

# The Influences of Capital Structure and Corporate Performance (Case Study of Selected Companies in the Nigeria Stock Exchange)

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## **Abstract**

*This study investigated whether financing decisions affect corporate performances. It answers the question whether optimum capital structure actually exists; and if so, whether such optimum mix of financing has relationship with corporate performance. Cross sectional data that covers thirty firms in three years (2012-2014) were used. The estimation procedures employed in this empirical study is based on Multiple Regression Analysis of Ordinary Least Square Method. The appropriate transformation of data being through the use-of the natural logarithm. The study reveals that the three sources of finance explain 48.9% of changes in corporate earnings in 2012, 39.34% in 2013 and 18.90% in 2014. The trend obviously shows that the firms were far from operating at equilibrium as regards capital structure. There is the need therefore for corporate entities to place emphasis on ensuring optimum capital structure decisions so as to utilize capital in ways that will maximise corporate earnings.*

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*Key words: Capital structure, Optimum mix; Corporate performance*

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## **Introduction**

In corporate finance, capital structure refers to the breakdown of a company's monetary sources. Whether a company elects to finance its operations through borrowing or shareholder funds makes an enormous difference in how it performs. Capital structure is so important that relying on the wrong source of financing can actually push a business into bankruptcy. Securities issued by corporate firms may be classified roughly as common stock and debt securities (Ross A.S; Westerfield R.W; and Jaffe J.), 1996). The term common stock has no precise meaning. It is usually applied to stock that has no special preference either in dividends or in bankruptcy. It is otherwise referred to as equity shares or ordinary shares.

The term 'debt' represents something that must be repaid; it is the result of borrowing money. The holders of debt are creditors. Such debt capital has a right to payment of interest or preference dividend before there can be any earnings for ordinary shareholders, and a prior claim on the company's assets in the event of a winding up.

These two types of finance - equity and debt - constitute mainly the basic sources of capital available to corporate firms (Oyejide, 1987). Equity includes retained earnings of the firms. Both represent the shareholders' funds - the capital contributions of the owners of the business.

The investment project of a firm can be financed either, by increasing the owners' claim or the creditors' claim or both. The owners' claim increase when the firm raises funds by issuing common shares or by retaining the earnings; the creditors' claim increase by

borrowings.

Provision of capital to any, firm and how the capital is managed is the primary pre-occupation of management of the firm. The management is concerned primarily with the efficient use of his capital resources and performance of the firm. That is how capital employed had been utilized in generating revenue. The ultimate measure of performance is how the investor values earnings. This will determine whether he would continue to invest in the firm.

The theory of company finance is based on the assumption that the objective of management is to maximize the market value of the company, which is consistent with maximizing the value of the ordinary shareholders' wealth. There are a number of ways by which this can be achieved: (i).increased sales, (ii).increased prices, (iii).reduced costs and/or altering product mix, among others.

In term of cost, capital imposes different returns. When management decides the optimal financing mix of its firm, cognizant importance is taken notice of such returns and risks associated thereto. If the management is going to maximize the shareholders' wealth (hence maximizing the corporate value of the firm), it should seek a way of attaining the best minimum cost possible, and what constitute the cost of capital to a company that obtains funds from different sources is the weighted average of the cost of the various components of the company's capital structure (WACC). The weights attached are based on the proportion that the different components contribute to the total capital structure of the company.

Following from this, experts have concluded that a company should be regarded as having a target Optimum Capital Structure where the Weighted Average Cost of Capital (WACC) at this target capital structure is at the minimum. (Ross et al, 1996). Gordon (1961) argues that, "If a project is evaluated using WACC the wealth of shareholders in the long run will be maximized". Van Horn (1989) and other finance writers support this view.

According to Van Home (1967), "The rationale behind using WACC as that by financing projects in the proportion specified and accepting projects yielding more than the WACC, the company would be able, in the long run, to increase its market value".

We need, therefore, to ask (i) whether the concept of an optimum capital structure is, in fact, a meaningful one; and (ii) whether such financing plan affects corporate performance; and if yes, (iii) what constitute optimum financing mix.

**Research questions.** The following questions were put forward by the researcher.

- Does capital structure actually exist?
- Does the optimum mix of financing have relationship with corporate performance?

**Objectives of the study.** The objective of this study therefore,

\*Is to determine that optimum mix of capital that increases corporate returns.

\*To measure the impact of debt-equity ratio on profitability of the listed companies.

## A REVIEW OF THE CAPITAL STRUCTURE THEORIES

Since the publication of the Modigliani and Miller's (1958) "irrelevance theory of capital structure", the theory of corporate capital structure has been a study of interest to finance economists. Over the years, three major theories of capital structure emerged which diverge from the assumption of perfect capital markets under which the "irrelevance model" is working. The first is the trade-off theory which assumes that firms trade off the benefits and costs of debt and equity financing and find an "optimal" capital structure after accounting for market imperfections such as taxes, bankruptcy costs and agency costs. The second is the pecking order theory (Myers, 1984, Myers and Majluf, 1984) that argues that firms follow a financing hierarchy to minimize the problem of information asymmetry between the firm's

managers-insiders and the outsiders' shareholders.

Recently, Baker and Wurgler (2002) have suggested a new theory of capital structure: the "market timing theory of capital structure". This theory states that the current capital structure is the cumulative outcome of past attempts to time the equity market. Market timing implies that firms issue new shares when they perceive they are overvalued and that firms repurchase own shares when they consider these to be undervalued. Market timing issuing behaviour has been well established empirically by others already, but Baker and Wurgler show that the influence of market timing on capital structure is highly persistent.

### **The Modigliani-Miller Theorem.**

The theory of business finance in a modern sense starts with the Modigliani and Miller (1958) capital structure irrelevance proposition. Before them, there was no generally accepted theory of capital structure. Modigliani and Miller start by assuming that the firm has a particular set of expected cash flows. When the firm chooses a certain proportion of debt and equity to finance its assets, all that it does is to divide up the cash flows among investors. Investors and firms are assumed to have equal access to financial markets, which allows for homemade leverage. The investor can create any leverage that was wanted but not offered, or the investor can get rid of any leverage that the firm took on but was not wanted. As a result, the leverage of the firm has no effect on the market value of the firm. Their paper led subsequently to both clarity and controversy. As a matter of theory, capital structure irrelevance can be proved under a range of circumstances. There are two fundamentally different types of capital structure irrelevance propositions. The classic arbitrage-based irrelevance propositions provide settings in which arbitrage by investors keeps the value of the firm independent of its leverage. In addition to the original Modigliani and Miller paper, important contributions include papers by Hirshleifer (1966) and Stiglitz (1969). The second irrelevance proposition concludes that "given a firm's investment policy, the dividend payout it chooses to follow will affect neither the current price of its shares nor the total return to its shareholders" (Miller and Modigliani, 1961). In other words, in perfect markets, neither capital structure choices nor dividend policy decisions matter.

### **The Trade-Off Theory**

The term trade-off theory is used by different authors to describe a family of related theories. In all of these theories, a decision maker running a firm evaluates the various costs and benefits of alternative leverage plans. Often it is assumed that an interior solution is obtained so that marginal costs and marginal benefits are balanced.

The original version of the trade-off theory grew out of the debate over the Modigliani-Miller theorem. When corporate income tax was added to the original irrelevance, this created a benefit for debt in that it served to shield earnings from taxes. Since the firm's objective function is linear, and there is no offsetting cost of debt, this implied 100% debt financing. Several aspects of Myers' definition of the trade-off merit discussion. First, the target is not directly observable. It may be imputed from evidence, but that depends on adding a structure. Different papers add that structure in different ways.

Second, the tax code is much more complex than that assumed by the theory. Depending on which features of the tax code are included, different conclusions regarding the target can be reached. Graham (2003) provides a useful review of the literature on the tax effects. Third, bankruptcy costs must be deadweight costs rather than transfers from one claimant to another. The nature of these costs is important too. Haugen and Senbet (1978) provide a useful discussion of bankruptcy costs.

Fourth, transaction costs must take a specific form for the analysis to work. For the adjustment to be gradual rather than abrupt, the marginal cost of adjusting must *increase*

when the adjustment is larger. Leary and Roberts (2005) describe the implications of alternative adjustment cost assumptions.

**Static trade-off theory.** The *static trade-off theory* affirms that firms have optimal capital structures, which they determine by trading off the costs against the benefits of the use of debt and equity. One of the benefits of the use of debt is the advantage of a debt tax shield. One of the disadvantages of debt is the cost of potential financial distress, especially when the firm relies on too much debt. Already, this leads to a trade-off between the tax benefit and the disadvantage of higher risk of financial distress. But there are more cost and benefits involved with the use of debt and equity. One other major cost factor consists of agency costs. Agency costs stem from conflicts of interest between the different stakeholders of the firm and because of ex post asymmetric information (Jensen and Meckling (1976) and Jensen (1986)). Hence, incorporating agency costs into the static trade-off theory means that a firm determines its capital structure by trading off the tax advantage of debt against the costs of financial distress of too much debt and the agency costs of debt against the agency cost of equity. Many other cost factors have been suggested under the trade-off theory, and it would lead to far to discuss them all. Therefore, this discussion ends with the assertion that an important prediction of the static trade-off theory is that firms target their capital structures, i.e. if the actual leverage ratio deviates from the optimal one, the firm will adapt its financing behaviour in a way that brings the leverage ratio back to the optimal level.

### **The Dynamic Trade-off Theory.**

Constructing models that recognize the role of time requires specifying a number of aspects that are typically ignored in a single-period model. Of particular importance are the roles of expectations and adjustment costs. In a dynamic model, the correct financing decision typically depends on the financing margin that the firm anticipates in the next period. Some firms expect to pay out funds in the next period, while others expect to raise funds. If funds are to be raised, they may take the form of debt or equity. More generally, a firm undertakes a combination of these actions. An important precursor to modern dynamic trade-off theories was Stiglitz (1973), who examines the effects of taxation from a public finance perspective. Stiglitz's model is not a trade-off theory since he took the drastic step of assuming away uncertainty. The first dynamic models to consider the tax savings versus bankruptcy cost trade-off are Kane et al. (1984) and Brennan and Schwartz (1984). Both analyzed continuous time models with uncertainty, taxes, and bankruptcy costs, but no transaction costs. Since firms react to adverse shocks immediately by rebalancing costlessly, firms maintain high levels of debt to take advantage of the tax savings.

Dynamic trade-off models can also be used to consider the option values embedded in deferring leverage decisions to the next period. Goldstein et al. (2001) observe that a firm with low leverage today has the subsequent option to increase leverage. Under their assumptions, the option to increase leverage in the future serves to reduce the otherwise optimal level of leverage today. Strebulaev (2007) analyzed a model quite similar to that of Fischer et al. (1989) and Goldstein et al. (2001). Again, if firms optimally finance only periodically because of transaction costs, then the debt ratios of most firms will deviate from the optimum most of the time. In the model, the firm's leverage responds less to short-run equity fluctuations and more to long-run value changes.

Certain ideas are fairly general in dynamic models. The optimal financial choice today depends on what is expected to be optimal in the next period. In the next period, it may be optimal to raise funds or to pay them out. If raising new funds, it might be optimal to raise them in the form of debt or in the form of equity. In each case, what is expected to be optimal in the next period will help to pin down the relevant comparison for the firm in the current

period. Much of the work on dynamic trade-off models is fairly recent and so any judgements on their results must be somewhat tentative. This work has already fundamentally altered our understanding of mean reversion, the role of profits, the role of retained earnings, and path dependence. As a result, the trade-off class of models now appears to be much more promising than it did even just a few years ago.

### **The Pecking Order Theory**

The *pecking order theory* does not take an optimal capital structure as a starting point, but instead asserts the empirical fact that firms show a distinct preference for using internal finance (as retained earnings or excess liquid assets) over external finance. If internal funds are not enough to finance investment opportunities, firms may or may not acquire external financing, and if they do, they will choose among the different external finance sources in such a way as to minimise additional costs of asymmetric information. The latter costs basically reflect the “lemon premium”(Akerlof, 1970) that outside investors ask for the risk of failure for the average firm in the market. The resulting pecking order of financing is as follows: internally generated funds first, followed by respectively low-risk debt financing and share financing.

In Myers and Majluf model (1984), outside investors rationally discount the firm's stock price when managers issue equity instead of riskless debt. To avoid this discount, managers avoid equity whenever possible. The Myers and Majluf model predicts that managers will follow a pecking order, using up internal funds first, then using up risky debt, and finally resorting to equity. In the absence of investment opportunities, firms retain profits and build up financial slack to avoid having to raise external finance in the future.

The pecking order theory regards the market-to-book ratio as a measure of investment opportunities. With this interpretation in mind, both Myers (1984) and Fama and French (2000) note that a contemporaneous relationship between the market-to-book ratio and capital structure is difficult to reconcile with the static pecking order model. Iteration of the static version also suggests that periods of high investment opportunities will tend to push leverage higher toward a debt capacity. To the extent that high past market-to-book actually coincides with high past investment, however, results suggest that such periods tend to push leverage lower. Empirical evidence supports both the pecking order and the trade-off theory. Empirical tests to see whether the pecking order or the trade-off theory is a better predictor of observed capital structures find support for both theories of capital structure (Shyam -Sunder and Myers, 1999; Fama and French, 2002).

### **The Market timing theory**

The *market timing theory* of capital structure argues that firms time their equity issues in the sense that they issue new stock when the stock price is perceived to be overvalued, and buy back own shares when there is undervaluation. Consequently, fluctuations in stock prices affect firms capital structures. There are two versions of equity market timing that lead to similar capital structure dynamics.

The first assumes economic agents to be rational. Companies are assumed to issue equity directly after a positive information release which reduces the asymmetry problem between the firm's.

### **The Concept of Optimum Capital Structure**

Many studies have been carried out in the area under discussion (field of finance) to determine the best financing plan or mix or the optimal capital structure of corporate firms because the value of the firm depends upon its expected earnings stream and the rate used to discount this stream (the firm's cost of capital).

Earliest theory on this subject (The traditional theory) holds the view that judicious use of debt finance with equity can lower the cost of capital until an optimum level is reached. Gearing beyond that level will push the cost of capital up again. This theory argues that the cost of equity finance and the cost of debt are independently determined. If the cost of equity is higher, as logically it should be because it is more risky, then the more highly geared a company becomes the lower its cost of capital (Ross et. al, 1996).

The traditional theory summarizes the relationship between cost of capital and capital structure by stating that companies should identify the optimal gearing level and finance all projects using the optimal mix in order to maximize their market values. Market values will be maximized because WACC for every company will be lowest at the optimal gearing level.

The use of a weighted average cost of capital, according to the Traditional theorists, to appraise the cash flows of investment projects has been justified in situation where the gearing ratio is not expected to change in the long run. A difficult situation is encountered if a major issue of funds which moves the company to a new level of gearing finances a large investment project. Can the project then be appraised simply by discounting at a WACC, and if so which WACC should be used?

If investors ignores financial risk there will be no problem because the WACC would be the same at all levels of gearing. However, it is probably not the case and the shareholders are likely to make gain or loss made up of two elements: (i) a gain or loss caused by accepting the project; (ii) a gain or loss caused by the changed gearing. Following the traditional view, if the company moves away towards the optimal level of gearing, the shareholders will make a gain under "ii", whereas if it moves away from optimal level, they will make a loss.

**Equity Capital and Corporate Performance.** The equity shareholders, among other financiers, are legally referred to as the owners of the business because of the risk bearing nature of their interest. A company will not make any distributable profits unless it is able to earn enough profit before interest and tax to pay all interest charges, and then tax. The lower the profit, or the higher the interest bearing debts, the less there will be, if there is anything at all, for shareholders.

When a company has preference shares in its capital structure, ordinary shareholders will not earn any profit for themselves until preference dividend has been paid first. This makes equity the most expensive source of finance. According to Courtadon & Mersick (1983), equity finance is only forthcoming when profit prospects are sufficiently attractive to compensate for the risk involved. However, it may be possible to do away with other source of finance but not with equity, though it is subject to the greatest risk and most expensive.

Marsh (1982) observed that equity issues tend to be favoured after periods of strong share price and overall market performance. Holding the size of issue constant, higher stock prices result in higher probabilities of equity issues. In order to maximise the long run value of the common stock, firms will develop a financial framework, which will cause the shares to sell at the highest price on the present market.

**Retained Earnings and Corporate Performance.** Inanga (1987) stated that a 'firm retaining and reinvesting part of its earnings to yield greater returns could generate growth'. Shareholders are interested in both the dividends as well as the earnings; the latter is an index, which determines the rate of dividend growth through retention or reinvestment. Person Hunt (1965) observed that the average investor is likely to pay more attention to changes in dividends than change in profit. A rise in dividend should tend to increase the supply of funds in stock market. As additional funds flows in, stock prices will begin to rise and dividend yield begins to decline.

The cost of retained earnings to the firm is determined by the fact that these funds can be

returned to the shareholders as further dividends. Courtadon & Mersick (1983) stated that ‘retained earnings have an opportunity cost to the net of tax returns, which the shareholders might obtain from the use of the funds in alternative investments’.

### Debt Capital and Corporate Performance.

The objective of raising debt capital is to provide finance on terms cheaper than those required by the equity shareholders. Miller (1977) observed that the value of the firm could be increased by the use of debt since interest payments can be deducted from taxable profit. Modigliani and Miller (1993), in their initial hypothesis, assumed that the value of the firm and its cost of capital are independent of the means of financing.

They argued that corporate firms couldn't reduce the cost of the capital or increase its valuation because the benefits of cheaper debt are offset by the increased cost of equity financing. When M-M began to consider the effect of taxes, their outlook changed. Interest on tax is a tax-deductible expense. The tax equity reduces the cost of debt and the associate cost of capital. With a reduced cost of capital there is an increased valuation of the firm.

Ross, et al (1996) observed that an increase in the firm's value from debt financing leads to an increase in the value of the equity. An increased debt may increase the market risk of a firm. It may also inhibit the growth of net income due to higher service charges on debt. The ability of the firm to tolerate leverage will depend on the variance of net operating earnings. Firms with relatively stable streams are more likely to utilise debt than equity. Their average cost of capital could begin to increase with leverage even when reliance on debt is moderate.

In Nigeria, Oyejide (1987) carried out a study to show that debt finance has the highest rate of return while equity has the lowest. *This* study therefore establishes that maximization of the market value of the company is consistent with maximizing the value of the ordinary shareholders' wealth and such financing plan that does this affects corporate performance. That shows that optimum mix of capital increases corporate returns.

### Methodology.

This study is based on descriptive and analytical research design. For this study researcher has selected thirty companies that were listed in Nigeria stock exchange between 2012-2014 financial years.

The model specified for measuring the impact of capital structure on corporate earnings has Earnings as the independent variable and equity capital, retained earnings and debt capital as independent variables. Any change in the value of earnings for any given period ‘t’ is a function of the additions of the rate of returns multiplied by the sources of capital.

The functional relationship is written as:

$$EBIT_1 - EBIT_{1-1} = f(Eq, R/E, Dt, e)$$

$$\text{Let } EBIT_1 - EBIT_{1-1} = \pi$$

$$\text{Therefore } \pi = b_0 Eq^{b_1} R/E^{b_2} Dt^{b_3}$$

$$\ln \pi = b_0 + b_1 \ln Eq + b_2 \ln R/E + b_3 \ln Dt + e \dots\dots\dots 1$$

Interpreting the model we have:

- EBIT<sub>1</sub> = Earnings before interest and tax in year t
- EBIT<sub>t-1</sub> = Earnings before interest and tax in year t -1
- Eq = Equity Capital in issue
- R/E = Retained Earnings
- Dt = Debt Capital
- b<sub>0</sub>, b<sub>1</sub>, b<sub>2</sub> and b<sub>3</sub> represent the regression parameters

**The a Prior expectations:** In the model it is expected that a positive change in the returns of, increase in the returns of equity capital, retained earnings and debt capital will have positive effect on the earnings performance of corporate firms and vice versa.. Therefore,

$$\partial\pi/\partial Eq > 0, \partial\pi/\partial R/E > 0, \partial\pi/\partial Dt > 0$$

### Method of Estimation

The estimation procedures employed in this empirical study is based on Multiple Regression Analysis of Ordinary Least Square Method; the appropriate transformation of data being through the use of the natural logarithm. The choice of this estimation technique is informed by the need to determine the estimation parameters of the equations being used in this study. It is one of the most useful techniques, and in fact, it is by far the most popular and widely accepted method that can be used to explain the influence of a change in the value of one variable on that of another variable. (Olayemi & Olayide, 1981).

### Presentation and Analysis of Data

In equation '1' it is established that in 2012

$$\ln\pi = b_0 + b_1 \ln Eq + b_2 \ln R/E + b_3 \ln Dt$$

The result of the OLS estimates for the parameters of the model is given as:

$$\ln\pi = 1420 - 0.202 \ln Eq + 0.321 \ln R/E + 0.613 \ln Dt$$

(3.4965) (0.600) (0.238) (0.345)

(Standard errors are in parameters)

$$R^2 = 0.568$$

$$DW = 1.777$$

From the estimated functions

$$\frac{\partial\pi}{\partial Eq} \times \frac{Eq}{\pi} = -0.202$$

$$\frac{\partial\pi}{\partial R/E} \times \frac{R/E}{\pi} = 0.321$$

$$\frac{\partial\pi}{\partial Dt} \times \frac{Dt}{\pi} = 0.346$$

**Interpretation:** From the estimated function all parameter of the variables except the equity show positive relationship with the change in earnings. While returns on equity deviated from the a priori expectation, the returns on retained earnings and debt have the correct a priori signs. The result shows the following regression or elasticity coefficients: -0,202, 0,321 and 0.631 for equity, retained earnings and debt capital respectively.

Considering the negative relationship between corporate earnings and equity, it is obvious that the impact of equity investment on corporate earnings is not immediately felt. To reflect the true position of business activities, the series of the variables are lagged to justify that investment on equity does have the expected influence on the performance of the firms in the subsequent year(s). The result of the lagged variables is presented in table 4

Table 1: Lagged Value of Variables

S/N	Variable	Lag	Co-efficient	Standard Error
1	Constant	-	0.383	3.464
	Equity	1	0.028	0.284
	Ret. Earning	-	0.279	0.210
	Debt	-	0.532	0.282
	R <sup>2</sup>	0.567		
	DW	1.636		

source: Researcher's field work 2014



Considering the lagged variables as presented in Table 4, the appropriate result from the new OLS for the parameters of the lagged variables is given as:

$$\ln\pi = 0.383 + 0.028\ln Eq + 0.279\ln R/E + 0.532\ln Dt$$

(3.464)    (0.284)        (0.210)        (0.282)

(Standard errors are in parentheses)

$$R^2 = 0.567$$

$$DW = 1.636$$

From the estimated functions

$$\frac{\partial\pi}{\partial Eq} X \frac{Eq}{\pi} = -0.028$$

$$\frac{\partial\pi}{\partial R/E} X \frac{R/E}{\pi} = 0.279$$

$$\frac{\partial\pi}{\partial Dt} X \frac{Dt}{\pi} = 0.532$$

The result obtained from above shows positive relationship between all of the dependent and independent variables. The elasticity's of all the sources of capital were found to be below unity (That is, less than one). Though they reflect positive increase of both returns on capital and corporate earnings, a percentage increase in returns of equity, retained earnings and debt capital leads to less than proportionate increase in the corporate earnings in the year under review. A 10% increase in the returns of equity leads to 0.2% increase in the Firms earnings. Similarly, a rise of returns on retained earnings and debt capital, each by 10%, increase corporate earnings by 2.1% and 5.3% respectively.

The  $R^2$  of the entire model of 0.567 appears reasonable and satisfactory. It implies that 56.7% of the changes in the corporate earnings are due to the independent variables in the model - returns on equity, retained earnings and debt capital. It therefore follows that about 43.3% of the changes in corporate earnings can only be explained by factors outside the consideration of this study,

In 2012 the result of the OLS estimates for the parameters of the model is given as:

$$\ln\pi = 1.907 + 0.3031\ln Eq + 0.2471\ln R/E + 0.439\ln Dt$$

(2.946)    (0.251)        (0.72)        (0.264)

(Standard errors are in parentheses)

$$R^2 = 0.656$$

$$DW = 1.462$$

From the estimated functions;

$$\frac{\partial\pi}{\partial Eq} X \frac{Eq}{\pi} = 0.103$$

$$\frac{\partial\pi}{\partial R/E} X \frac{R/E}{\pi} = 0.247$$

$$\frac{\partial\pi}{\partial Dt} X \frac{Dt}{\pi} = 0.439$$

**Interpretation:** In the above regression parameters, a 10% increase in the returns of equity leads to 1.3% increase in the Firms earnings. Similarly, a 10% increase in each of the returns on retained earnings and debt capital, equity capital increase corporate earnings by 2.4% and 4.3 respectively. In this year debt capital makes the largest contribution (of about 4.39%) to the earnings of the organizations. This is followed by retained earning that contributes 2.47%.

In 2013, the result of the OLS estimates for the parameters of the model is given as:

$$\ln\pi = -6.568 + 1.3471\ln Eq + 0.60\ln R/E + 0.13\ln Dt$$

(2.609)    (0.406)        (0.208)        (0.270)

(Standard errors are in parentheses)

$$R^2 = 0.859$$

$$DW = 1.863$$

From the estimated functions;

$$\frac{\partial \pi}{\partial Eq} \times \frac{Eq}{\pi} = 1.347$$

$$\frac{\partial \pi}{\partial R/E} \times \frac{R/E}{\pi} = 0.060$$

$$\frac{\partial \pi}{\partial Dt} \times \frac{Dt}{\pi} = 0.137$$

**Interpretation:** In the above regression parameters, a 10% increase in the returns on equity, retained earnings and debt capital, there is 13.47, 0.60%, and 1.37% increase in the earnings of the companies respectively. In this year, Equity capital makes the largest contribution (of about 33.47%) to the earnings of the organisations. This is followed by debt capital, which contributes 1.37% and the least contributor, retained earnings, of 0.6%.

The three regression equations show different results for the period 2012 -2014. The result for 2012 shows that the three sources of finance explained only 48.9% of the change in earnings, in 2012, 39.34% and in 2014, 18.9%. This implies that certain factors that are not included in the model affected earnings performance.

The regression results show that debt capital had a highest change in return of 53.2% in 2012 and 43.9% in 2013, followed by equity, of 134.7% in 2014.

### Summary

This study investigates how capital structure decisions affect corporate performance. It equally examines the reality of the concept of optimum capital structure: and whether such optimum mix of financing has relationship with corporate performance.

The model used in this study measures the relationship between Changes in earnings performance of corporate firms and the returns from various capital employed in the firms. To analyse this model, cross sectional data that covers thirty firms in three years (2012 - 2014) were used. The technique of estimation was through the Multiple Regression Analysis of Ordinary Least Squares Method, the appropriate transformation of data being through the use of the natural logarithm.

From the estimation technique used in this study, the result obtained from the analyses of the model reveals that sources of capital contributes varying degree to the earnings of the corporate organisations, with debt capital making the largest contribution in 2012 (53.2%), 2013 (43.9%) and equity (134.7%) in 2014. The study also reveals that firms are not operating at optimal level of capital structure. The trend of performance exhibits a linear relationship that is downward sloping, indicating that a minimum cost possible is not yet attained. The implication of this is that *firms* are not making productive use of equity and debt capital.

### Conclusion

It appears from this study that many firms are not operating at equilibrium level. This is reflected by the linear relationship between returns from sources of finance and earnings performance between 2012 and 2014.

**Recommendation .** In the last few years examined in this study, returns from various sources of capital has not proved that corporate firms were operating at optimum capital structure.

The financing mix of companies plays an important role in improving earnings performance of firms. The managers should work out modality for ensuring that firms operate within the orbit of equilibrium. They should plan their financial Structures in such a way to ensure efficient utilisation of the firms' productive resources.

### References

- Altman, E.J. (.968). "Corporate Bankruptcy, Potential Stock Holder Returns and Share Valuations", Journal of Finance Vol.24. Pp. 888.
- Courtadon, G.R. and Merrick, J.J. (1983). "The Option Pricing Model and the Valuation of Corporate Securities" Midland Corporate Finance Journal.
- Donaldson, G.G. (1961). "Corporate Debt Capacity" A Study of Corporate Debt Policy and Determination of Corporate Debt Capacity", Boston: Harvard Graduate School of Business Administration.
- Gordon, M. (1961). The Investment, Financing, and Valuation of Corporation. Homewood, ill: Richard D.Irwin.
- Inanga, E. (1987). "The Cost of Capital and the Capital Asset Pricing Model, A Theoretical Analysis", NJESS Vol.29, No. 1. Pp. 111-123
- Marsh, P (1982) "The Choice Between Debt Equity, An Empirical Study" Journal of Finance Vol.37. Pp 121-144.
- Miller, M. (1977). "Debt and Taxes", Journal of Finance, Vol.2, No.4. Pp.34.
- Modigliani, F and Miller, M. (1958). "The Cost of Capital, Corporation Finance and the Theory of Investment", American Economic Review,
- Myers, S.C. (1984). "The Capital Structure Puzzle", Journal of Finance,
- Oyejide, T.A. (1987). "Impact of Equity Capital, Retained Earnings, and Debt on Corporate Profit in Nigeria", NJESS Vol.39(1),pp35-43
- Pandey, I. M.(1979). "Financial Management", New Delhi: Vikas Publishing House.
- Ross, A.S., Westerfield, R.W. and Jaffe, J. (1996). "Corporate Finance (6<sup>th</sup> Ed.)" U.S.A.: Irwin McGraw Hill.
- Schwartz, E (1959). "Theory of Capital Structure of the Firm" Journal of Finance (XIV). Pp 18-39.