**	1	.890**	.766**	.672**	.812**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	172	172	172	172	172	172
Liquidity	Pearson Correlation	.682**	.890**	1	.787**	.684**	.780**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	172	172	172	172	172	172
Company Size	Pearson Correlation	.692**	.766**	.787**	1	.650**	.717**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	172	172	172	172	172	172
Company Age	Pearson Correlation	.792**	.672**	.684**	.650**	1	.653**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	172	172	172	172	172	172
CSR	Pearson Correlation	.672**	.812**	.780**	.717**	.653**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	172	172	172	172	172	172

** . Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

Regression analysis between the dependent and independent variables was carried out and the findings were presented and discussed in the sections that follow.

Regression Analysis Between Firm Performance and Leverage

Regression analysis between the dependent variable (Firm Performance) and Leverage was done as summarised in Table 1.10. From the model R^2 was .460 implying that 46.0% of the total variability in the dependent variable (Firm Performance) could be explained by Leverage.

Table 1.10: Model Summary Table of Firm Performance and Leverage

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.679	.460	.457	3.575

Predictors: (Constant), Leverage

Regression Analysis between Firm Performance and Liquidity

The study carried out a regression analysis to establish the relationship between Liquidity and Firm Performance of companies listed in the NSE. The findings were summarized in Table 1.11. From the Table, R^2 was .466 which implies that 46.6% of the total variability in the dependent variable (Firm Performance) is influenced by Liquidity.

Table 1.11: Model Summary for Firm Performance and Liquidity moderated by CSR

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.682	.466	.463	3.557

a. Predictors: (Constant), Liquidity

Regression Analysis between Firm Performance and Company Size

A regression analysis was carried out to establish the relationship between Firm Performance and Company Size and the findings were summarized in Table 1.12.

The model summary Table 1.12 shows that R^2 is .479 which implies that 47.9% of the total variability in the dependent variable (Firm Performance) is influenced by Company Size.

Table 1.12: Model Summary Table of Firm Performance and Company Size

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.692	.479	.476	3.512

Predictors: (Constant), Company Size

Regression Analysis Between Firm Performance and Company Age

The study carried out a regression analysis to establish the relationship between firm performance and company age. The results of the analysis were presented in Table 1.13

The model Summary shows that the coefficient of determination R^2 is .628 meaning that 62.8% of the total variability in the dependent variable (Firm Performance) could be explained by Company Age.

Table 1.13: The Model Summary of Firm Performance and Company Age

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.792 ^a	.628	.626	2.969

a. Predictors: (Constant), Company Age

SUMMARY OF THE STUDY FINDINGS

Leverage and Financial Performance

In the first objective, the study sought to establish if there is a relationship between financial leverage and financial performance of listed firms in NSE. The study established that 47.1% of the respondents agreed that their company’s current bank is flexible when financing is needed in financial distressed times, 48.8% agreed that to a large extent increasing cost of external capital limits investment, 42.4% agreed that in the presence of low growth opportunities increasing managerial share ownership increases the magnitude of the leverage-investment relationship, 41.3% agreed that providers of external capital recognize the potential of their investment, 41.3% agreed that they can scale investments projects with a different risk in a different category, 42.4% agreed that increasing external share ownership decreases the magnitude of the leverage-investment relationship, 50.6% majority agreed that in the presence of low growth opportunities the relationship between leverage and debt is negative, while 41.3% agreed that the magnitude of the overinvestment problem differs from the magnitude of the underinvestment problem in their company. Regression analysis between the dependent variable (Financial performance) and Leverage revealed that 46.0% of the total variability in the dependent variable (Financial performance) could be explained by Leverage.

Liquidity and Financial Performance

In the second objective, the study sought to determine the effect of liquidity on financial performance of listed firms in NSE. The descriptive statistics for liquidity showed that a majority (40.1%) agreed that the board has established liquidity policies, 43.0% agreed that liquidity policies and procedures are adequate, 43.6% agreed that appropriate risk limits have been established in their organization, 44.8% agreed that the person or committee charged with oversight have the experience and competence to monitor liquidity, 50.6% agreed that strategic plans are integrated with liquidity monitoring, 47.1% agreed that there is adequate liquidity management in their organization. The study carried out a regression analysis to ascertain the influence that liquidity had on financial performance. The findings revealed that 46.6% of the total variability in the dependent variable (financial performance) was influenced by liquidity.

Company Size and Financial Performance

In the third objective, the study sought to establish the relationship that existed between Company size and Financial Performance of listed firms in NSE. The study findings revealed that 45.9% agreed that their firm size gives them more market power that provides them the possibility to charge higher prices and earn higher profits, 46.5% agreed that due to their firm size they are able to cope better with changes and they have better chances to offset random losses due to market uncertainties, 44.2% agreed that as a result of their firm size they have favorable financing conditions, 54.1% agreed that their firm size allows

them economies of scale due to their bargaining power over supplies, 39.5% agreed that their firm size gives them advantage in the R&D process which leads to a superior ability to exploit the outcomes of study, while 39.0% agreed that they have a higher asset turnover ratio as a result of the size of their firm. From the regression analysis between the dependent variable (Firm Performance) and Company Size, R^2 was .479 which implied that 47.9% of the total variability in the dependent variable (Firm Performance) is influenced by Company Size.

Company Age and Financial Performance

In the fourth objective the study sought to establish the effect of company age on financial performance of listed firms in NSE. The study found that 51.2% agreed that their company has been able to enjoy superior performance due to the experience and skills acquired over the years it has existed, 41.9% agreed that new firms are unable to achieve economies of scale and they rarely have the sufficient managerial resources and expertise, 43.0% strongly agreed that old firms are not flexible enough to make rapid adjustment and hence face barriers to innovate and make profit, 53.5% agreed that older firms own antiquated machines, plants and equipment that limit their capability to innovate, 52.3% agreed that older firms have the ability to innovate positively due to accumulated experience and knowledge, while a majority (47.1%) agreed that New firms are hampered by their need to make search processes in the prelude to every new problem they counter. The regression analysis between Financial Performance and Company Age revealed that 62.8% of the total variability in the dependent variable could be explained by Company Age. The influence was found to be statistically significant as the p-value was less than the 5% threshold at .000.

CONCLUSIONS

In the first objective the study sought to establish nature relationship between financial leverage and financial performance of listed firms in NSE. From the findings, Leverage was found to have a positive significant influence on the total variability in the dependent variable -financial performance. The influence was statistically significant and therefore, the null hypothesis that there is no significant relationship between leverage and financial performance of listed firms in NSE was rejected. Based on this finding, the study concluded that leverage had a statistically significant influence on financial performance of listed firms in NSE. This finding agrees with Jensen and Meckling (1976), Brandes and Lewis (1986), Grossman and Hart, (1983) and Jensen (1986) claim that there is a positive effect of leverage confirm performance.

In the second objective, the study sought to determine the kind of relationship that existed between liquidity and financial performance of listed firms in NSE. From the findings, Liquidity had a positive influence on the Dependent variable (financial performance). The null hypothesis that there is no significant relationship between liquidity and financial performance of listed firms in NSE was rejected and instead the alternative hypothesis that there is a statistically significant relationship between liquidity and financial performance of listed firms in NSE was accepted. The study therefore concluded that, liquidity had an impact on financial performance of listed firms in NSE. The conclusion agrees with findings of Almajali, Alamo and Al-Soub (2012) who established that there is a positive effect between liquidity and financial performance.

In the third objective, the study sought to establish the relationship that existed between Company size and Financial Performance of listed firms in NSE. From the findings, company size had a positive significant influence on financial performance of listed firms in NSE. The null hypothesis that, there is no significant relationship between Company size and financial performance of listed firms in NSE was rejected and instead the alternative hypothesis that, there is a significant relationship between Company size and financial performance of listed firms in NSE was accepted. Considering this finding, the study concluded that Company size had an influence on financial performance of listed firms in NSE. It also reflects that the firm is relatively more stable and better able to generate profits than a firm with small

total assets. The finding concurs with studies which suggest that a positive relationship exists between company size and profitability (Lee and Giorgis, 2004; Raven Scaft, 1983; Samiee and Peters, 1990; Ural and Acavci, (2006).

In the fourth objective the study sought to establish if a relationship existed between company age and financial performance of listed firms in NSE. The findings revealed that Company Age had a statistically significant positive influence on financial performance of listed firms in NSE. The null hypothesis that, there is no significant relationship between company age and financial performance of listed firms in NSE was rejected and the alternative hypothesis was accepted. Hence, the study concluded that, company age has an impact on financial performance (as measured by return on assets) of listed firms in NSE. This conclusion agrees those arrived at by (Durand & Coeuderoy, 2001) Coad et al. (2013); Ismael, Che Rose, Abdullah and Uli (2010); Gaur and Gupta (2011); and Ericson and Pakes (1995) which support positive relationship between company age and firm performance.

RECOMMENDATIONS

The main objective of this study was to establish the effect of firm characteristics on financial performance of listed firms in NSE. The findings revealed that, firm characteristics have a significant effect on the financial performance of listed companies in the NSE. Based on these findings, the study recommends that policy makers and other stakeholders in the institutions focus on aligning their firm attributes as they were found to have a significant effect on financial performance of listed firms in the NSE.

REFERENCES

- Agarwal, R., & Gort, M. (2002). Firm Product Lifecycles and Firm Survival. *American Economic Review*, 92, 184-190.
- Aldrich, H.E. and Austen, E. (1986). Even Dwarfs started small: liabilities of size and age and their strategic implications. In: Straw, B., Cummings, L. (eds.), *Research in Organizational Behaviour*, 8. JAI Press, Greenwich, CT, 16-98.
- Allison, P. (2015). *Statistical Horizons: When can you safely ignore multicollinearity?*
- Almajali, A.Y., Alamo, S.A., Al-Soub, Y.Z. (2012). Factors Affecting Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange, *Journal of Management Research*, Vol 4(2), pp. 266-289.
- Amato, L.H. and Burson, T.E. (2007). The Effects of firm size on profit rates in the Financial services. *Journal of Economics and Economic Education Research*, Vol.8, Issue 1, pp.67-81.
- Barnett, M.L., (2007). Stakeholder Influence Capacity And The Variability of Financial Returns To Corporate Social Responsibility", *Academy Of Management Review*, 32(3), pp.794-816.
- Baumann, H.D. and Kaen, F.R. (2003). Firm size, employees and profitability in U.S. manufacturing industries. *Social Science Research Network*, January, 2013.
- Brandes, J.A. and Lewis, T.R. (1986). Oligopoly and Financial Structure, The Limited Liability Effect. *Academy of Management Journal*, 40 (3), 560-583.
- Cai, J., Zhang, Z. (2011): Leverage Change, Debt Overhang, And Stock Prices, *Journal of Corporate Finance* 17, pp.391– 402.
- Carhart, M.M. (1997). On Persistence in Mutual Fund Performance, *Journal of Finance*, 52(1), pp. 57-82.
- Chenhall, R.H. & Euske, K.J. (2007). The Role of Management Control Systems in Planned Organizational Change: An Analysis of Two Organizations. *Accounting, Organizations and Society*, 32, pp. 601-637. Performance measures. *European Management Journal*, 25(4), pp. 266-282.
- Cho, E., & Kim, S. (2015). Cronbach's coefficient alpha: Well known but poorly understood. *Organizational Research Methods*, 18(2), 207-230.

- Crabtree, A.D. & DeBusk, G.K. (2008). The effects of adopting the balanced scorecard on shareholder returns. *Advances in Accounting*, 24(1), pp. 8 – 15.
- Daft, R.L. (1995). *Organization Theory and Design* (5 ed.), Minneapolis, St. Paul: *MN West Publishing Company*.
- Dean, T.J., Robert, L.B., & Bamford, C.E. (1998). Differences in Large and Small Firm Responses To Environmental Context. Strategic Implications from Comparative Analysis Of Business Formations. *Strategic Management Journal*, 19, 709-728.
- Dogan, M. (2013). Does firm size affect firm profitability? Evidence from Turkey: *Journal of Finance and Accounting*, 4(4).
- Erasmus, P.D. (2008). Evaluating Value Based Financial Performance Measures. *Corporate Ownership & Control/Vol. 6, Issue 1 Fall 2008*.
- Fama, E.F. and French, K.R. (1993).The Cross-Section of Expected Stock Returns. *Journal of Finance*, 47(2), pp.427-466.
- Faraway, J. J. (2016). Extending the linear model with R: generalized linear, mixed effects and nonparametric regression models (Vol. 124). *CRC press*.
- Fraquelli, G. & Vannoni D. (2000). Multidimensional performance in telecommunications regulation and competition: Analysing the European major players. *Information Economics and policy*. 12(1), 27-46.
- Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: a guide for non-statisticians. *International journal of endocrinology and metabolism*, 10(2), 486-489.
- Griffin, J.J., & Mahon, J.T. (1997). The Corporate Social Performance and Corporate Financial Performance Debate, *Business and Society*, 36, 5-32.
- Grossman, S., and Hart, O. (1983). An Analysis of Principal-Agent Problem. *Econometrica* 51: pp. 7-45.
- Gujarati, D.N. (2014). *Econometrics by example*. Palgrave Macmillan.
- Gujarati, D.N. (2003, 2009). *Basic Econometrics*. United States Military Academy, West Point. Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies, Inc. 1221 Avenue of Americas, New York. NY, 10020.
- Gupta, P. Srivastava, A. Sharma, D. (2010). Capital Structure and Performance: evidence from India. Dept. of Accounting Gautam Buddha University, Greater Noida, India, *Staff Papers*.
- Hannan, M.T. and Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*, 49(2), 149-164.
- Hvide, H.K., & Moen, J. (2007). Liquidity Constraints and Entrepreneurial Performance. Retrieved November 2008, retrieved from: <http://ssrn.com/abstract=1012012.com>
- Itter, C.D., Larker, D.F. & Rajan, M.V. (1997). The choice of performance measure in annual bonus contracts. *The Accounting Review*, (April 1997). pp. 231-255.
- Jensen, M.C. (1986). Agency Costs of Free Cash flow Corporate Finance and Takeovers. *American Economic Review*, 76, 323-39
- Jensen, M.C., and Meckling, W.H., (1976). The Theory of the Firm: Managerial Behaviour, Agency Cost and Ownership Structure, *Journal of Financial Economics*, 3,303-360.
- Langfield – Smith, K. (2007). A Review of Quantitative Research in Management Control Systems and Strategy. In: Chapman, C.S., Hopwood, A.G. Shields, M.D. (Eds.). *Handbook of Management Accounting Research, Vol. 1 Elsevier, Oxford, U.K. pp. 753-784*.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2014). *IBM SPSS for intermediate statistics: Use and interpretation*. Routledge.
- Leibenstein, H. (1976). *Beyond Economic Man*. Cambridge, M.A. *Harvard University Press*.
- Lintner, J. (1965). The Valuation of Risk Assets and Selection of Risk Investments in Stock Portfolios and Capital Budgets. *Review of Economics and Statistics*, 47(1): 221-245.
- Meyer, M.W. and Zuker, L.G. (1989). *Permanent Failing Organization*. Sage, Beverly Hill, CA.

- Miller, D. and Chen, (1999). The Market Reaction to International Cross-Listing: Evidence from Depositary Receipts: *Journal of Financial Economics*, 51, pp103-123. Mishkin, F.S., & Eakins, S.G. (2006). Financial markets and institutions. Pearson Education India.
- Modigliani, F., and Miller, M.H. (1959, 1963). The Cost of Capital, Corporation Finance and the Theory of Investment. *Journal of American Economic Review*, 53, pp. 433-443.
- Montgomery, D. C., Peck, E. A., & Vining, G. G. (2015). *Introduction to linear regression analysis*. John Wiley & Sons. New York.
- Moskowitz, M. (1972). Profiles in Corporate Responsibility: The Ten Worst and Ten Best: *Business and Society Review*, 13:28-42.
- Mwangi C. I. & Oyenje, J.J.(2013). The Relationship between Corporate Social Responsibility Practices and Financial Performance of Firms In The Manufacturing, Construction and Allied Sector Of The Nairobi Securities Exchange. *International Journal of Business, Humanities And Technology*.
- Mwangi, L.W., Muathe, S.K., and Kosimbei, G. (2014). Relationship Between Capital Structure and Performance of Non-Financial Companies Listed In the Nairobi Securities Exchange, Kenya. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, Vol.1 Issue 2 pp.72-90.
- Mwangi, J.M. (2016). The Effect Of Financial Structure on Financial Performance of Firms Listed at East Africa Securities. Thesis submitted to Jomo Kenyatta University of Agriculture and Technology in Fulfilment for Degree of Doctor of Philosophy in Business Administration.
- Myers, S.C., (1984). The Capital Structure Puzzle. *Journal of Finance*, 34, pp.575-592.
- Myers, S.C., and Majluf, N., (1984). Corporate Financing and Investment Decisions When Firms Have Information that Investment Do Not Have. *Journal of Financial Economics*, 13, 187-221.
- Myers, S.C., (2001). Capital Structure. *The Journal of Economic Perspectives*, 15(2), 81-102.
- Nachmias, C.F. and Nachmias, D. (2004). *Research Methods in the social sciences*, 5th.Ed. London: Arnold.
- Nunes, P.J., Serrasqueiro, Z.M. & Sequeira, T.N. (2009). Profitability in Portuguese Service Industries: A Panel Data Approach. *The Service Industries Journal*, 295(5), 693-707.
- Ocloo, C.E., Akaba, S., & Worwui-Brown, D.K., (2014). Globalization and Competitiveness, Challenges of Small and Medium Enterprises (SMEs) in Accra, Ghana, *International Journal of Business and Social Science Vo.5 No.4 (Special Issue – March 2014)*.
- Penrose, E.T. (1959). The Theory of the growth of the firm. Oxford: *Basil Blackwell*.
- Schmukler, S. L. (2004). Financial Globalization: Gain and Pain for Developing Countries. *Economic Review*, Vol. 89, No. 2, 2004. *Reserve Bank of Atlanta, Second Quarter 2004*.
- Sharpe, W.F. (1964). Capital Asset Prices. A Theory of Market Equilibrium under Conditions of Risk, *Journal of Finance*, 19: 3, pp. 425-442.
- Shepherd, W.G. (1986). On the Core Concepts of Industrial Economics, in H.W. De Jong and W.G. Shepherd, eds, *Mainstreams in Industrial Organization* Dordvecht: *Martinus Nijhoff Publishers*.
- Siregar, S.V & Utama, S. (2005). Pengaruh Struktur Kepemilikan, Ukuran Perusahaan, and Paraktek Corporate Gorvanance, Earnings Management, *Simposium Nasional Akuntans*. Solo 15-16 September, 2005.
- Stinchcombe, A.L. (1965). Social Structure and Organizations in J.G. March, (ed.) *Handbook of Organizations*. Chicago: *Rand McNally*.
- Yoo, W., Mayberry, R., Bae, S., Singh, K., He, Q. P., & Lillard Jr, J. W. (2014). A study of effects of multicollinearity in the multivariable analysis. *International journal of applied science and technology*, 4(5), 9.