



GLOBAL JOURNAL OF ADVANCED RESEARCH
(Scholarly Peer Review Publishing System)

EFFECTS OF DEBT ON FIRM PERFORMANCE: A SURVEY OF COMMERCIAL BANKS LISTED ON NAIROBI SECURITIES EXCHANGE

Harwood Isabwa Kajirwa

Department of Business Management,
School of Business and Management sciences, University of Eldoret, P.O. Box 1125-30100, Eldoret,
Kenya

ABSTRACT

This study sought to find out whether the use of debt in a firms debt structure affects firm performance. A survey of commercial banks listed on Nairobi Securities Exchange in Kenya. The specific objective was to determine the effects of debt on firm performance. The study used a longitudinal research design in collection of data. A target population of 11 commercial banks was considered in the study. The data was analyzed using Statistical package of social studies version 16.0. The data was analyzed using inferential statistics; correlation and regression model. The study found that debt negatively affects firm performance though not statistically significant as measured by ROA ($\beta = -.442$, $p\text{-value} = 0.242$ which is more than $\alpha = 0.05$). The conclusion of the study was that the use of debt in a firms' capital structure negatively affects the performance of commercial banks in Kenya though not statistically significant. The management of sugar firms should identify alternative low risk sources of financing to swap with debt financing.

Key words: Debt, ROA

1. INTRODUCTION

Debt is an alternative mode for raising additional funds to meet the day to day needs of a given organization. It refers to resources which are borrowed with expectations of repayment. Thorough analysis of the statement of financial position of the commercial banks under study reveals that the proportion of funds borrowed was progressively increasing between 2010- 2014. This translates into the firms becoming highly dependent on debt in their capital structure. Prior studies on the effect of debt on firm performance found diverse results. Some researchers found that debt negatively affects firm performance for example Luper and Isaac (2012) while others for example Valeriu and Nimalathasan (2010) found a positive effect existed between debt and firm performance and hence a gap in knowledge for further research. This research sought to address this gap in knowledge by conducting a research on the effects of debt on performance of commercial banks listed on Nairobi securities Exchange in Kenya.



2. LITERATURE REVIEW

2.1 Concept of Firm performance

Performance is best looked at in two ways that is, end results and a means to achieve the results. According to (Ukko, 2009) Performance is the ability to distinguish the outcomes of organizational activities. Performance could either be financial and non-financial performance (Ittner, 2008). The non-financial performance is measured using operational Key Performance Indicators such as Market share, innovation rate or customer satisfaction (Hyvonen, 2007). Financial performance is a subjective measure of how well a firm can use its assets from its primary role of conduction of business and its subsequent generation of revenues.

Financial performance is also used as a general measure of a firm's overall financial status over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in totality. The financial performance is measured using accounting Key Performance Indicators such as Return on assets, Earnings before interest and tax (Crabtree & DeBusk, 2008).

The advantage of these measurements is their general availability, since every profit oriented organization produces these figures for their yearly financial reporting (Chenhall *et al.*, 2007). This study was interested much with financial performance and used Return on assets which represents the amount of EBIT a firm can achieve for each dollar of assets it controls.

2.2 Debt and Firm Performance

Debt is a resource borrowed with the expectation of paying back after a specified period of time. If the specified time spread over a period of one year then it becomes long term debt and if the expected payment period is less than or equal to one the it becomes a short term debt. The use of debt in a firms' capital structure has got its share of advantages. The firm benefits from debt tax shield effect and financial leverage. The enterprises pay interest to creditors of the costs, exemption from corporate income tax, while dividends paid to shareholders is deducted from the net profit after corporate income tax, so if interest rates are appropriate, and earnings before interest and tax more than business interest, then improve the enterprise's debt ratio would increase the tax-free income, improve the enterprise's market value. The use of debt in the capital structure has disadvantages:

First is financial risk because after the need for regular business borrowing to pay interest on the cash flow will produce a lot of pressure, when the debt expires, a one-time payment of principal, which requires companies with ample cash flow. Once the poor business or not raise the necessary cash would be in financial difficulty, or even lead to bankruptcy. Second, moral hazard of creditors is more harm to the equity holders than to creditor. Moral risk manifests itself in corporate income to repay the loan in not more than choose not to repay the loan when the cost of the behavior, which will result in great loss of creditors.

According to a study by Nima, Mohammad, Saeed, & Zeinab (2012) examined the relationship between capital structure and firm performance of Tehran Stock Exchange Companies is investigated between the years 2006 to 2011. The study uses three performance measures including Gross Profit Margin, Return on Assets as dependent variable and three capital structures including long term debt short term debt and total debt ratios as independent variable. The study reported a significant relationship between dependent and independent variable, except long term debts with gross profit margin.

According to Ebaid (2009) research, capital structure choice decision, in general terms, has weak-to-no influence on the financial performance of listed firms from 1997 to 2005 in Egypt as one of emerging or transition economies. By using three accounting-based measurements of financial performance which are return on assets, return on equity, and Gross Margin, the empirical tests come with the result that capital structure particularly Short term debts and Total debts have a



negative impact on an organization's performance which is measured by ROA. Apart from that, capital structure including short-term debt, long-term debt and total debt has no significant impact on an organization's performance which is measured by ROE and Gross margin.

According to Valeriu and Nimalathan (2010) they researched on capital structure and its impact on profitability: a study of listed manufacturing companies in Sri Lanka. The result shows that debt is positively and strongly associated to all profitability ratios (gross profit ratio; operating profit ratio; and net profit ratio) except return on capital employed and ROA.

According to Iorpev & Kwanum (2012) they examined the impact of capital structure on the performance of manufacturing companies in Nigeria. The annual financial statements of 15 manufacturing companies listed on the Nigerian Stock Exchange were used for this study which covers a period of five years from 2005-2009. Multiple regression analysis was applied on performance indicators such as Return on Asset and Profit Margin as well as Short-term debt to Total assets, Long term debt to Total assets and Total debt to Equity as capital structure variables. The results show that there is a negative and insignificant relationship between Short term debt to total assets and Long term debt to total assets, and ROA and profit margin; while Total debt to equity is positively related with ROA and negatively related with profit margin. Short term debt to total assets is significant using ROA while Total Long term debt to total assets is significant using profit margin. The work concludes that statistically, capital structure is not a major determinant of firm performance.

H01: Debt has no significant effect on ROA

3. RESEARCH METHODOLOGY

The study was carried out using a longitudinal research design, employing secondary quantitative data for Five years (2010-2014). The data was obtained from Nairobi Securities Exchange Handbooks and Published books of accounts of the companies listed in the Nairobi Securities Exchange. The population for this study constituted all commercial banks listed companies in the Nairobi Securities Exchange as at May 2014, there were 11 commercial banks listed on the Nairobi Securities Exchange. A census survey was carried out for the study and only commercial banks with all the data for the five years considered in the study were considered. Secondary data was used in the study. All the data was collected by review of documents, annual reports of the companies, the Nairobi Securities Exchange Handbooks and published books of accounts. Data was analyzed by use of the statistical Package for Social Science (SPSS) Version 16. The inferential statistics were used in data analysis that is, Pearson product moment correlation and regression model. Pearson product moment correlation was used to assess for significant association between dependent variables (ROA) and the independent variable (Debt). The regression model was as follows:

$$ROA_{M,t} = \beta_0 + \beta_1 X_{1M,t} + e_{M,t}$$

Where; $X_{1M,t}$ = Total liabilities to total assets of the firm M in year t

$e_{M,t}$ = error term; β_0 = y intercept; β_1 = coefficient of x_1 .

4. EMPIRICAL RESULTS

Pearson product moment Correlation was used to assess for significant correlation between dependent variable (ROA) and the independent variable (Debt). The study used a 95% confidence level. The results showed that there was significant correlation between debt and firm performance as measured by ROA ($r = -.282$, $p = .042$) as shown in Table 4.1.

**Table 4.1: Correlation Results**

		DEBT	ROA
DEBT	Pearson Correlation	1	-.282
	Sig. (2-tailed)		.042
	N	20	20
ROA	Pearson Correlation	-.282	1
	Sig. (2-tailed)	.042	
	N	20	20

Source: (Survey Data, 2015)

Regression

Simple linear regression model was used to predict firm performance in the study. The prediction was carried out basing on the effect of debt on firm performance. The findings indicated that the model adjusted R square was 0.026 which indicated that 2.6% total variation of firm performance is explained by debt ratio as shown in Table 4.2.

Table 4.2: Regression model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.282 ^a	.080	.026	4.14966

a. Predictors: (Constant), TLTA

Source: (Survey Data, 2015)

The research further found that debt recorded coefficient estimates of $\beta = -.442$ (p-value = 0.242 which is more than $\alpha = 0.05$) as shown in Table 4.3, hence we fail to reject the null hypothesis (H_{01}) and conclude that debt affect firm performance though not statistically significant. The research found similar results to Valeriu and Nimalathanan (2010), Ebaid (2009). The results were different to the findings of Nima, Mohammad, Saeed, & Zeinab (2012) because they researched on different listed firms across the economy.

Table 4.3: Regression coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	47.326	0.596		1.547	.140
	DEBT	-.442	.365	-.282	-1.213	.242

a. Dependent Variable: ROA

Source: (Survey Data, 2015)



5. CONCLUSIONS

The study concludes that the use of debt in a firms' capital structure negatively affects a firms' financial performance though not statistically significant. The ratio of a firm' total liabilities to total assets negatively affect the firm financial performance. This implies that an increase in the proportion of debt used by commercial banks results into a decrease in a firms' financial performance.

6. RECOMMENDATIONS

The recommends that:

- i. The management of Commercial banks should identify alternative low risk sources of financing to swap with debt financing.
- ii. The central bank of Kenya should lower the interest rate at which it lends money to commercial banks.
- iii. Banks should conduct cost benefit analysis all the time before deciding on the proportion of short term debt, long term debt to include in their capital structure.
- iv. A further research to be conducted on effects of debt on firm performance: A survey of commercial banks not listed on the Nairobi securities exchange.

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