



FINANCIAL LEVERAGE AND CORPORATE SURVIVAL: EVIDENCE FROM SELECTED FIRMS IN NIGERIA

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Abstract: The study assesses the impact of financial leverage on corporate survival of companies in cement industry in Nigeria over a period of 3 years (2013-2015). Total Debts to Total Assets Ratio (TDTA) and Total Debts to Total Equity Ratio (TDTE) are proxies for financial leverage while Return on Assets (ROA) and Probability of Bankruptcy (Probankr) proxied corporate survival. In addition, two control variables: Firm size (fmsize) and sales growth were used. The study population was the four (4) listed cement companies on the Nigeria Stock Exchange as at 2006 which also formed the sampled size. The study used panel data from annual reports of these companies and were analyzed using Regression



El-Arbah: Jurnal Ekonomi, Bisnis Dan Perbankan Syariah licensed under a <u>Creative Commons Attribution 4.0</u> international License. (Ordinary Least Square). The study shows that TDTA and FMSIZE have significant positive relationship with ROA. TDTE and SALESGTH however, show negative insignificant relationship with ROA. On the other, TDTA, TDTE and FMSIZE have insignificant positive relationship with PROBANKR. SALESGTH however, shows a negative insignificant relationship with PROBANKR. It was recommended among others that cement companies in Nigeria should take advantage of trade-off theory of capital structure by using debt to make a better return on equity.

Keywords: Financial Leverage, Corporate, Survival; Debt Ratio; Debt to Equity Ratio; Probability, Bankruptcy and Return on Assets.

A. Introduction

Predicting firms' financial distress or corporate survival has been of considerable interest to accountants and financial analysts. Financial distress, no doubt, affects a firm's entire existence and results in a huge cost to the firms, the society and the country's economy. As a result, predicting firm's financial distress is crucial for all stakeholders: shareholders, managers, employees, creditors, suppliers, clients, the community and the government. Interest in corporate survival has grown rapidly in recent years with the global increase in the number of corporate collapses such as the Asian financial crisis in 1997, Enron and WorldCom collapse in the US in 2001 and 2002, respectively.

Every business is established with a motive of continuity. Continuous existence of organizations is one of the matters that have attracted attention, comments and interests from financial experts, researchers, management of corporate entities and the general public. Financial performance and sustainability of a firm can be analysed in terms of profitability, dividend growth, sales turnover, asset base, capital employed among others. However, there is debate among several scholars regarding how the survival of firms should be measured and the factors that affect corporate survival. A single factor cannot reflect every aspect of a company survival and therefore the use of several factors allows a better evaluation of the profile of firms.

Capital structure is one of the dominating issues in corporate finance literature. The concept of capital structure is generally described as the proportion of long-term debt and equity that make up the total capital of a firm. Capital structure refers to the way a corporation finances its assets through a combination of equity and debt. A firm's capital structure is then the composition or 'structure' of its liabilities. Company can choose any capital structure of its choice and such activities that change the company's existing capital structure are known as capital restructuring. Restructuring takes place when the company substitutes one capital structure for another leaving the company's total assets unchanged. Capital structure decision is a significant managerial decision because it influences shareholder's return and risk and at the same time, the market value of a share may be affected by the capital structure decision. As a result, the company will have to plan its capital structure initially from its inception and subsequently, whenever funds have to be raised, a capital structure decision is involved.

Capital structure obviously involves the choice between equity financing or debt (leverage) financing. This means firms can finance their activities either through equity by issuing shares or through borrowing. Any of these has its attendant implication on the firm's profit because, the providers of capital have claims on the net cash flows of the business after paying the obligatory tax dues while the balance is retained for business operations. Omolehinwa (2001) argues that, in deciding whether to go for equity or debt financing, the management need to consider among others: dilution of ownership; stability of earnings; security; tax savings and also, financial risk. If firm is wholly equity financed, the after-tax operating cash flow in each period accrues as a benefit to shareholder in form of dividend. On the other hand, if the firm borrowed portion of its capital, a proportion of it must be set aside to servicing this debt element. Firm's choice of source of funds therefore determines the allocation of its operating cash flow each period between debt and shareholders.

Financial leverage is the extent to which a business is using borrowed money. Many firms raise part of their long-term financial requirements through borrowing, often by issuing loan stocks or debentures. These give lenders contractual rights to receive interest, typically at a predetermined rate and on specified dates. Usually such loan stocks are redeemable, thus, the contractual rights extend to the amount to be repaid and to the date of redemption. Loan finance could also be provided by a bank or similar institution, which would acquire similar contractual rights. The central point about loan finance lies in the fact that neither interest nor redemption payments are matters of the borrowing firm's discretion. Interest on such loans amounts to an annual charge on profits. This must be satisfied before the equity shareholders, who in the typical firm provide the larger part of the finance. The more debt financing a firm uses in its capital structure, the more financial leverage it employs.

A firm's choice of corporate finance is no doubt a significant managerial decision as it determines the allocation of business income which has impact on the firm's and may threaten its survival, existence and growth. Many studies including onaolapo and kajola (2010); olorunfemi (2010); Enekwe, Agu and Eziedo (2014) Melaye and Willy (2013) and Abubakar (2015) have been conducted to assess the effects of capital structure and performance of firms. Not many however considered the effects of leverage on survival of corporate entities. This study therefore assesses the impact of debt financing (financial leverage) on corporate survival of companies in cement industry in Nigeria over a period of ten (10) years covering 2006 - 2015.

The remaining parts of the paper is organized as follows: Section two reviews the literature on subject matter; section three describe the research methodology, section four is results and discussion and section five is conclusion and recommendations.

B. Literature Review

1. Concept of Financial Leverage

Financial leverage refers to the use of debt to acquire additional assets. Financial leverage is also known as trading on equity or gearing. Leverage refers to debt or borrowing of funds to finance the purchase of a company's assets. Igben (2009) opines that, using debt or leverage increases the company's risk of bankruptcy. It makes the company vulnerable to financial risk attached to fixed interest securities. The higher the fixed interest securities: debentures and preference shares capital in relation to capital, he maintains, the higher the risk of the company being unable to pay the fixed financial charges and consequently, the higher the risk of its being forced into liquidation. It however increases the company's returns, specifically its returns on equity. This is because, if debt financing is used rather than equity financing, owner's equity is not diluted by issuing more shares of stock.

Financial leverage can dramatically alter the payoffs to shareholders of the firm. It may not however, affect the overall cost of capital. Then a firm's capital structure is irrelevant because changes in capital structure will not affect the value of the firm (Miller and Modigliani, 1958). Pandey (2007) is of the view that financing or leverage decision is a significant managerial decision because it influences shareholder's return, risk and the market value of the firm. It has implications on shareholders' dividends and risk which can affect the cost of capital and the market value of the firm. Gupta (2010) cites some studies showing results about the relationship between increased use of debt in capital structure and financial performance. Ghosh, Nag and Sirmans (2000), Berger and Bonaccorsi (2006) show a positive relationship between leverage and financial performance, while Gleason *et al* (2000), Simerly and Li (2000) and Zeitun and Tian (2007) show negative relationship between financial performance and leverage level.

Several researchers have studied the use of debt and suggest the determinants of financial leverage by reporting that firm's debt-equity decision is generally based on a trade-off between interest and tax (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.

Marimuthu (2009) maintains that studies have indicated that companies without borrowing (unlevered firms) show less fluctuation in their earnings, whereas, companies with borrowing (levered companies) show greater fluctuation

in their earnings when there are changes in their financial performance. Hence, some specific implications of borrowing on levered firms could be outlined as follows: borrowing requires interest payments that in effect, slash firms' net incomes, interest expenses as fixed costs that increase the volatility of net incomes and thus, affect Earning Per Share (EPS). Borrowing also relatively reduces the proportion of equity in a company's capital structure and hence, reduces the number of shares outstanding.

Modigliani and Miller (1958; 1963) however come out with advancement in the capital structure by creating a new body of knowledge for understanding capital structure. Obviously, they reiterated that capital structure is irrelevant to company value. The validity and reliability of their theory has been tested by many researchers all over the world. In addition, Modigliani and Miller (1966) claim that industrial classification and other key assumptions are very important to their theoretical model. Despite the criticisms by many researchers, many do support MM's view with regard to irrelevance of capital structure to company value.

Titman and Wessels (1988) indicate that costs and benefits are associated with debt and equity financing. However, they failed to prove that future growth, volatility of earnings and firm sizes have effects on capital structure. Myers (1977) suggests that tangible assets (fixed assets) can support a higher debt level as compared to intangible assets such as growth opportunities. Thies and Klock (1992) posit that the relationship between earnings variability and financial leverage is ambiguous and the findings are quite mixed.

2. Concept of Corporate Survival

Survival is a term that has many connotations, both subjective and objective. The most objective way to measure corporate survival in organizations is to observe their continuing existence. An organization survives as long as it acquires inputs and provides outputs for public consumption. Failure of organization, according to Sheppard (1989) is when resource providers cannot be induced to further supply resources and the firm cannot repay resource providers for past support. The general consensus among stakeholders, according to Moulton, (1988) is that a firm which failed to return investors' and creditors' capital,

failed to provide workers with job security, and also, failed in its tax obligation to government is a failed organization. Jerry (n.d) quoted Moulton (1988) that such organizations might have entered chapter 11 bankruptcy, in other word, the firm is financially distressed.

When an organization is financially distressed, certain significant costs including direct and indirect cost have occurred (Altman & Hotchkiss, 2006). According to them, the impact of such events on owners, shareholders, managers, employees, lenders, suppliers, clients, the community and the government is horrendous. Financial distress can cause direct and indirect costs to the firm. Direct costs are the tangible, out of pocket expense of either liquidity or attempting a reorganization of the ailing enterprise. These include bankruptcy filing fees and legal, accountants' fee and other professional service costs such as lawyers' fee (Altman, 1983). The indirect cost will include of lost sales and profits of the firm due to the perceived potential of bankruptcy which are losses primarily from customer reluctance. Customers often need assurance that firms are sufficiently stable to deliver on promises and will be reluctance to buy from a firm that may fail. Potential of financial distress of firms will affect the firm-suppliers relationship, employees may become demotivated due to job insecurity perception. As Geroski (1995) points out, studies on survival have typically linked the propensity for a firm to survive to characteristics specific both to the firm and the industry. Bloom (2007) argues that uncertainty about future productivity and demand conditions will generate fluctuations in investment, hiring and productivity. Higher uncertainty generates a temporary slowdown and bounce back as firms postpone activity and wait for uncertainty to subside. This effect is expected to be stronger during recessions.

Survival of corporate organizations is very important, because, it is no doubt one of the expectations of stakeholders after profit, long term growth and stability. Nwaiwu and Opusunju (2016) quoted Gross (1968) that entities that do not have survival as its primary objective should have re-think. Patience (2000) considers corporate survival as the process of sustaining the organization by finding ways to protect the organization from failing. According to her, it is a concept which needs to be refined to address global organization. Michael (2009) considers it as a process of re-thinking about organizational philosophy, vision and mission by defining business opportunity that will grantee the sustainability of the organization. To him, it is a way of protecting an infant industry from failing. Also, Wisdom (2010) defines corporate survival as an opportunity given to a firm to protect it from being decline. He sees it as a system of protecting a firm from corporate decline or failure. Firms' survival may be considered as the outcome of a (medium-) long-run process of selection among competitors, where either firms show acceptable performance as time passes or they exit the market. That is why, indeed, relevant studies in industrial economics, organizational ecology and strategic management have considered firm survival as a meaningful organizational outcome ((Freeman, Carroll & Hannan (1983); Geroski (1995); Agarwal, Sarkar & Echamebadi (2002) and Dosi (2012,)).

3. Review of Empirical Studies on Corporate Survival

Huynh and Petrunia (2010) present empirical evidence on the determinants of firm survival and growth. It shows that firms' leverage matters for both activities and has a non-linear impact on survival. According to them, it may be the case that highleverage (or low profitability) does not have a persistent effect on economic activity, but the consequences of leverage for firm survival impinge upon recovery from recession. Goktan, Kieschnick and Moussawi (2006) also examined the relation between corporate governance structures and the likelihood of a company going private, being acquired or going bankrupt. They found the evidence that corporate governance primarily influences whether a corporation is acquired or goes private but not whether it goes bankrupt.

Van, Van and Botman (2008) analyze the determinants of survival of internet firms listed on the NASDAQ between 1996 and 2001. Their results show that surviving firms are associated with lower risk indications in the IPO prospectus, higher underwriter reputation, higher investor demand for the shares issued at the IPO, lower valuation uncertainty, higher insider ownership retention, a lower NASDAQ market level, and a higher operating cash flow to liabilities ratio

compared to non survivors. Zingales (1998) and Bridges and Guariglia (2008) argue that higher leverage results in higher failure probabilities. Accordingly, a positive relationship between leverage and the probability of survival. Lee, Yeh and Liu (2003) employed accounting, corporate governance and macroeconomic variables to construct a binary logistic regression model for the prediction of financially distressed firms. The percentage of directors controlled by the largest shareholder, management participation, and the percentage of shares pledged for loans by large shareholders are found to have positive relationship with the probability of financial distress.

Lee and Yeh (2004) utilized three corporate governance variables namely, the percentage of directors occupied by the controlling shareholder, the percentage the controlling shareholders shareholding pledged for bank loans and the deviation in control away from the cash flow rights to fit the dichotomous prediction models. The results suggested that three variables mentioned above are positively related to the risk of financial distress of Taiwan companies. Additionally, Kauffman and Wang (2007) investigated the drivers of internet firm survival and exit using Cox proportional hazards model and a semi-parametric Bayesian survival analysis. The empirical results suggested that market, firm and e-commerce related variables can reduce an internet firm's likelihood of exit. Those variables include the entry of additional internet firms via IPOs, a smaller firm size, good IPO timing, being a late entrant and the selling of digital products or services. In addition, internet firms which operate in breakthrough markets are more likely to survive than those that operate in re-formed markets.

Hannan and Freeman (1989) argues that the likelihood of any particular new firm surviving is lower in populations where there are a greater number of other competing new entrants. If a new firm is the only entrant it should have a greater chance of survival than if it must compete with a high number of new entrants.

C. Research Methodology

The research approach employed in this paper is a literature study approach. The literature study approach is essentially the same as research in general, but the research data acquired through the literature study approach are secondary data. Finding and gathering of references that are pertinent to the topic of this research is first of the researchers' processes take in preparing this paper. The study randomly sampled twenty-nine (29) companies in Nigeria for a period of three (3) years, covering 2013 to 2015. Panel data extracted from the annual reports of these companies were used and the study employed regression (OLS) via Stata for data analysis.

D. Result And Discussion

1. Variables Measurement

The study used debt ratio (dr) and debt equity ratio (der) as proxies for financial leverage. Similarly, probability of bankruptcy (Probankr) and return on assets (roa) are proxies for corporate survival while Firm size (fmz) and sales-growth (Salesgth) are control variables.

| Dependent Variables | | | | | | |
|---------------------------|---------------|--|--|--|--|--|
| Variables | Abbreviations | Description | | | | |
| Probability of bankruptcy | Probankr | This is the likelihood that a corporate entity may not be able service its debts which could lead to liquidation which could be the result of high leverage by the firm. This is measured using Hopwood et at Model which incorporates many financial indicators, including: net income / total assets; current assets / sales; current assets / current liabilities; current assets; long-term debt / total assets; and the natural log of sales. | | | | |

Variables and their measurement Table (1) presents the variables in the study and their measurement.

| Return on Assets | ROA | It is a profitability metrics which |
|----------------------|---------------|--|
| | | shows how profitable a firm is |
| | | relative to its total assets and how |
| | | well the management is employing |
| | | the company's coasts to make |
| | | refitable It is calculated thus |
| | | promable. It is calculated thus: |
| | | |
| | Independent V | |
| Debt Ratio | DR | This ratio measures the financial |
| | | leverage of a firm. Companies with |
| | | higher level of liability relative to |
| | | assets are considered highly |
| | | leveraged and risky for creditors |
| | | and investors. This is measured |
| | | thus: Fixed interest loan/ Total |
| | | assets |
| Debt to Total Equity | DER | This ratio compares firm's total |
| Ratio | | debts to total equity. It shows the |
| | | percentage of company's finance |
| | | that comes from creditors and |
| | | investors This was determined |
| | | thus: Fixed interest loan/Total |
| | | equity |
| | Control Vari | ables |
| Firm Size | Em7 | This is measured using the natural |
| | 1 1112 | log of total assots Goroski (1995) |
| | | opined that a firm's size plays an |
| | | important role in determining firm's |
| | | aunitical. The argument is that large |
| | | firme experience higher euritye |
| | | nims experience nigher survival |
| | | probabilities than their smaller |
| | | counterparts because they have |
| | | access to alternative sources of |
| | | external finance and they are less |
| | | informationally opaque. Thus large |
| | | firms are less likely to fail than |
| | | |
| | | small firms (Dunne, Roberts & |
| | | Samuelson (1998) and Clementi & |
| | | Samuelson (1998) and Clementi & Hopenhayn (2006). As used by |
| | | Samuelson (1998) and Clementi & Hopenhayn (2006). As used by Goktan, Kieschnick and Moussawi |
| | | small firms (Dunne, Roberts & Samuelson (1998) and Clementi & Hopenhayn (2006). As used by Goktan, Kieschnick and Moussawi (2006) and Schultz (1993) |
| Sales Growth | Salesgrth | Small firms (Dunne, Roberts & Samuelson (1998) and Clementi & Hopenhayn (2006). As used by Goktan, Kieschnick and Moussawi (2006) and Schultz (1993) This is the rate by which sales |
| Sales Growth | Salesgrth | small firms (Dunne, Roberts & Samuelson (1998) and Clementi & Hopenhayn (2006). As used by Goktan, Kieschnick and Moussawi (2006) and Schultz (1993) This is the rate by which sales volume of a firm's product grows |
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| Sales Growth | Salesgrth | small firms (Dunne, Roberts & Samuelson (1998) and Clementi & Hopenhayn (2006). As used by Goktan, Kieschnick and Moussawi (2006) and Schultz (1993) This is the rate by which sales volume of a firm's product grows from year to year. It was measured thus: the natural logarithm of this year's sales – last year's sales |

| This variable was used by Joseph, |
|-----------------------------------|
| Marina-Eliza and Serafeim (2015) |

Source: Generated by the Researchers

i. Model Specification

The study adopted Linear Regression to measure and predicts the relationship among the variables. The regression models to examine the extent of relationship between financial leverage and corporate survival are therefore presented as follows:

| Probankr | $= \alpha + \beta_1 DR_{it} + \beta_2 Fmz_{it} + \beta_3 Salesgrth_{it} + u_{it}$ | (i) |
|----------|---|------|
| ROA | $= \alpha + \beta_1 \text{DER}_{it} + \beta_2 \text{Fm}_{zit} + \beta_3 \text{Salesgrth}_{it} + u_{it}$ | (ii) |

Results

This section presents the results and discusses the major findings.

Descriptive Statistics

This section presents the results of descriptive statistics

| Table (2) Survival | Descriptive statistics of Financial Leverage and Corporate | | | | |
|-----------------------|--|----------|-----------|----------|---|
| Variables | dr | der | salesgrth | probankr | |
| roa | fmz | | _ | - | |
| Mean | 0.2844736 | 2.289451 | 3.304067 | 2.185132 | |
| 0.2253977 | 10.26387 | | | | |
| Minimum | 0 | 0 | 3.3038 | 1.1372 | - |
| 0.1794 | 7.8757 | | | | |
| Maximum | 4.2897 | 94.0429 | 3.3043 | 13.33 | |
| 14.4187 | 12.0509 | | | | |
| Std. Dev. | 0.6265284 | 10.33463 | 0.0002067 | 1.369863 | |
| 1.541864 | 0.9091774 | | | | |
| Skewness | 0.0000 | 0.0000 | 0.334 | 0.0000 | |
| 0.0000 | 0.1424 | | | | |
| Kurtosis | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| 0.0000 | 0.8305 | | | | |
| Prob | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| 0.0000 | 0.3223 | | | | |
| Obs. | 87 | 87 | 87 | 87 | |
| 87 | 87 | | | | |

Source: Generated by the researchers from the Annual Reports and Accounts of the sampled companies, using Stata

Table 2 presents the descriptive statistics of the variables in the study. It shows the minimum, maximum, mean and standard deviation of the selected companies for the period covered by the study. The table reveals some relatively high figures in mean and standard deviation which was necessitated by the nature and size of data input. From the table, probability of bankruptcy which is made up of net income, current assets, current liabilities, total assets, sales and long-term debt has naturally high figures, hence, the minimum and maximum values of 1.14 and 13.33 respectively. The same goes for sales-growth with minimum and maximum values approximately being #3.3b which also shows a wide dispersion, with the sales having the mean and standard deviation of 3.30 and 0.00 respectively. From the Table also, the average Debt Ratio of these companies shows a mean of 28%, the minimum and maximum values are 0% and 428% respectively. This means that for every #1 earning, leverage account for 28%. Also, the average Debt-Equity Ratio of these companies shows a mean of 229% which means that for every #1 earning, leverage account for 229%. ROA shows a mean score of approximately 23% which means that on average, investors of the sample companies enjoy above 23% returns on assets invested, that is, every #1 assets invested yield about #23 return. Furthermore, the mean of firm size shows a score of #10.3b, a minimum of #7.88b and maximum of #12.05b. This shows that the average total assets of the sample firms is #10.3b for the period covered by the study.

Correlation Matrixes

This section presents the results of correlation matrixes of the variables of the study.

| Table (2) | Spearman | Correlation | of Variables | <u>used in the</u> |
|-----------------|----------|--------------------|--------------|--------------------|
| <u>study</u> | | | | |
| Model I | probankr | dr | fmz | <u>salesgrth</u> |
| probankr | 1.0000 | | | _ |
| dr | 0.4091 | 1.0000 | | |
| fmz | 0.0128 | -0.0941 | 1.000 | 0 |
| <u>salegrth</u> | -0.0753 | 0.0797 | 0.0682 | 1.0000 |

| Model II | roa | der | fmz | <u>salaesgrth</u> |
|-----------|---------|---------|--------|-------------------|
| roa | 1.0000 | | | |
| der | -0.0300 | 1.0000 | | |
| fmz | -0.2666 | -0.1789 | 1.0000 | |
| salesgrth | -0.1472 | 0.0326 | 0.0682 | 1.0000 |
| <u> </u> | | 1 6 11 | | |

Source: Generated by the researcher from the Annual Reports and Accounts of the

sampled companies, using Stata 14

The correlation matrix, as shown in Table 4.2, shows the direction of relationship between the independent variables (debt ratio and debt-equity ratio) and dependent variables (probability of bankruptcy, return on assets, firm size and sales-growth). Model I reveals that all variables except sales-growth are positively correlated with probability of bankruptcy. This means that increase in leverage and asset of these companies lead to direct increase in the probability of the companies to survive. According to the table however, sales-growth has an inverse relationship with corporate survival. Model II reveals that all variables have inverse relationship with return on asset. This means that increase in these variables (debt-equity ratio, firm size and sales-growth) lead to reduction in the return on asset (by extension, corporate survival) and vice versa.

Regression Analysis

This section presents the results of regression (Ordinary Least Square) analysis

| Model I | | | | Model II | |
|-----------|-------------------|-----------|-----------|-----------------|-----------|
| Variables | coefficient T. st | tatistics | Variables | coefficient T.s | tatistics |
| P>/z/ | | | P>/z/ | | |
| Probankrt | | | ROA | | |
| Constant | 2480.443 | 1.13 | Constant | 3119.23 | 1.21 |
| 0.000 | | | 0.231 | | |
| Dr | 0.9267089 | 4.24 | Der | -0.011105 | -0.70 |
| 0.000 | | | 0.486 | | |
| Fmz | 0.0910847 | 0.60 | Fmz | -0.460174 | -2.55 |
| 0.547 | | | 0.013 | | |
| Salesgrth | -750.4257 | -1.13 | Salesgrth | -942.5524 | -1.20 |
| 0.260 | | | 0.232 | | |
| | R-Square | 0.6827 | | R-Square | 0.6427 |
| Ad | j R-Square | 0.1532 | Adj F | R-Square | 0.0932 |
| | Probability | 0.0008 | P | robability | 0.0004 |

Table (3)OLS Regression Analysis of Financial Leverage and CorporateSurvival

Source: Generated by the researcher from the Annual Reports and Accounts of the sampled companies, using Stata 14

NOTE: The significant level is 5%

Table 3 presents the regression results of Models I and II. The result of first model shows that debt ratio and firm size have positive relationship with probability of bankruptcy while sales-growth is negatively related to probability of bankruptcy. The coefficient of debt ratio (0.000) shows a significant relationship meaning that debt ratio can significantly influence the survival of the sample firms. Firm size, according to the result has an insignificant positive relationship with corporate survival while sales-growth shows a negative insignificant relationship with corporate survival.

R-Square shows the explanatory power of the model. The R² of 0.6827 shows that the variables considered in this model account for 68% changes in corporate survival while the remaining 32% of the changes are as a result of other variables not considered in the model. The results of t-statistics show that the variables are insignificant predictors of corporate survival and the general level of significant is 0.0008% indicating that the model used is perfect for the study and that leverage has significant impact on corporate survival.

The result of regression result for Model II from tables 4.3 shows that all variables are negatively related to corporate survival proxied by Return on asset. The coefficient of debt equity ratio (0.486) and sales-growth (0.232) are insignificant while that of firm size shows a significant relationship with corporate survival.

The coefficient of determinations, 'R-Square' of 0.6427 indicates that the variables considered in this model account for 64% changes in corporate survival while the remaining 36% of the changes are as a result of other variables outside the model. The results of t-statistical values show that all variables are insignificant predictors of corporate survival and the general level of significant 0.0004 suggesting that the model is perfect for the study and that leverage has significant influence on corporate survival of the firms sampled in the study.

E. Conclusion and Recommendations

From the results obtained above, debt ratio has a significant positive relationship with firms' survival proxied by the probability of bankruptcy but firm size has an insignificant positive relationship with probability of bankruptcy while sales-growth has an insignificant negative relationship with probability of bankruptcy. The result further reveals that firms size has a negative significant relationship with return on asset which is a proxy for corporate survival while both debt equity ratio and sales-growth maintain insignificant negative relationship with corporate survival.

The study therefore recommends that: companies in Nigeria should take advantage trade-off theory of capital structure by using debt to make a better return on equity which ultimately influences firms' profitability; the companies should determine an optimal debt level that balances the benefits of debt against the costs of debt; in addition, the companies should avoid situations where they are highly leveraged since it may lead to bankruptcy if they are unable to make payment on the debt; and lastly, the study recommends that investors should consider these variables when taking investment decision due to its great influence on their investment. Firms are not discouraged from debt but highly leveraged firms can be dangerous for investment.

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