

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/337844036>

Effect of Firm Specific Factors on Financial Performance of Non-Financial Firms Listed At Nairobi Securities Exchange

Article · January 2016

CITATION

1

READS

28

3 authors, including:



Abdulkadir Sheikh Ali Banafa

Technical University of Mombasa

15 PUBLICATIONS 20 CITATIONS

SEE PROFILE

Effect of Firm Specific Factors on Financial Performance of Non-Financial Firms Listed At Nairobi Securities Exchange

Geoffrey Mose Bongoye, Dr. Abdulkadir Banafa and
Dr. William Kingi

Abstract: *The many years question on how firms choose their capital structure and its effects on financial performance still remain unanswered. This study sought to explore the effect of firm specific factors on financial performance of non-financial firms listed at NSE. The study used secondary panel data over the 5 year-period from 2011 to 2015 covering a target population of 37 non-financial firms listed at NSE. The findings of the study revealed that firm specific factors generally have a positive relationship with financial performance (measured by ROA) of non-financial firms listed at NSE. Firm size, firm liquidity and growth opportunities were found to have a positive relationship with financial performance as measured by ROA. On the other hand, asset tangibility has a significant negative relationship with financial performance of non-financial firms listed at NSE.*

Key Words: *Asset Tangibility; Financial Performance; Firm Liquidity; Firm Size; Firm Specific Factors; and Growth Opportunities.*

INTRODUCTION

Capital structure concept is one of the most puzzling issues in corporate finance literature and it has stimulated passionate debate in the corporate finance management area for nearly half-century (Kariuki and Kamau, 2014). The financial performance of firms is directly affected by the capital structure decisions thus making it a vital managerial decision. Borgia and Yan (2013) argue that capital structure is an important corporate decision because it could bring an optimal financing mix which could maximize the market value of the firm. For a firm to continue as a going concern, the management must determine an appropriate capital structure. However, managers and practitioners still lack adequate guidance for attaining optimal financing decision (Kibet, Tenei&Mutwol, 2011).

Brigham and Michael (2001) observe that there are wide variations in capital structure amongst industries and among individual firms within those industries over time. On the same line of thought, Yong *et al.* (2008) assert that the proportion of debt in a firm's capital structure fluctuates extensively across seemingly comparable firms. Capital structure decision is even more complicated when it is examined in an international context, particularly in developing countries where markets are characterized by controls and institutional constraints (Boateng, 2004). Truly, most of the literature seeking an association between capital structure and the firm specific or industry characteristics has focused on the experience of developed countries (Borgia & Newman, 2012), where they have many institutional similarities. However, developing markets, with several institutional differences, have hardly been the subject of research on the relationship between firm specific capital structure determinants and financial performance.

The results by Modigliani and Miller (1958 and 1963) set the ground for many researchers to explore further the determinants of corporate capital structure decisions. Up to date, there has been no general agreement on the capital structure debate. However, there is a common agreement that the capital structure that a firm opts for is a choice between debt and equity in financing its long term investments. Therefore, a value maximizing firm will establish an optimal capital structure and then raise new capital to target this optimal structure over time (Brigham and Ehrhardt, 2008). Consequently, the current changing and evolving environment causes rating firms in terms of credit to depend partly on their capital structure and strategic planning, requiring them to select effective resources to achieve the wealth maximizing goal of shareholders (Drobtetz and Fix, 2003).

1.2 Statement of the Problem

Studies analyzing the impact of financing decisions on performance and profitability usually employ some of the most relevant capital structure

determinants (Vatavu, 2015). The difficulty facing managers in the choice of an optimal capital structure is how these determinants affect firms' financial performance, since financial performance is crucial to firm value and consequently, its survival.

Most of the previous studies (Antoniou *et al.*, 2002; Boateng, 2004; Ngugi 2008 and Githira, 2015) aimed at examining the significance of the determinants believed to have impact on capital structure decisions. These studies also focused on the general factors that affect capital structure. This study adopts a different approach so as to fill the gaps left by the previous studies. First, it focuses only on firm specific factors, instead of examining a series of factors. Secondly, the significance of these factors are verified in connection with the financial performance of non-financial firms. Finally, the relationship between capital structure and financial performance is compared in relation to asset tangibility, firm size, firm liquidity and growth opportunities which is an attempt of in-depth analysis. Therefore, the objective of this study was to establish the effect of firm specific factors on financial performance of non-financial firms listed at NSE.

1.3 The Study objectives

The main objective of this study was to establish the effect of firm specific factors on financial performance of non-financial firms listed at NSE. The study was guided by the following specific objectives:

- i) To establish whether asset tangibility has an effect on financial performance of non-financial firms listed at NSE.
- ii) To determine whether firm size has an effect on financial performance of non-financial firms listed at NSE.
- iii) To examine whether firm liquidity has an effect on financial performance of non-financial firms listed at NSE.
- iv) To assess whether growth opportunities has an effect on financial performance of non-financial firms listed at NSE.

1.4 Research Hypotheses

H₀₁: Asset tangibility has no significant effect on financial performance of non-financial firms listed at NSE.

H₀₂: Firm size has no significant effect on financial performance of non-financial firms listed at NSE.

H₀₃: Firm liquidity has no significant effect on financial performance of non-financial firms listed at NSE.

H₀₄: Growth opportunities has no significant effect on financial performance of non-financial firms listed at NSE.

1. LITERATURE REVIEW

2.1 Theoretical Framework

Modigliani and Miller (1958) were the pioneers of the capital structure theory. A number of theories have been advanced since then to explain capital structure notable among which are the static trade-off theory and the pecking order theory which have been a centre of debate in the corporate finance management.

Modigliani and Miller Propositions

Modigliani and Miller (1958) in their paper: "The Cost of Capital, Corporation Finance and the Theory of Investment" formed the foundations of the modern corporate finance. Their capital structure irrelevance proposition argues that under perfect markets, the total value of a firm should not be affected by its capital structure. Myers (1984) explains that in a perfect capital market, financial innovations would quickly extinguish any deviation from the predicted equilibrium from such markets. A perfect market is built on the following assumptions: no taxes, no bankruptcy costs, no difference in interest rate, no agency costs and no information asymmetry. According to Modigliani and Miller (1958) the capital structure has no impact on firm value and an unlevered firm should have the same value as an identical levered firm (Hillier, 2013). This result is known as the MM Proposition I (irrelevant proposition) without corporate taxes, and is generally considered as the starting point of modern corporate finance (Hillier, 2013). Hence, the MM proposition I provides a benchmark with which we must constantly reckon.

Modigliani and Miller further argued that in the real world there exist taxes; therefore they developed a model which took into account the existence of taxes. This model is known as MM proposition II with corporate taxes. By including the taxes in their model, firms take advantage of debt due to the tax shield and therefore a firm taking on debt will be worth more than an identical unlevered firm. The tax shield arises because an interest payment is a tax deductible expense, unlike the dividend payments which are made after payment of taxes. Baxter (1976) argued that bankruptcy cost has effect on the value of the indebted firm. These costs will include liquidation fees, reorganization costs and legal fees, which may be as a result of the firm going bankrupt. This implies that a firm with higher debt would incur higher bankruptcy costs than one with less debt. Therefore with the presence of corporate taxes and bankruptcy costs there should be an optimal capital structure, where the value of the firm is maximized.

The Modigliani and Miller irrelevance proposition is hard to test. With debt and firm value both plausibly endogenous and driven by other factors

such as profits, asset tangibility and growth opportunities, and structural test of the theory by regressing value on debt cannot be established (Luigi and Sorin, 2007). Luigi and Sorin (2007) argued that Modigliani and Miller theorem does not provide a realistic description of how firms finance their operations but provide a means of finding reasons why financing may matter.

Static Trade-off Theory

Modigliani and Miller (1963) were the pioneers of this theory, they analyzed capital structure decisions in a model with taxes, and hence interest payment on debt shields profits from being taxed. The theory assumes that a firm has an optimum capital structure based on trade-off between costs and benefits of using debt. The theory states that an optimal capital structure is obtained where the net tax advantage of debt financing balances leverage related costs such as financial distress and bankruptcy, holding firm's assets and investment decisions constant (Baxter, 1967; and Myers, 1984). In essence, the theory predicts that more profitable firms should have more debt since they have more profits that could be shielded from taxes without incurring an undue cost of bankruptcy (Olakunle and Oni, 2014). However, the theory does not explain the conservative nature of firms when using debt finance, why leverage is consistent in most countries yet they have divergent taxation systems (Popescu, 2009).

Titman and Wessels (1988), Rajan and Zingales (1995) and Fama and French (2002) affirm that higher profitability firms tend use less debt that is inconsistent with the actual trade off prediction that higher profitability firms should use more debt to reduce tax liabilities.

Pecking Order Theory

Donaldson suggested this theory in 1961 but it received its first rigorous theoretical foundation by Myers and Majluf (1984). Myers and Majluf suggested that firms have a particular preference order for capital used to finance their business. Pecking order theory predicts that due to the information asymmetry between the firm and outside investors regarding the real value of both current operations and future income stream and prospects, external capital will always be relatively costly compared to internal capital (Olakunle and Oni, 2014). Myers and Majluf (1984) argued that if firms issue no new security but only use its retained

earnings to support the investment opportunities, the information asymmetry can be resolved. This implies that issuing equity become more expensive as information asymmetry between insiders and outsiders increases hence leading to undervalued securities.

In addition, Myers (1984) stated that in the event that external finance is required, firms are most likely to issue the safest security that is to say they start with debt then possibly convertible debt then equity comes as a last resort. Myer's argument was such that firm adheres to a hierarchy of financing sources and prefers internal financing to external financing when available. When internal finances are not sufficient and there is need for external financing, debt would be preferred to equity. Pandey (2005) concurred with Myers argument that managers always preferred to use internal finance and would only resort to issuing shares as last resort. Pecking order theory therefore suggests that firms should finance their investment in the order of internal funds, debt and equity (Myers, 1984; and Myers & Majluf, 1984).

Two main literature approaches have been advanced that examined the impact of information asymmetry on firm's capital structure. The contribution of Myers and Majluf (1984) and Myers (1984) posits that capital structure is designed to mitigate inefficiencies in the firm's investment decisions that are caused by information asymmetry, by following a pecking order in their investment decisions. In the second approach, Ross (1977) asserts that firm's capital structure choice is used as a means to signal to outside investors the information held by insiders. Investors are forced to rely on noisy signals such as the firm's level of capital structure to determine the risk of their investment and firm's value may be underpriced by the market (Myers and Majluf, 1984).

2.2 Conceptual Framework

Borg, Gall & Gall (2005) defines a conceptual framework as a graphical or diagrammatical representation of the relationship between variables in a given study. The financial performance of firms depends on the interrelationships of the independent variables which include asset tangibility, firm size, firm liquidity, and growth opportunities and the dependent variable; financial performance of non-financial firms listed at NSE.

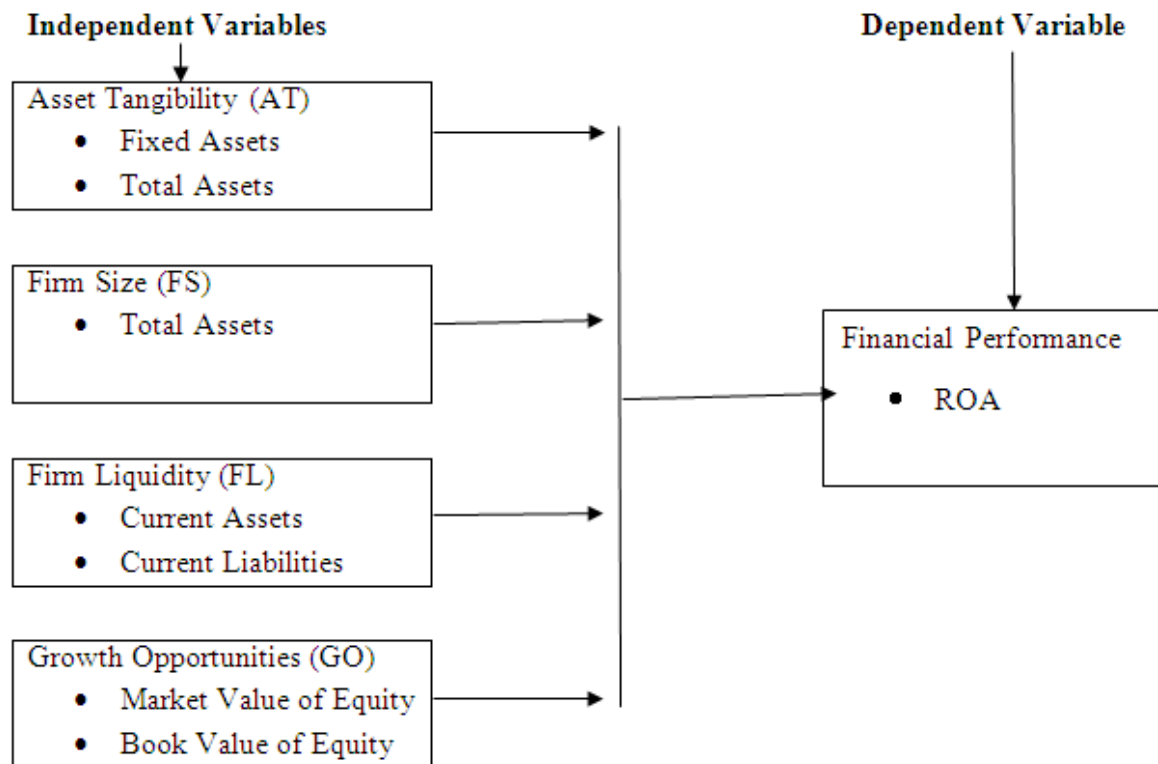


Figure: Conceptual Framework

2.3 Firm Specific Factors

1. Asset Tangibility

The importance of asset tangibility has been evidenced by the various literatures due to its effect on the firm's capital structure choice. If a firm has more tangible assets in their composition of total assets, it will have higher ability to raise debt since the assets can be used as collateral. Most of the previous empirical studies have evidenced a positive relationship between asset tangibility and leverage. Drobetz and Fix (2003) used the ratio of fixed assets to total assets as a proxy to measure asset tangibility. Their evidence was gathered from 124 large firms listed at the Swiss Stock Exchange and they concluded that there exists a positive relationship between asset tangibility and leverage. Similar positive results were found by Pandey (2002) using asset tangibility one of the independent variables in Malaysia.

The asset structure of a firm plays a significant role in determining its capital structure. The degree to which the firm's assets are tangible should result in the firm having greater liquidation value (Hovakimian *et al.*, 2004). Firms that invest heavily in tangible assets also have higher financial leverage since they borrow at lower interest rates if their debt is secured with such assets. By pledging the firm's assets as collateral, the costs associated with adverse selection and moral hazards are

reduced (Gathogo and Ragui, 2014). This will result in firms with assets that have greater liquidation value having relatively easier access to finance at lower cost, consequently leading to higher debt or outside financing in their capital structure.

Some other studies have shown a negative relationship between asset tangibility and leverage. Daskalakis and Psillaki (2006) also did a study on the capital structure decision of firms in France and Greek, asset tangibility was one of the four factors examined. Measuring asset tangibility as the ratio of fixed assets over total assets, they found that asset tangibility had a negative correlation to leverage in both countries. According to them this result was in line with the pecking order theory. Their argument was based on the fact that firms with more tangible assets have already found stable income and hence they don't have reason to seek external financing.

2. Firm Size

Empirical evidence on the relationship between firm size and capital structure supports a positive relationship. Several other studies have shown a positive relationship between firm size and leverage (Al-Sakran, 2001; Hovakimian *et al.* (2004). Their results suggest that smaller firms are more likely to use equity finance, while larger firms are more likely to issue debt rather than

stock. In a study of six African countries, Bigsten *et al.* (2000) also showed that about 64% of micro firms, 42% of small firms and 21% of medium firms appear constrained, while this is only 10% for the large firms. Cassar and Holmes (2003), Esperança *et al.* (2003), and Hall *et al.* (2004) found a positive association between firm size and long-term debt ratio, but a negative relationship between size and short-term debt ratio. Firm size has been found to be an important factor in determining capital structure decision of firms ever since the famous debt studies conducted by Gupta in 1969 on US firms. The diversification actually can protect them from fluctuating business conditions thus lowering the possibility of income loss or in the extreme case insolvency.

Boateng (2004) did a study on the effect of firm size on leverage, by trying to find out the practice of the financial managers in Sub-Saharan African nation, Ghana. The study applied a cross-sectional survey using questionnaires on a sample of equity joint ventures in Ghana with partners from Western Europe, America and Asia. About 90 questionnaires were administered to the Joint venture companies' managers and 41 questionnaires were successfully collected. The size of equity joint ventures was categorized according to the total capitalization; less than \$5 million as small firms, between \$5-\$10 million as medium firms and greater than \$10million as large firms. The ratio of total debt to total book value of assets was used to measure leverage. After the survey on the impact of size on the joint venture companies in Ghana, the concluded that large firms tend to be more levered. Therefore, this proves that large firms will have more assets, well diversified and less prone to bankruptcy.

3. Firm Liquidity

A firm liquidity is the ability of the firm to meet its short-term financial obligations; it is defined as the ratio of current assets to current liabilities (Pandey, 2005). In the recent studies, liquidity is considered to significantly affect the capital structure choice of firms (Antoniou *et al.*, 2002). Wu (2007) examined the determinants of capital structure choice of China using liquidity as one of the factors. The study grouped the companies into two categories; companies with an average ROE more than 10 % and those with ROE less than 10%. The results showed that in both categories, liquidity had a negative relationship with debt ratio.

Krenusz (2004) conducted studies on the determinants of capital structure in the United States, Germany and Hungary. Liquidity ratio as measured as the ratio of current assets over current liabilities was examined as one of the factors affecting capital structure. The result indicated a

strong negative relationship between liquidity and leverage. However, in another study done by Anderson *et al.*, (2002) on US, UK and Belgium showed a positive relationship between liquidity and leverage of the firms in the UK and Belgium. On the centrally the US firms experienced the "predicted" negative results.

4. Growth Opportunities

Growth opportunities is likely to place a greater demand on internally generated funds and push the firm into borrowing (Hall *et al.*, 2004). In addition, firms with high growth prospects will capture relatively higher debt ratios. In the case of small firms with more concentrated ownership, it is expected that high growth firms will require more external financing and should display higher leverage (Heshmati, 2001). Al-Sakran (2001) suggests that higher growth firms use less debt. Cassar and Holmes (2003) and Hall *et al.* (2004) showed positive associations between growth and both long-term debt and short-term debt ratios, while Esperança *et al.* (2003) found mixed evidence. It is also important to note that the dividend payout of the firm could affect choice of capital in financing growth. Generally, firms with low dividend payout are able to retain more profits for investments. Such firms would therefore depend more on internally generated funds and less on debt finance. On the other hand, firms with high dividend payout are expected to rely more on debt in order to finance their growth opportunities.

Several studies are in support of the pecking order in relation to growth opportunities. Zhao and Wijewardana (2012) in their study done in Colombo Security Exchange, Sri Lanka found that growth opportunities and financial leverage have a positive relationship. Arabzadeh and Meghaminejad (2012) and Kumar *et al.*, (2012) found that growth opportunities has a positive correlation with financial leverage. Ebadi, Thim and Choong (2011) studying the impact of firm characteristics on capital structure in Iranian listed firm, found that growth rate is positively related with the debt ratio.

2.4 Empirical Review

Pouraghajan and Malekian (2012) did a study to establish the impact of capital structure on the financial performance of companies listed in the Tehran Stock Exchange. They sampled 400 firms among Companies Listed in the Tehran Stock Exchange from 12 industrial groups for the period 2006 to 2010. Financial performance for the companies was by return on assets ratio (ROA) and return on equity ratio (ROE). The results suggested a significant positive relationship between asset tangibility, firm size, and growth opportunities with financial performance measures. A positive and

significant relationship between firm size and the measures of financial performance was established. On the other hand, the study showed a statistically positive and significant relationship between asset structure ratio or assets tangibility and measures of financial performance. Finally, the study indicated that there is a significant positive relationship between growth opportunities and measures of financial performance measured by ROA and ROE. Kamau (2014) sought to determine the effect of internal factors on the profitability of private hospitals in Kenya using a case study research design. The target population was the departmental heads and staff in the finance department of the Karen Hospital. The study used stratified random sampling technique to collect primary data using semi structured questionnaires. The study found a positive correlation between profitability of private hospitals and asset tangibility, firm size and volume of capital while leverage showing a negative relationship. The study concluded that asset tangibility, firm size, leverage and volume of capital affect profitability of private hospitals in Kenya.

Chinaemerem & Anoth (2012) sought to determine the impact of capital structure on the financial performance of Nigerian firms using a sample of thirty non-financial firms listed on the Nigerian Stock Exchange between 2004 and 2010. They generated panel data for the selected firms and analyzed the relationship using ordinary least squares (OLS). The study used asset tangibility as one of the independent variables measured by the ratio of fixed assets to total assets while financial performance was measured by ROA and ROE. The study showed a negative and significant relationship between firm's asset tangibility and ROA against theoretical expectations. They concluded that firms with high ratio of asset tangibility have a lower financial performance ratio. However, the relationship between asset tangibility and ROE showed a positive but not significant result. The study concluded that the sampled firms did not utilize their fixed assets composition in the total asset judiciously to impact on their financial performance.

Babalola (2013) did a study to establish the effect of firm size on the profitability of manufacturing companies listed in the Nigerian Stock Exchange. The study analyzed secondary panel data obtained from sampled companies for the period 2000-2009. Profitability was measured by using ROA, while both total assets and total sales were used as the proxies of firm size. The study concluded that, firm size, both in terms of total assets and in terms of total sales, has a positive impact on the profitability of manufacturing companies in Nigeria.

Lartey, Antwi & Boadi (2013) did a study to find out the relationship between the liquidity and the profitability of banks listed on the Ghana Stock Exchange for the period 2005-2010. Data from seven out of the nine listed banks was collected for the analysis. The study applied descriptive research design and adopted the longitudinal time dimension; the panel method. They used document analysis as the main research procedure for the collection of secondary data for the study. Liquidity ratio measured by current assets divided by current liabilities and profitability ratio measured by ROA (profit after taxes divided by total assets) and ROE (earnings after taxes divided by shareholder's equity) was computed. The trend in liquidity and profitability were determined by the use of time series analysis. The study found that there was a very weak positive relationship between the liquidity and the profitability of the listed banks in Ghana.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a descriptive research design to analyze the effect of firm specific factors on financial performance of non-financial firms listed at NSE. This is a research design where a researcher provides a numeric descriptions of some parts of the population (Oso and Onen, 2009). The survey is ideally suitable for studies where independent variables are described as they are.

3.2 Target Population

Bryman and Bell (2007) define a population as the universe of units from which a sample is to be selected. The target population of this research project comprised 37 non-financial firms listed at NSE for the 5 year period from 2011 to 2015.

3.3 Data Collection Method

This study used secondary data and utilized panel data which consist of time series and cross sections. The data for all the variables in the study was extracted from published annual reports and financial statements of the non-financial firms listed at NSE for the period from 2011 to 2015. Data was obtained from the NSE hand books for the period of reference. The data collected provided information detailing firm specific factors and financial performance.

3.4 Data Processing and Analysis

The data was analyzed using descriptive statistics, correlation analysis and panel multiple regression analysis. Multiple regressions are most appropriate for studies involving two or more independent variables. The relationship between firm specific factors and financial performance was estimated using the model:

$$Y = \alpha_0 + \beta_1 AT + \beta_2 FS + \beta_3 FL + \beta_4 GO + \epsilon$$

Where:

Y = Financial performance measure by Return on Assets (ROA); given by Earning after tax divided by Equity.
 α_0 = Constant or intercept.
 $\beta_1 - \beta_4$ = Coefficients of explanatory variables.

AT = Asset Tangibility; given by fixed assets divided by total assets.
FS = Firm Size; given by natural logarithm of total assets.
FL = Firm Liquidity; given by current assets divided current liabilities.
GO = Growth Opportunities for a firm.
 ϵ = Standard Error term.

Table 3.1: Measurement of Study Variable

Variable	Name of Variable	Measurement	Hypothesis Testing
Dependent	Financial Performance (ROA)	ROA = (Earnings after Tax) ÷ (Total Assets)	Student t-test/ 2 tail test
Independent	Asset Tangibility (AT)	AT = (Fixed Assets) ÷ (Total Assets)	Student t-test/ 2 tail test
	Firm Size (FS)	FS = Natural Logarithm of Total Assets	Student t-test/ 2 tail test
	Firm Liquidity (FL)	FL = (Current Assets) ÷ (Total Liabilities)	Student t-test/ 2 tail test
	Growth Opportunities (GO)	GO = (Market Value of Equity) ÷ (Book Value of Equity)	Student t-test/ 2 tail test

4. RESEARCH FINDINGS AND DISCUSSION

4.1 Descriptive Statistics

	ROA	AT	FS	FL	GO
Mean	0.0565	0.5704	6.9419	2.3452	1.9421
Standard Error	0.0089	0.0159	0.0545	0.2088	0.3920
Median	0.053	0.610	6.95	1.46	0.75
Standard Deviation	0.1216	0.2169	0.7409	2.8406	5.3318
Range	1.771	0.86	3.25	18.66	55.54
Minimum	-0.540	0.080	5.280	0.100	0.020
Maximum	0.628	0.940	8.530	18.760	55.56
Count	185	185	185	185	185
Confidence level (99.9%)	0.0299	0.0533	0.182	0.698	1.311

Descriptive statistics table indicates the descriptive parameters information for the study variables. In this section descriptive statistics of the variables used in analysis are presented to look at the nature and validity of the data. All variables are based upon accounting values and are thus determined simultaneously.

4.2 Correlation Matrix of Variables:

	ROA	AT	FS	FL	GO
ROA	1.000				
AT	-0.08688	1.000			
FS	0.04878	0.18163	1.000		
FL	0.20208	-0.02285	-0.37945	1.000	
GO	0.07518	-0.02418	-0.20105	0.29051	1.000

The data is checked for multicollinearity problem to see if the explanatory variables are highly correlated with one another. The aim of this was to detect near multicollinearity through the use of the correlation matrix of variables. Detection of multicollinearity problem will help solve it before actual analysis for the following reasons. Firstly, highly correlated variables make it more difficult to observe individual contribution of each to the overall fit of the regression. As a consequence, the regression may have high coefficient of determination but individual variables are not significant. Secondly, the regression would be

more sensitive to every small change in the specification, i.e. adding or removing a regressor would lead to large change in coefficient values or significances of other variables. Lastly, presence of near multicollinearity would lead to inappropriate conclusions for the test, reducing precision of the desired inference. Overall, the explanatory variables that have correlation behavior above 0.7 should not be included in the regression analysis model (Dougherty, 2007). From the table the highest correlation is 0.2905 hence there is no multicollinearity problem for the study variables.

3.3 Regression Analysis

	Coefficients	Standard Error	t- statistic	P-value
Intercept	-0.13156	0.09287	-1.41667	0.158307
AT	-0.06257	0.04099	-1.52660	0.12862
FS	0.02833	0.01303	2.17397	0.03101
FL	0.01094	0.00342	3.19479	0.00165
GO	0.00075	0.00172	0.04372	0.66249
Multiple R	0.26873			
R Square	0.07221			
Adjusted R ²	0.05156			
Standard Error	0.11842			
Observations	185			

The established regression equation was:
 $Y = -0.132 - 0.063AT + 0.028FS + 0.011FL + 0.0008GO + 0.118$

From the above regression equation it was revealed that holding asset tangibility, firm size, firm liquidity and growth opportunities of the firm to a constant zero, financial performance of non-financial firms listed at NSE would stand at -0.014. A unit increase in asset tangibility would lead to decrease in financial performance of listed non-financial firms by a factors of 0.063, while a unit increase in firm size would lead to an increase in financial performance of by factors of 0.028, a unit increase in firm liquidity would lead to an increase in financial performance by a factor of 0.011, and a unit increase in growth opportunities would lead to an increase in financial performance of non-financial firms listed at NSE by a factor of 0.0008.

Effect of Asset Tangibility on Financial Performance of Non-financial Firms Listed at NSE

First objective was to establish the effect of asset tangibility on financial performance of non-financial firms listed at NSE. The findings of the analysis show a coefficient value of -0.063 and the p-value of 0.158. From this result there is a significant negative correlation between asset

tangibility (AT) and return on assets (ROA) at 5% level of significance.

Effect of Firm Size on Financial Performance of Non-financial Firms Listed at NSE

The second objective of the study was to determine the effect of firm size and financial performance of non-financial firms listed at NSE. The result showed a coefficient of 0.028 and the p-value of 0.129. From this findings study showed that there is a positive relationship between firm size (FS) and financial performance as measured by ROA but the relationship is not significant at 5% level of significance.

Effect of Firm Liquidity on Financial Performance of Non-financial Firms Listed at NSE

The values from the analysis revealed a coefficient of 0.011 and a p-value of 0.031. The study established a positive correlation between firm liquidity and financial performance of listed non-financial firms listed at NSE. The correlation though is not significant at 5% level.

Effect of Growth Opportunities on Financial Performance of Non-financial Firms listed at NSE

The final objective was to determine the effect of growth opportunities and financial performance of non-financial firms listed at NSE. From the study

4.4 Analysis of Variance (ANOVA)

	df	SS	M	F	Significance
Regression	4	0.19646	0.04912	3.50256	0.00882 ^a
Residual	180	2.52407	0.01402		
Total	184	2.72053			

The ANOVA Table 4.4 indicated that the regression model predicted the outcome variable significantly well. This can be seen from the regression row under the significance column. This indicated the statistical significance of the regression model that was applied. Here, P is 0.0088 which is less than 0.05 and indicated that in general, the model applied is significantly good enough in predicting the outcome variable i.e. financial performance using asset tangibility, firm size, firm liquidity and growth opportunities as independent variables.

4.5 Hypotheses Testing

H₀₁: Asset Tangibility has no significant effect on financial performance of non-financial firms listed at NSE

The results shows that statistically there is a negative relationship between asset tangibility (AT) and financial performance as measured by return on assets (ROA) but it is not significant. Therefore, the first hypothesis which indicates that asset tangibility has no effect on financial performance of non-financial firms listed at NSE is rejected.

H₀₂: Firm Size has no significant effect on financial performance of non-financial firms listed at NSE

In the second hypothesis stated that firm size has no effect on financial performance of non-financial firms listed at NSE. The results from the second hypothesis test indicate a positive relationship between firm size and firm performance as measured by ROA. Therefore, this hypothesis of research also is rejected. The results of this hypothesis for ROA measure are consistent with the results of Zeitun and Tian (2007), but are not consistent with the results of Onaolapo and Kajola (2010).

H₀₃: Firm Liquidity has no significant effect of Financial Performance of non-financial firms listed at NSE

The third hypothesis was to establish whether firm liquidity has an effect on financial performance of non-financial firms listed at NSE. From the results it was found out that firm liquidity has a significant

growth opportunities has a coefficient of 0.0008 while the p-value is 0.0017. This revealed the study a positive correlation between growth opportunities (GO) and financial performance but not significant at 5% level.

positive relationship with financial performance as measure by ROA. Following these results, the third hypothesis is rejected. The findings of this study are in line with those found out by Lartey, Antwi and Boadi (2013) but their results show a weak positive correlation.

H₀₄: Growth Opportunities has no significant effect on Financial Performance of non-financial firms listed at NSE

Finally, the fourth hypothesis indicates that growth opportunities has no effect on financial performance of non-financial firms listed at NSE. The results from fourth hypothesis indicate that there is a positive relationship between firm growth opportunities and ROA measures of financial performance but not significant. Therefore, the fourth hypothesis is rejected. The results of this hypothesis are consistent with the results obtained from the researches of Pouraghajan and Malekian (2012) and not consistent with those of Onaolapo and Kajola (2010).

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The general objective of the study was to establish the relationship between firm specific factors and financial performance of non-financial firms listed at Nairobi Securities Exchange (NSE). The research was aimed at addressing the following four specific objectives; first to determine whether asset tangibility has an effect on financial performance of non-financial firms listed at NSE, to assess whether firm size has an effect on financial performance of non-financial firms, to examine the relationship between firm liquidity and financial performance of non-financial firms and finally to evaluate the effect of growth opportunities on financial performance of financial firms listed at NSE. The study revealed a positive correlation between firm specific factors on financial performance of non-financial firms listed at NSE. The findings from the regression model summary adjusted R Square (R²) value indicated that 5.16% of the financial performance as measured by ROA of non-financial firms listed at

NSE could be explained by their asset tangibility, firm size, firm liquidity and growth opportunities.

The first hypothesis was to establish whether asset tangibility does not have a significant effect on financial performance of non-financial firms listed at NSE. The findings revealed that actually asset tangibility has a negative effect on financial performance and hence the null hypothesis was rejected. From the findings increase in asset tangibility will reduce the financial performance of non-financial firms listed at NSE when measured using ROA. Therefore, non-financial firms listed at NSE avoid over-investing in fixed assets it does not necessarily lead to improved financial performance.

The second hypothesis that firm size does not have a significant effect on financial performance of non-financial firms listed at NSE. It was found out that firm size had a positive effect on return on assets. The null hypothesis was therefore rejected. The study found that non-financial firms that are bigger have better financial performance. The third hypothesis that stated that firm liquidity has no effect on financial performance of non-financial firms was also rejected since from the findings, firm liquidity has a positive effect on financial performance. The investment in more current assets has better results in terms of financial performance of non-financial firms.

The fourth hypothesis stated that growth opportunities has no significant effect on financial performance of non-financial firms listed at NSE. From the findings though, it was established that asset growth opportunities has a positive effect on financial performance of non-financial firms listed at NSE. This also shows that firms with high growth prospects have a higher financial performance as measured by ROA.

5.2 Conclusions

The first specific objective was to determine the extent to which asset tangibility affects financial performance as measured by ROA. In general terms, asset tangibility has a negative impact on financial performance of non-financial firms listed at NSE and that a higher asset tangibility will lead to a decrease ROA. A firm that finances its operations using little amounts of loans unlike firms that incur higher finance costs will have a higher interest coverage ratio, indicating a better financial health meaning that the company is more capable to meeting its interest obligations from operating earnings because finances which could otherwise have been used to repay interest will be retained.

The second objective was to establish whether firm size measured by the natural logarithm of total assets impacts on the financial performance of non-financial firms. It was found that firm size and financial performance had a statistically positive relationship but not significant, this is an indication that quite a number of non-financial firms listed at NSE were fairly financially stable in terms of asset base.

The third objective was to examine the relationship between firm liquidity and financial performance of non-financial firms at NSE. The result revealed a significant positive relationship between firm liquidity and financial performance. These findings support Gatete (2015) who found some evidence of a positive relationship between liquidity ratio and bank profitability for 43 commercial banks in Kenya. In view of the fact that firm liquidity has some amount of bearings on the financial performance, it is important that non-financial firms manage their liquidity very well. When the firms hold adequate liquid assets, their liquidity ratio will improve and hence resulting in an increase in financial performance. Adequate firm liquidity helps the non-financial firms minimize liquidity risk. The firms can be able to absorb any possible unforeseen shock caused by unexpected need for increase in short term financial obligations. However, if liquid assets are held excessively, financial performance could diminish since current assets usually have no or have little interest generating capacity.

Lastly the fourth objective was to evaluate the impact of growth opportunities on financial performance of non-financial firms listed at NSE. The non-financial firms have significantly high growth prospects while they also have a positive relationship with financial performance as measured by ROA. These shows that the managers will retain more earnings so that they can meet their growth demands since these also lead to a positive impact on financial performance.

5.3 Recommendations

From the study findings the first objective on effect of asset tangibility on financial performance reveals that firms should not over-invest in fixed asset since they do not increase financial performance. The firms should hold only those necessary fixed assets for the operations of the business. They should hold an optimal level of fixed assets since holding too little may also make the firms miss on loans that the financial institutions given by providing fixed assets as collateral.

Firm size is also important in the financial performance of non-financial firms; bigger firms

have an advantage over the smaller ones since they enjoy economies of scale. The bigger the firm the more bargaining power it has hence better financial performance.

The third objective was to establish the effect of firm liquidity on financial performance. The findings revealed a positive relationship between firm liquidity and financial performance of non-financial firms listed at NSE. The firms with higher liquidity ratios show they have a bigger ability to meet their short term financial obligations without touching their fixed assets or borrowing from financial institutions.

Finally the fourth objective was to determine the effect of growth opportunities on financial performance of non-financial firms listed at NSE. Firms with greater growth prospects are will have low dividend payout ratio so as to use their retained earnings for investment projects. These firms should also have high ability to obtain extra sources of funds when the internal resources are no sufficient.

5.4 Suggestions for Further Studies

This study was done using non-financial firms listed at NSE; thus further research should also look into other sectors like banks and insurance firms to help find out the relationship between firm specific factors and financial performance using similar variables. The findings obtained can then be compared to find out whether there are areas of commonalities and unique factors. It is suggested also that further studies be done on unlisted companies even though it might be challenging to obtain financial information from private companies. Further research should also be done using other capital structure determinants such as inflation, tax-shield, profitability and many others to determine the relationship between financial performance and capital structure.

REFERENCES

Abor, J. (2005). The Effect of Capital Structure on Profitability: An Empirical analysis of Listed Firms in Ghana. *Journal of Risk Finance*, 6, 438-47.

Antoniou, A., Guney, Y. & Paudyal, K. (2002). Determinants of corporate capital structure: Evidence from European countries. *University of Durham, working paper*.

Arabzadeh, M., Meghaminejad, M. (2012). The capital structure and Liquidity on the Tehran Stock Exchange. *American Journal of Scientific research*, 47, 69-78.

Babalola, Y. A., (2013). The Effect of Firm Size on Firms Profitability in Nigeria. *Journal of*

Economics and Sustainable Development, ISSN 2222-2855.

Banafa, A. S, Muturi, W & Ngugi, K (2015). The impact of leverage on financial performance of listed non-financial firm in Kenya. *International Journal of Finance and Accounting*, 4 (7), 1-20.

Baxter, N. (1976). Leverage, Risk of Ruin and the Cost of Capital. *The Journal of Finance*, 22, 395-403.

Boateng. (2004). Determinants of capital structure: Evidence from International joint ventures in Ghana. *International Journal of Social Economics*. Bradford. Vol.31. Iss 1/2. pg. 56.

Booth, L., Aivazian, V., Demircuc-Kunt, A. and Maksimovic, V. (2001). Capital Structure in developing Countries. *The Journal of Finance*, 56, 87-130.

Borgia, D., & Newman, A. (2012). The influence of managerial factors on the capital structure of small and medium-sized enterprises in emerging economies: Evidence from China. *Journal of Chinese Entrepreneurship*, 4(3), 180-205.

Borgia, D., & Yan, N. (2013). The Impact of Institutional Factors on Capital Structure: Evidence from Chinese Private Listed Firms.

Brigham, E. & Ehrhardt, M. (2008) *Financial Management: Theory and Practice*. 12th ed., USA, Thomson Learning.

Brigham, E. F., and Michael. C. (2001). *Financial Management Theory and Practice*. (10th edn). New York: The Dryden Press.

Bryman, A., & Bell, E. (2007). *Business Research Methods* (2 ed.). New York: Oxford University Press Inc.

Bundala, N.N. (2012). Do Tanzanian Companies Practice Pecking Order Theory, Agency Cost Theory or Trade-Off Theory? An Empirical Study in Tanzanian listed companies. *International Journal of Economics and Financial Issues*, 2(4), pp. 401-422.

Chinaemerem, O. C. & Anthony, O. (2012). Impact of Capital Structure on Financial Performance of Nigerian Firms. *Arabian Journal of Business and Management Review*, 1(2012).

Daskalakis, N and Psillaki, M. (2006). The determinants of capital structure of the SME's: Evidence from the Greek and the French firms. *Unpublished paper*.

Drobtetz, W. and Fix R. (2003). What are the determinants of the capital structure? Some evidence for Switzerland, University of Basel. *WWZ/ Department of Finance, Working Paper No. 4/03*.

Fama, E.F., & French, K.R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *Review of financial studies*, 15 (1), 1-33.

- Githira, W.C. (2015). Capital Structure Determinants Among Companies Quoted in Securities Exchange in East Africa. *International Journal of Education and Research*, 3(5).
- Hillier, D. (2013). *Corporate Finance*. Berkshire: McGraw-Hill Higher Education.
- Jensen, M. and Meckling, W. (1976). Theory of the Firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, Vol 3, pp. 305-360.
- Kamau, S. M. (2014). Effect of internal factors on the profitability of private hospitals in Kenya: A case study of the Karen Hospital Limited. *International Journal of Social Sciences and Entrepreneurship*, (13), 127-147.
- Kariuki, S. N. and Kamau, C.G. (2014). Determinants of Corporate Capital Structure among Private Manufacturing Firms in Kenya: A Survey of Food and Beverage Manufacturing Firms. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(3), pp. 49-62.
- Kaya, E. O. (2015). The Effects of Firm Specific Factors on the Profitability of Non-Life Insurance Companies in Turkey. *International Journal of Financial Studies*, 3, 510-529.
- Kerlinger, F.N., and Lee, H.B. (2011). The Impact of Global Economic Crisis on Working Capital of Real Sector in Turkey. *Business and Economic Horizon*, 4(1) pp. 52-69.
- Kibet, B., Kibet, L., Tenai, J. & Mutwol, M. (2011). The Determinants of Leverage at the Nairobi Stock Exchange, Kenya. *The Second Asian Business and Management Conference 2011* Osaka, Japan.
- Kinyua, G.N. (2014). The Relationship between Capital Structure and Profitability of listed Non-financial firms in Kenya. University of Nairobi. *Unpublished Research Project*.
- Krenusz, A. (2004). Determinants of capital structure: A comparison between the United States, Germany and East-Europe. *4th Europe Doctoral Seminar, Faculty of Economics*, Sarajevo.
- Kumar, M.A.S., Kumar, N.R., Ganesh, B., Saravanan, R. (2012), A study on Capital Structure with special reference to Pharmaceutical Industries in India. *European Journal of social Sciences*, 29(3), 343-354.
- Lartey, V.C., Antwi, S. and Boadi, E.K. (2013). The Relationship between Liquidity and Profitability of Listed Banks in Ghana. *International Journal of Business and Social Sciences*, 4(3).
- Mahmud, M. Herani, M. Rajar A. & Farooqi W. (2009). Economic Factors Influencing Corporate Capital Structure in Three Asian Countries: Evidence from Japan, Malaysia and Pakistan. *Industrial Journal of Management & Social Sciences*, 3(1):9-17.
- Mburu, S.M. (2015). Impact of Capital Structure on Financial Performance; Evidence from Non-financial firms quoted at the Nairobi Securities Exchange. *Internal Journal of Scientific and Research Publications*, Vol 5(12), Dec 2015.
- Metcalfe, R. W. and Titard, P. L. (1976). *Principles of Accounting*, W. B. Saunders, (Philadelphia), pp.157.
- Modigliani, F. & Miller, M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, 48(3), 261-297.
- Modigliani, F., Miller, M. (1963). Company Income Taxes and Cost of Capital; a Correction. *American Economic Review*, 53, 433-443.
- Mugenda, A. G. (2008). *Social science research: Theory and principles*. Nairobi: Applied Research and Training Services Press.
- Mwangi M. (2010). The relationship between capital structure and financial performance of firms listed at the Nairobi Stock Exchange. *Unpublished management research project of the University of Nairobi*.
- Mwangi, L.W., Makau, M.S. 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*, 1(2).
- Myers S. (1977). Determinants of corporate borrowing. *Journal of Financial Economics* 5, 147-176.
- Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, 39(3): 575-592.
- Myers, S.C. and Majluf N.S. (1984). Corporate Financing and Investment Decisions When Firms Have Information the Investors Do Not Have. *Journal of Financial Economics*, 13(2), 187-221.
- Nagano. (2003). Determinants of corporate capital structure in East Asia: Are there differences from the industrial countries? *Working paper WIFS -04-002*.
- Nairobi Securities Exchange- www.nse.co.ke
- Ngugi, R. W. (2008). Capital financing behavior: evidence from firms listed on the Nairobi Stock Exchange. *European Journal of Finance*, 14(7), 609-624.
- Olakunle, A. O. & Oni, E. (2014). Assessing the impact of asset tangibility on capital structure: choice for listed firms in Nigeria. *Journal of Applied Economics and Business*, 2 (3), 5-20.
- Pandey, M. (2002), Capital structure and the firm characteristics: evidence from an emerging

market. *Working paper*, Indian Institute of Management.

Pouraghajan A. and Malekian E. (2012). The relationship between capital structure and firm performance evaluation measures: Evidence from the Tehran Stock Exchange.

International journal of Business and Commerce, Vol. 1 (9) 166 – 181.

Rajagopal, S. (2010). The portability of capital structure theory: Do traditional models fit in an emerging economy? *Journal of Finance & Accountancy*, 5.

Robson, C. (2002). *Real World Research: A Resource for Social Scientist and Practitioners*, Research oxford Blackwell.

Ross, S. A. (1977). The determination of financial structure: The incentive signaling approach. *Bell Journal of Economics*, (Spring): pp. 23-40.

Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business students*. 5th ed Italy: Prentice Hall.

Tharmila K. and Arulvel K.K (2013). The impact of the capital structure and financial performance: A study of the listed companies traded in Colombo stock exchange.

Titman, S., Wessels, R. (1988), The Determinants of capital Structure Choice. *Journal of Finance*, 43, 1-19.

Velnampy, T. & Niresh, J. A. (2012). The Relationship between Capital Structure and Profitability. *Global Journal of Management and Business Research*, 12(13): 67-74

Wiwattanakitang, Y. (1999), An Empirical study on the determinants of the Capital Structure of Thai Firm. *Pacific-Basin Finance Journal*, 7, 371-403.

Wu, J (2007). An empirical study of influential factors of debt financing. *International Journal of Nonlinear Science*, Vol.3, 208-212.

Yong, C., Kim-Lan S., Pei-Lee T. & Keng-Boon O. (2008). Time Series Analysis on Factors Influencing Saving Rate in Malaysia. *Icfai University Journal of Financial Economics*, 6(4), 50-56.