

# Factors Affecting the Financial Performance of Listed Companies at the Nairobi Securities Exchange in Kenya

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## ABSTRACT

With the increasing trend of sudden corporate failure in both global and local context, shareholders and other stakeholders are increasingly becoming more concerned of the financial performance of their firms. The study therefore aimed to find out the factors affecting the financial performance of listed companies at Nairobi Securities Exchange in Kenya. It was informed by trade off and the agency theories. The study adopted an explanatory research design and 29 listed firms (excluding listed banks and insurance companies) which have consistently been operating at the Nairobi securities exchange during the period 2006-2012 were sampled. Purposive sampling technique was used. The analysis of the data collected from financial statement followed a number of basic statistical techniques. Descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation and multiple-regression) were used to analyze data. Pearson correlation was used to ascertain the interrelationship between the variables, whereas multiple-regression was used to assess the extent of the effect of the independent variables on the dependent variable. Study findings showed that leverage had a significant negative effect on financial performance ( $\beta_1 = -0.289$ ,  $\rho < 0.05$ ). Findings also showed that liquidity had a significant positive effect on financial performance ( $\beta_2 = 0.296$ ,  $\rho < 0.05$ ). Company size had a significant positive effect on financial performance ( $\beta_3 = 0.480$ ,  $\rho < 0.05$ ). The study also revealed that company age had a significant positive effect on financial performance ( $\beta_4 = 0.168$ ,  $\rho < 0.05$ ). The study provides some precursory evidence that leverage, liquidity, company size and company age play an important role in improving company's financial performance. The study suggests that there is need to determine an optimal debt level that balances the benefits of debt against the costs of debt and developing sound techniques of managing current assets to ensure that neither insufficient nor unnecessary funds are invested in current assets as maintaining a balance between short-term assets and short-term liabilities is critical. The study also suggest that firms should expand in a controlled way with the aim of achieving an optimum size so as to enjoy economies of scale which can ultimately result in higher level of financial performance.

**Keywords:** Financial Performance, Liquidity, Leverage, Company Size and Age

## 1.0 Introduction

The financial performance of companies is a subject that has attracted a lot of attention, comments and interests from both financial experts, researchers, the general public and the management of corporate entities. Yet, selecting out the most successful firms has always proved to be a difficult task to many as a firm may have a high level of profitability, but at the same time be in a very bad situation regarding its liquidity. The Financial performance of a firm can be analyzed in terms of profitability, dividend growth, sales turnover, asset base, capital employed among others. However, there is still debate among several disciplines regarding how the performance of firms should be measured and the factors that affect financial performance of companies (Liargovas & Skandalis, 2008). A single factor cannot reflect every aspect of a company performance and therefore the use of several factors allows a better evaluation of the financial profile of firms.

According Iswatia, & Anshoria (2007) performance is the function of the ability of an organization to gain and manage the resources in several different ways to develop competitive advantage. Financial performance emphasizes on variables related directly to financial report. The Capital market plays a critical role in the economy by facilitating mobilization and allocation of capital resources to finance long term productive investments. In this way, it facilitates and promotes the process of economic growth in the country. The Capital Markets Authority of Kenya was established to oversee the orderly development of Kenya's capital markets. On the other hand, the Nairobi Security Exchange (NSE) which is the only stock exchange in the Kenya has a double responsibility for development and regulation of the market operations to ensure efficient trading.

A number of studies (Almajali et al, 2012; Liargovas, and Skandalis, 2008) have been done with regard to factors affecting the financial performance of listed companies, especially in developed economies. Can the

findings of these studies be replicated in emerging economies or infant capital markets? In Kenya, a few studies have been done in this area and therefore it is imperative to find out the factors that affect the financial performance of listed companies at the Nairobi Securities Exchange.

## 2.0 LITERATURE REVIEW

### 2.1 Concept of Financial Performance

Almajali et al (2012) argues that there are various measures of financial performance. For instance return on sales reveals how much a company earns in relation to its sales, return on assets explain a firm's ability to make use of its assets and return on equity reveals what return investors take for their investments. Company's performance can be evaluated in three dimensions. The first dimension is company's productivity, or processing inputs into outputs efficiently. The second is profitability dimension, or the level of which company's earnings are bigger than its costs. The third dimension is market premium, or the level at which company's market value is exceeds its book value (Walker, 2001).

Cohen, Chang and Ledford (1997) measured accounting returns using Return on Assets (ROA). They indicated that return on assets (ROA) is widely used by market analysts as a measure of financial performance, as it measures the efficiency of assets in producing income. The most used accounting measures of financial performance is Return on Assets (ROA) (McGuire *et al.*, 1988; Russo and Fouts, 1997; Stanwick and Stanwick, 2000; Clarkson *et al.*, 2008), Return on Equity (ROE) (Bowman and Haire, 1975), and Return on Sales (ROS) (Stanwick and Stanwick, 1998). Thus, the study used return on assets (ROA) as a measure of financial performance.

### 2.2 Leverage

Leverage refers to the proportion of debt to equity in the capital structure of a firm. The financing or leverage decision is a significant managerial decision because it influences the shareholder's return and risk and the market value of the firm. The ratio of debt-equity has implications for the shareholders' dividends and risk, this affect the cost of capital and the market value of the firm (Pandey, 2007).

Gupta *et al* (2010) cited some studies showing contradictory results about the relationship between increased uses of debt in capital structure and financial performance. Ghosh, Nag and Sirmans (2000), Berger and Bonaccorsi di Patti (2006) reported a positive relationship between leverage and financial performance, while Gleason *et al* (2000), Simerly and Li (2000) showed negative relationship between financial performance and leverage level. Similarly, Zeitun and Tian (2007) found that debt level is negatively related with financial performance.

Several researchers have studied firms' debt use and suggested the determinants of financial leverage by reporting that firm's debt-equity decision is generally based on a trade-off between interest tax shields and the costs of financial stress (Upneja & Dalbor, 2001). According to the trade-off theory of capital structure, optimal debt level balances the benefits of debt against the costs of debt (Gu, 1993) hence, use of debt to a certain debt ratio results in higher return on equity, however, the benefit of debt would be lower than the cost after this level of capital structure. In other words, the more a company uses debt, the less income tax the company pays, but the greater its financial risk. Based on the trade-off theory for capital structure, firms can take advantage of debt to make a better return on equity. Thus the study hypothesizes that;

$H_{01}$ : *Leverage has no significant effect on the Financial Performance (Return on assets) of Companies listed at Nairobi Securities Exchange.*

### 2.3 Liquidity

The International Financial Reporting Standards (2006) define liquidity as the available cash for the near future, after taking into account the financial obligations corresponding to that period. Liargovas and Skandalis, (2008) argues that firm can use liquid assets to finance its activities and investments when external finance are not available. On the other hand, higher liquidity can allow a firm to deal with unexpected contingencies and to cope with its obligations during periods of low earnings.

Almajali et al (2012) found that firm liquidity had significant effect on Financial Performance of insurance companies. The result suggested that the insurance companies should increase the current assets and decrease current liabilities because the positive relationship between the liquidity and financial performance. In contrast to the above reasoning, based on a theoretical model by Jovanovic (1982) suggested that a moderate amount of liquidity may propel entrepreneurial performance, but that an abundance of liquidity may do more harm than good. Therefore, they concluded that the effect of liquidity on firms' financial performance is ambiguous. Thus the study hypothesizes that;

$H_{02}$ : *Liquidity has no significant effect on the Financial Performance (Return on assets) of Companies listed at Nairobi Securities Exchange.*

## 2.4 Company size

Previous studies in finance have shown that company size can predict the future stock price (Simerly & Li, 2000). For instance, Hvide and These (2007) in their study concluded that larger firms have better performance. Flamini et.al (2009) suggested that bigger firms are more competitive than smaller firms in harnessing economies of scale in transactions and enjoy a higher level of profits. Athanasoglou et al., (2005) assert that increase in company size increases the performance of the bank. Almajali et al (2012) argued that the size of the firm can affect its financial performance. However, for firms that become exceptionally large, the effect of size could be negative due to bureaucratic and other reasons (Yuqi 2007). Thus study hypothesizes that;

*H<sub>03</sub>: Company size has no significant effect on the Financial Performance (Return on assets) of Companies listed at Nairobi Securities Exchange.*

## 2.5 Companies' age

Examining the relation between firm age and financial performance would seem to be relevant for both theory and practice. If performance declines as firms grow older, it could explain why most of them are eventually taken over (Loderer, Neusser, and Waelchli, 2009). Age could actually help firms become more efficient. However, old age may also make knowledge, abilities, and skills obsolete and induce organizational decay (Agarwal and Gort, 2002).

Sorensen & Stuart (2000) argued that companies age affect the firm's performance. They further argued that organizational inertia operating in old firms tend to make them inflexible and unable to appreciate changes in the environment. Liargovas and Skandalis (2008) reported that older firms are more skilled since they have enjoyed the benefits of learning and not prone to the liabilities of newness, hence they have a superior performance.

Loderer et al, (2009) found a positive and significant relationship between the age of a company and profitability. Malik (2011) in his Pakistan study found that there is significantly positive relationship between company size and profitability. Thus the study hypothesized that;

*H<sub>04</sub>: Company age has no significant effect on the Financial Performance (Return on assets) of Companies listed at Nairobi Securities Exchange.*

## 3.0 RESEARCH METHODOLOGY

The study adopted an explanatory design. This is because the research is a cause-effect relationship. Purposive sampling technique was used as the study only included all the 29 firms(excluding listed Banks and Insurance companies) which have consistently been operating at the NSE for the past 7 years from 2006-2012. Data was collected from 203 financial reports of the sampled companies. The analysis of the data collected from financial statement followed a number of basic statistical techniques. Descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation and multiple-regression) were used to analyze data. A multiple linear regression model was used to test the research hypotheses at 0.05 level of significance (95% confidence level). The multiple regression model used in this study is given as;

$$y_{it} = \alpha_{it} + \beta_1 x_{1it} + \beta_2 x_{2it} + \beta_3 x_{3it} + \beta_4 x_{4it} + \varepsilon_{it}$$

Where,  $y$  =financial performance measured by Return on Asset (ROA)  $\alpha$  = constant,  $\beta_1 \dots \beta_4$  = the slope which represents the degree in which financial performance changes as the independent variable change by one unit variable.,  $x_1$  = leverage,  $x_2$  = liquidity,  $x_3$  = company's size,  $x_4$  = company's age,  $\varepsilon$  = error term,  $t$  = measure of time,  $i$  = number of firm observation

## 4.0 Data analysis and Research Findings

The section presents study data analysis and research findings. First, the descriptive statistics and correlation results are presented in table 1. The study reported that ROA was 8.03%, leverage was 44.81% debt against equity (mean=0.4481), Liquidity was 1.824 current assets over current liabilities of firms and a company size of 7.1654 and that firms had an average of 53 years of operation from the year of incorporation. The analysis also indicated that liquidity and company size had a significant positive correlation with the financial performance of firms (ROA). However, there was negative correlation between leverage and financial performance (ROA).

**Table 1 Correlation Statistics**

	Mean	Std. Deviation	ROA	Leverage	Liquidity	Company size	Age
ROA	0.0803	0.09548	1				
leverage	0.4481	0.50017	-.337**	1			
liquidity	1.8324	1.34726	.371**	-.209**	1		
Company size	7.1654	1.0096	.468**	0	0.01	1	
Age	52.9901	24.03854	0.114	0.078	0.055	-0.099	1

To test multiple regression models, it was necessary to assess whether the collected data violate some key assumptions of regression models because any assumption violations can result in distorted and biased research results. Skewness of the data indicated an approximately normal distribution. After the researcher was assured that the assumptions of regression models were met, the research hypotheses were tested using Multiple Regression analysis.

#### 4.1 The Result of Hypothesis Testing

Findings in table 2 below indicated that 55.2% variation of financial performance (ROA) is predicted by joint contribution of leverage, liquidity, company size, and company age ( $R^2 = 0.552$ ). The rest of 44.8% is explained by other variables that were not included in this research model. The estimated equation for multiple linear regression-models is:

$$ROA = -0.295 - 0.289x_1 + 0.296x_2 + 0.482x_3 + 0.168x_4 + 0.06723$$

According to hypothesis 1, Leverage has no significant effect on the Financial Performance (Return on assets) of Companies listed at Nairobi Securities Exchange ( $H_{01}$ ). However, research findings show inconsistency with the hypothesis since leverage recorded a beta coefficient ( $\beta$ ) of (-0.289,  $\rho=0.00<0.05$ ). Hence, leverage had a significant negative effect on the financial performance of companies listed at Nairobi Securities Exchange. The firm's debt-equity decision is generally based on a trade-off between interest tax shields and the costs of financial stress. The tax benefits of debt dominate up to a certain debt ratio, resulting in higher return on equity, but the benefit would be less than the cost after the level of debt ratio.

Research hypothesis 2 stated that, Liquidity has no significant effect on the Financial Performance (Return on Assets) of Companies listed at Nairobi Securities Exchange ( $H_{02}$ ). This was not consistent with research findings since liquidity recorded a significant positive relationship with financial performance (beta coefficient 0.296,  $\rho<0.05$ ). The study findings concurs with (Liargovas, and Skandalis, 2008) that a firm can use liquid assets to finance its activities and investments when external finance is not obtainable or expensive. Nevertheless, according to Jovanovic (1982) abundance of liquidity may do more harm than good.

Hypothesis 3 stated that Company size has no significant effect on the Financial Performance (Return on Assets) of Companies listed at Nairobi Securities Exchange ( $H_{03}$ ), results from the study show inconsistency with the hypothesis thus supporting the argument that company size has a significant positive effect on the financial performance of companies listed at the Nairobi Securities Exchange, (beta coefficient estimates of company size 0.482,  $\rho<0.05$ ). This is in agreement Loderer et al, (2009) found a positive and significant relationship between the age of a company and profitability. However, for firms that become extremely large, the effect of size could be negative due to bureaucracy and other reasons (Yuqi, 2007).

Research hypothesis 4 stated that Company age has no significant effect on the Financial Performance (Return on Assets) of Companies listed at Nairobi Securities Exchange ( $H_{04}$ ), this is inconsistent with the study finding since age reported a beta coefficient of (0.168,  $\rho= 0.002<0.05$ ) thus null hypothesis 4 that was rejected. The study findings concur with (Jovanovic, 1982; Ericson and Pakes, 1995) that company age could actually help firms become more efficient, because with time firms discover what they are good at and find better ways of doing things.

**Table 2 Multiple Regression Results**

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	-0.295	0.04		-7.468	0
Leverage	-0.055	0.01	-0.289	-5.345	0
Liquidity	0.021	0.004	0.296	5.494	0
Company size	0.046	0.005	0.482	9.113	0
Age	0.001	0.000	0.168	3.159	0.002
R Squared	0.552				
Adjusted R Square	0.531				
F	40.837				
Sig.	0.000				

Dependent Variable: ROA

## 5.0 Conclusion and Recommendations

### 5.1 Conclusion

The study affirms that leverage has a significant negative effect on financial performance. From the study findings there is clear evidence to conclude that as the firm increases debt beyond the optimum level, financial performance declines and the possibility of bankruptcy also increases. Nevertheless, an optimal level of leverage can enable a firm to improve its financial performance as it can accrue tax advantage (tax shield) associated with optimum level of debt. The study also provides evidence to infer that liquidity play an important role in improving the firm's financial performance. Thus, firms with optimum levels of liquidity report better financial performance as a result of the risk-return tradeoff.

Based on research findings, the study concluded that company size has a significant positive effect on financial performance. Large companies are found to have a competitive advantage over small firms as large firms have a wide array of resources and also enjoy economies of scale, hence are in a better position to compete in the market. However, for firms that become extremely large, the effect of size could be negative due to bureaucracy and other reasons (Yuqi, 2007). Finally the study concludes that company age has a significant positive effect on financial performance. In addition the study infers that age helps firms to become more efficient, because with time firms discover what they are good at and find better ways of doing things.

### 5.2 Recommendations

Based on the trade-off theory for capital structure, the study recommends that firms can take advantage of debt to make a better return on equity which ultimately influences firms' profitability. They should determine an optimal debt level that balances the benefits of debt against the costs of debt. Firms should avoid situations where they are highly leveraged since this may lead to bankruptcy if they are unable to make payment on their debt. The study also recommend that companies should develop sound techniques of managing current assets to ensure that neither insufficient nor unnecessary funds are invested in current assets as maintaining a balance between short-term assets and short-term liabilities is critical. Furthermore the study recommends that companies should expand in a controlled way with the aim of achieving an optimum size so as to enjoy economies of scale which will ultimately result in higher level of financial performance. However if a firm expands beyond the optimum size diseconomies of scale will set in and this can result in a decline in the financial performance of the firm.

Finally, companies that are old should put in place measures to counter the new changes in market conditions and avoid bureaucracy in order to stabilize on performance whereas new firms should have strategies in place to market and stabilize in order to have a competitive advantage over old companies.

### 5.3 Areas for further research

The study was only limited to four factors that affect the financial performance of the listed companies in the stock market. Thus, more research should be carried out to determine other factors that affect financial performance. Factors such as managerial competency and capitalization of the firm are recommended for future study. This would enable the researchers and concerned investors to mitigate effects of such factors and hence enhance financial performance. Another research area that could be done is to find out the factors that affect the financial performance of non-listed firms, specifically family owned enterprises where the incidence of business failure is greater than larger corporations.

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