TESTING STATIC TRADEOFF THEORY AGAINST PECKING ORDER MODELS OF CAPITAL STRUCTURE IN NIGERIAN QUOTED FIRMS

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ABSTRACT

We test two models with the purpose of finding the best empirical explanation for corporate financing choice of a cross section of 27 Nigerian quoted companies. The models were developed to represent the Static tradeoff Theory and the Pecking order Theory of capital structure with a view to make comparison between theoretical predictions and empirical results. Data pertaining to 1996 through 2006 were used. By using ordinary least square multiple regression methods, we aim at establishing which of the two theories has the best explanatory power for Nigerian firms. The analysis of the outcomes led to the conclusion that both of them appears to be a good description of the financing policies of those firms for the period under review.

1.0   INTRODUCTION

The determining factors affecting the choice of the capital structure of firms can be broken down into four categories, according to their purpose towards:

(a)   Improving the conflicts between the various stakeholders with claims upon the firm resources, machines, managers (the agency approach):

(b)   Conveying private information to the capital markets or mitigating effects of adverse selection. (the asymmetric information approach)

(c)   influencing the nature of products or competition in the product/input market s: and

(d)   Influencing the results of disputes over corporate control (Harris and Ravir 1991).

Financing policy by firms requires managers to identify ways of finding new investment. The managers may exercise three main choices: use retained earnings borrow through debt instruments, or issue new shares. Hence the standard capital structure of a firm includes retained earnings, debt and equity; these three components of capital structure reflect firm's ownership by shareholders while the second component represents ownership by debt holders. The pattern found in developing and developed countries alike (see Eboh, 2004 la-porta, lepez-de silence and shleifer, 1999)

The choice of appropriate capital structure is seen by many as a viable option to increase and maximize shareholders wealth. With the recent development in the Securities and Exchange Commission (SEC), Nigerian stock exchange (NSE), and the entire financial system, with firms being listed and quoted in the NSE, one issue that has received great attention is the capital structure decision. This follows because the market value of the firm may be affected by the capital structure decision. The debt-equity mix has implications for the shareholders earning and risk, which in turn will affect the cost of capital and the market value of the firm. The term capital structure is used to represent debt/equity mix.

Factors influencing firms in their decision on a certain capital structure has been cause for debate for decades among academics. Several theories have been put forward on the subject, but it seems consensus is yet to be reached. Among

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those, there is the Static Tradeoff Theory (STT), which asserts that firms decide for a predetermined capital structure and try to stick to it through time, although they might eventually deviate from it for a various reasons. Another well known theory in the literature is the Pecking Order Theory (POT), which states that the firms' capital structure is determined by the difference between the internally generated cash flow and the financial deficit.

Recently, an interesting discussion has been generated in studies designed to detect which of these two theories of capital structure best describes the financing choice of corporations. To date, just a very few studies had been performed in this area; (see Shyam-Sander and Myers (1999), Chirinko and Singha (2000), Frank and Goyal (2003) using European, USA and Asia data. In Nigeria, very little work has been done in this area, see Odedokun (1995), Olatundun (2002) and Eboh (2004). Thus there is a conspicuous gap in the empirical research on capital structure theories in Nigeria, this gap request urgent attention.

1.1   Objectives of the study

The main or general objective of this study is to test the static trade off theory and the pecking order theory using Nigerian data in order to establish which theory best explains the capital structure of local firms.

2.0   LITERATURE REVIEW

2.1   Theoretical Frameworks

The literature in capital structure began with the seminar work by Modigliani and Miller (1958) on the irrelevance of capital structure. Since then, capital structure continues to be a topic of interest in financial economics and had produced a large volume of research. Modigliani Miller theory with its modifications is based on the assumption of a perfect capital market. This is followed by the trade off theory which emanated from the works of De Angelo and Masulis (1990). According to this theory, the tax advantage of debt will be traded off against the cost of financial distress. This trade off results in an optimal capital structure. The third theory is the pecking order theory. This theory implies that firms prefer to finance using retained earnings, followed by debt, and finally by equity see Myers and Majluf (1984).

One theory that has generated strong empirical support is agency theory, Agency theory posits that capital structure is determined by agency cost i.e. cost due to conflicts of interest. The literature in this area has been built on the early work by Fama and miller (1972) and Jensen and Meckling (1976). These alternative theories lead to different conclusion regarding the influence of capital structure decision on corporate financing choice.

2.1.1   The Static Trade-off Theory

The static trade off theory of capital structure predicts that firms will choose their mix of debt and equity financing to balance the cost and benefits of debt. It should however be realized that a company cannot continuously minimize its overall cost of capital by employing debt. A point or range is reached beyond which debt becomes more expensive because of the increased risk(financial distress) of excessive debt to creditors as well to shareholders. When the degree of leverage increases, the risk of creditor increases, the risk of creditors increases and they demand a higher interest rate and do not grant loan to the company at all, once it's debt has reached a particular level. Further the excessive amount of debt makes the shareholders position very risky. This has the effort of increasing the cost of equity. Thus up to a point the overall cost of capital decreases with debt, but beyond that point the cost of capital would start increasing and , therefore it would not be advantageous to employ debt further, so there is a combination of debt and equity which minimizes the firm's average cost of capital and maximizes the market value per share. The trade-off between cost of capital and earnings per share (EPS) set the maximum limit to the use of debt. However, other factors should also be evaluated to determined the appropriate capital structure for a company. According to the trade off theory, the tax advantages of debt will be traded off against the costs of financial distress firms for which the tax advantage is lower (e.g. firms with non-debt tax shields) and firms with higher costs of financial distress (e.g. firms with more relative earnings) will have lower leverage (see De Angelo and Masulis (1980)). As debt financing causes monitoring by lenders and reduces the free cash flow, debt can be used as an instrument to align the interest of managers and shareholders (Jensen and Meckling (1976)), Jensen (1986)). However, debt financing may also cause conflicts of interests between shareholders and creditors, which could e.g. lead to sub optimal investment policies.

2.1.2   Pecking Order Theory

The major prediction of the model is that firms will not have a target optimal capital structure, but will instead follow a pecking order of incremental financing choices that places internally

generated funds at the top of the order, followed by debt issues, and finally only when the firm reached its "debt capacity" new equity financing.

yers and Majluf (1984) noted that this theory is based upon costs derived from asymmetric information between managers and the market and the idea that trade-off theory costs and benefits to debt financing are of issuing new securities. The cost of equity includes the cost of new issue of shares and the cost of retained earnings. The cost of debt is cheaper than the cost of both these sources of equity funds. Considering the cost of new issue and retained earnings, the latter is cheaper because personal taxes have to be paid by shareholders on distributed earnings while no taxes are paid on retained earnings as also no floatation costs are incurred when the earnings are retained. As a result, between the two sources of equity funds, retained earnings are preferred. It has been found in practice that firms prefer internal financing. If the internal funds are not sufficient to meet the investment outlays, firms go for external finance, issuing the safest security first. They start with debt, then possible hybrid securities such as convertible debentures, then perhaps equity as a last resort. There are other theories, such as Modigliani and miller's and also those based on agency theory.

2.2 **Empirical Literatures**

Many studies have been performed on capital structure issues in developed countries (especially US and some European countries), but to our knowledge very few has been done on developing countries in general. This section therefore reviews some of the relevant ones as follows;

In the cross sectional study of the determinants of capital structure, Rayan and Zingales (1995) examine the extent to which at the level of the individual firm; the capital structure may be explained by four key factors, namely; market-to-book, size, profitability and tangibility. Their analysis is performed upon a firm-level sample from each of the countries, and although the results of their regression analysis differ slightly across countries, they appear to uncover some fairly strong conclusion.

Rayan and Zingales used the market-to-book ratio as a proxy for the level of growth opportunities available to the enterprise. This is in common with most studies; tend to apply proxies rather than valuation models to estimate growth opportunities (Danbolt et al (1995)). Rayan and Zingales suggest that, this is consistent with the theoretical predictions of Jensen and Meckling

(1976) on agency theory, and the work of Myer (1977), who argues that, due to information asymmetries, companies with high gearing would have a tendency to pass up, while companies with large amounts of investment opportunities (also known a growth options) would tend to have low gearing ratios.

However, the empirical evidence regarding the relationship between gearing and growth opportunities is rather mixed. While Titman and Wessels (1995) found a negative correlation Kester (1986) does not find support for the predicted negative relationship between growth opportunities and gearing. Despite this controversy, however, Rayan and Zingales (1995) uncovered evidence of negative correlation between market-to-book and gearing for all countries. This is thus consistent with the hypothesis of Jensen and Meckling (1976), Myers (1977), and lends weight to the notion that companies with high level of growth opportunities can be expected to have low level of gearing.

Secondly, Rajan and Zingales include size (which is proxied by the natural logarithm for sales) in their cross sectional analysis. There is no clear theory to provide expectations as to be effect which size should have on gearing.

Shyam-Sander and Myers (1999) introduced a test of pecking order theory of capital structure. Their test is based upon the prediction of what type of financing is used to fill the "financing deficit". The financing deficit is defined using the cash flow identity, as the growth in assets less the growth in current liabilities (except the current portion of long-term debt) less the growths in retained earnings. According to this identity, this deficit must be "filled" by the net sale of new securities. Shyam-Sander and Myers ague that, except for firms at or near their debt capacity, the pecking order predicts that the deficits will be filled entirely with new debt issues. The empirical expectation of their test is $DD_{it} = B_{po}DEFit + E_{it.}$ Where DD_{it} is the net debt issued by firm i in period t, and DEF_{it} is the corresponding financial deficit. Shyam-Sander and Myers argue that the "Sample" version of the pecking order predict = 0 and β_{po} = 1. Intuitively, the slope coefficient in this regression indicates the extent to which debt issues cover the financing deficit, they acknowledge that β_{po} may be less than 1 for firms. Near their debt capacity, behaviour, the firms in their sample should not be significantly constrained by such concerns. They find β_{po} = 0.75 with an R^2 of 0.68. They interpret this as evidence that "the pecking order is an excellent first-order description of corporate financing behaviour for the sample. They also find

that a target adjustment model based on the trade-off theory has little power to explain the changes in debt financing for these firms.

This paper has generated an interesting discussion in the literature of capital structure. First, Chirinko and Singha (2000) were among the first to criticize Shyam-Sander and Myers through illustration using several examples that their test has no power to distinguish between plausible alternative hypotheses.

Frank and Goyal (2003) also question the conclusion drawn by Shyam-Sander and Myers (1999) on several fronts. The most interesting challenges are the extent to which the Shyam-Sunder and Myers findings hold for broader sample of firms, whether the results hold over a longer time horizon (in particular including the 1990s) and whether their findings hold for sub-samples of firms with high level of asymmetric information. For their broader sample of firms, Frank and Goyal show that the prediction $\beta_{po} = 1$ does not hold and that it significantly weakens in the 1990's, even for the types of firms (large, mature) examined by Shyam-Sunder and Myers (1999)

Fama and French (2002) examined many of the predictions of the tradeoff and the pecking order theories with respect to capital structure and dividend policy. They argue that for the majority of the predictions, the two theories agree and generally report findings consistent with these shared predictions. Consistent with Shyam-Sander and Myers (1999), Fama and French (2002) find that (for their large sample) debt is used to address variations in investment and earnings in the short term. However, they also find, as in Frank and Goyal (2003), that small; high-growth companies issue most of the equity (see Fama and French (2002)). Fama and French join Frank and Goyal in arguing that these findings contradict the pecking order theory.

The only major attempt on Nigeria using Nigerian data known to us is the one by Eboh (2004), he survey a cross section of 65 Nigerian quoted companies in bid to identify the predominant capital structure theory that influence financing choice of firms in Nigeria; he discovers among others that the pecking order theory of Myers and Majluf appears to be a good description of the financing policies of a large sample of firm within the period (1996-2000).

The understanding of the factors that resulted in these contrasting finding is important furthering our understanding of capital structure and financing choices by firms.

3.0   METHODOLOGY

3.1   Sources of Data

The data for this study were derived from secondary sources. The researcher opted for secondary data because of the nature of this research. The data were extracted from publications of the Nigerian Stock exchange fact-book 2001, 2005 and 2007 editions, Best Shares Selection Guide various publications published by Flarmark and Company, Security and Exchange Commission (SEC) annual reports. The data contains all the hundred and forty five companies quoted on the Nigeria Stock Exchange as at 2007. However, only annual report of 27 companies has all the data that is required for this study. Samples cover 15 sectors of NSE classifications namely: Automobile and Tyre, Banking, Breweries, Building Materials, Chemical and Paints, Conglomerates, Construction, Engineering Technology, Food/Beverages and Tobacco, Health care, Industrial/Domestic product, Insurance, Petroleum Marketing, Printing and Publishing, Textiles.

3.3   Model Specification
The following models were built in line with the hypotheses of the study.

1. $CS_{21} = f(TANG_{21}, ROA_{21}, SZ_{21})$
                                     +   ±   +
$CS_{21} = b_0 + b_1 TANG_{21} + b_2 ROA_{21} + b_3 SZ_{21} + \mu$ ……………………………………………………………4.1

2. $CS_{22} = f(TANG_{22}, ROA_{22}, SZ_{22}, GRT_{22})$
                                     +   ±   +   -
$CS_{22} = b_0 + b_1 TANG_{22} + b_2 ROA_{22} + b_3 SZ_{22} + b_4 GRT_{22} + \mu$ ……………………………………………4.2

3. $CS_{23} = f(TANG_{23}, ROA_{23}, SZ_{23})$
                                     +   ±   +
$CS_{23} = b_0 + b_1 TANG_{23} + b_2 ROA_{23} + b_3 SZ_{23} + \mu$ ……………………………………………………………4.3

4. $CS_{24} = f(TANG_{24},\ ROA_{24},\ SZ_{24},\ GRT_{24})$

                         +   ±   +   -

$CS_{24} = b_0 + b_1 TANG_{24} + b_2 ROA_{24} + b_3 SZ_{24} + b4 GRT_{24} + \mu$...4.4

5. $CS_{25} = f(TANG_{25},\ ROA_{25},\ SZ_{25})$

                         +   ±   +

$CS_{25} = b_0 + b_1 TANG_{25} + b_2 ROA_{25} + b_3 SZ_{25} + \mu$ 4.5

6. $CS_{26} = f(TANG_{26},\ ROA_{26},\ SZ_{26},\ GRT_{26})$

                         +   ± +   -

$CS_{26} = b_0 + b_1 TANG_{26} + b_2 ROA_{26} + b_3 SZ_{26} + b_4 GRT_{26} + \mu$ 4.6

7. $MCS = f(MSZ,\ MROA)$

                    +   ±

$MCS = b0 + b1MSZ + b2MROA + \mu$ 4.7

Where: B_0, b_1 b_2 are regression parameters, t is the year CS_1 = capital structure = debt/equity ratio in year t. μ is the stochastic error term.

MCS   =   Mean Value (1996 – 2006) for capital structure
$TANG_t$ =   Tangibility ratio for year t, defined as fixed assets divided by total asset
GRT_t =   Market Value of equity divided by total asset in year t
SZ_t =   Size of firm in year t provided by natural logarithm of
                              total asset i.e. Ln (Total Asset)
ROA_t =   Return on Asset in year t.
CS_{21} =   Capital structure for 2001, CS_{22}, for 2002, CS_{23} for 2003,
                              CS_{24} for 2004, CS_{25} for 2005 and CS_{26} for 2006.
$TANG_{21}$ =   Tangibility for 2001, $TANG_{22}$ for 2002, $TANG_{23}$ for
                              2003, $TANG_{24}$ for 2004, $TANG_{25}$ for 2005 and $TANG_{26}$ for 2006.
ROA_{21} =   Return on Asset for 2001, ROA_{22} for 2002, ROA_{23} for
                              2003, ROA_{24} for 2004, ROA_{25} for 2005, ROA_{26} for 2006.
SZ_{21} =   Size for 2001, SZ_{22} for 2002, SZ_{23} for 2003, SZ_{24} for
                              2004, SZ_{25} for 2005, SZ_{26} for 2006.

GRT_{21} =   Growth for 2001, GRT_{21} for 2002, GRT_{23} for 2003,
                              GRT_{24} for 2004, GRT_{25} for 2005, and GRT_{26} for 2006

4.0   EMPIRICAL RESULTS AND ANALYSIS

The analysis is done on equation basis,

Equation 4.1

CS21 = 0.859 – 0.299 TANG21 + 2.780 ROA21 – 5.7E-02SZ21
          (0.323) (-0.778)   (6.111)*   (-0.306)
R^2 = 64.6% R^2 (adj) = 59.6% F-stats = 12.801   DW=2.713

Equation 4.2

CS22 = 4.805 – 3.8E-02 TANG22 + 2.294 ROA22 – 0.133SZ22 – 3.194GRT22
          (1.953) (-0.121)   (2.156)***   (-0.845)   (-4.712)*
R^2 = 51.1% R^2 (adj) = 42.2%   F-stat = 5.746   DW = 1.911

Equation 4.3

CS24 = 4.009 + 0.173 TANG24 – 1.115 ROA24 + 4.487E-02SZ24 – 4.349GRT24
          (0.814)   (0.518)   (-0.765) (0.155)   (-2.760)**
R^2 = 34.2% R^2 (adj) = 22.3%   F- stat = 2.864   DW = 1.990

Equation 4.4

MCS = 134.339 – 5.754 MSZ – 12.507MROA
          (1.463)   (-0.884)   (-2.705)**
R^2 = 26.9% R^2 (adj) = 20.8%   F- stat = 4.413   DW = 1.606

The numbers in bracket represents t-value, while the number directly beneath the bracket represents the parameter estimates. *indicate that the estimated co-efficient is statistically significant at 1% level of significant, ** indicate that the estimate co-efficient is statistically significant at 5 per cent level of significance while *** indicate that the estimated co-efficient is statistically significant at 10 per cent level of significance.

In equation 4.1, We regress tangibility in 2001 (TANG21),return on asset in 2001 (ROA21), and size in 2001 (SZ21) on the capital structure for 2001. the equation shows a good explanatory power of the independent variable. The co-efficient of multiple determination (R^2) of 0.646 or 64.6% indicates that about 64.6% variations in the observed behaviour in the dependent variable is jointly explained by the independent variables. The remaining 35.4% may better be accounted for by other omitted variables and is represented by the stochastic error term. The high R^2 indicates that the model fits the data well and is statistically robust.

The F- statistic of 12.801 is significant at 1% level considering the table F- statistic [$F_{0.01}$ (3,6) = 9.78]. The calculated F- statistic is greater than the table F- statistic (i.e 12.801 > 9.78), therefore it is significant at 1% level. This buttresses the fact that the high R^2 is better than would have occurred by chance. On the test of significance, the table t- statistic, two tailed test, with degree of freedom N-K = 10- 4 = 6, the following correspond to 10%, 5% and 1% significance levels respectively: 1.943, 2.447 and 3.707. Any parameter that is less than the above figures (the least being the 10% level) is statistically insignificant in the model; and therefore, could as well be removed from the model and the overall goodness of fit (R^2) may not be significantly affected as stated in koutsoyannis (1977). A cursory examination of the equation shows that only return on asset in 2001 (ROA21) is significant at 1% level. The other independent variable failed the test of significance in the model. The ROA21 carries a positive sign and this is consistent with the Trade off theory of capital structure in 2001. On the contrary, tangibility of asset (TANG21) and logs of asset (SZ21) are not statistically significant; which means that statistically, they have no significant influence on the capital structure in 2001. Another essential test is the second order or econometric criteria. The DW statistic is 2.713. the table DW at 5% level indicates the following, given K^1 = 3 (excluding the constant term) and sample size (n) equals 10. then

dL = 0.525, dU= 2.016, 4-dU = 1.984 and 4 – dL = 3.475. The decision rule is: if calculated DW falls within the dU and 4 –dU, then the result of the model are fantastic, reliable and have no serial correlation in the residuals of the model; therefore there is no autocorrelation. If it lies within dU and dL or 4 – dU and 4 – dL, then the result are inconclusive. But beyond the above mentioned regions, result is critical and therefore have autocorrelation. In such a case the result of the estimates will no longer be reliable for prediction and need transformation of the original model to solve the econometric problem. The DW statistics (2.713) show inconclusive evidence regarding the presence or absence of positive first order serial correlation.

In equation 4.2, We state that the capital structure in 2002 (CS22) is a function of tangibility in 2002 (TANG22), return on asset in 2002 (ROA22), size in 2002 (SZ22) and growth in 2002 (GRT22). Testing the expected signs of the parameter estimates, we observe that three estimates, tangibility, size and growth are wrongly signed. On the contrary, the coefficient of the constant term and return on asset ROA22 are correctly signed, showing that the two variables are directly related to the capital structure in 2002. The equation shows a good explanatory power of the independent variable with a coefficient of multiple determination of 51.1%. the F- statistic of 5.746 is significant ay 5% level. $F_{calculated} > F_{tabulated}$ at 5% level i.e (5.746 >5.19)

On the test of significance, only two parameter estimates are significant. They are return on asset (ROA22) at 10% level and growth(GRT22) at 1% level of significance. The return on asset carries a positive sign which is consistent with the trade- off theory of capital structure while growth with a negative sign signifies the pecking order theory of Myers and Majluf (1984).
Based on the DW test, there is no incidence of auto- correlation in this equation, since the DW calculated (1.911) lies between the dU (2.414) and 4 – dU (1.586). Therefore, our estimates are reliable.
In equation 4.3, We regress tangibility in 2004 (TANG24), return on asset in 2004 (ROA24), size in 2004 (SZ24), growth in 2004 (GRT24) on the capital structure in 2004 (CS24).
Testing the expected signs of the parameter estimates, we observed that two estimates, return on asset and growth are wrongly signed: The coefficient of multiple determination (R^2) of 34.2% does not show a very impressive explanatory power of the independent variables.

The F – statistic of 2.864 is statistically significant only at 25% level of significant which is not impressive. On the test of significance, only the growth (GRT24) parameter is significant at 5% level of significance. All the other variables failed the failed the test of significant in the model. The GRT24 carries a negative sign which is consistent with the pecking order theory of Myers and Majluf (1984). Based on the DW statistic, there is no incidence of autocorrelation in this model. The DW calculated is 1.990 and this lies in the region between dU (2.414) and 4 – dU (1.586). Therefore our estimates are reliable.

In equation 4.4, We test for the stability of the results over time; by finding the average result within the ten years period of this study i.e. (1996 – 2006, excluding 1998), so as to form better judgment and generalization from the result of the test. The equation considers mean of capital structure (MCS) as a function of mean of size (MSZ) and mean of return on asset (MROA).

On the test of significance, only the mean of return on asset (MROA) is statistically significant at 5%. All the other variable failed the test of significance in the model. The coefficient of mean of return on asset has a negative sign supporting the economic a priori expectation by pecking order theory of Myers and Majluf: specifically, MROA comes out with an estimated coefficient of -12.507. This means that an increase of one percent in MROA will decrease the MCS by 12.507. This test confirms that the mean of return on capital structure is explained by the mean on the return on asset. This is in agreement with pecking order theory. The F- statistic of 4.413 is significant at 10 per cent level. The F calculated > F tabulated at 10 per cent level i.e (4.413 > 3.26). The DW statistic of 1.606 shows inconclusive evidence regarding the presence or absence of positive first- order serial correlation.

4.3 DISCUSSION OF FINDINGS

The main findings of this study are:
1.   That in 2001, return on asset ROA21 is the significant determinant of capital structure which confirms the fact that the Trade off theory as tested by ROA21 exert the only significant influence on the capital structure of firm. The influence of the pecking order theory as tested by the negative relationship between return on assets ROA21 and capital structure is statistically insignificant.
2.   That in 2002, the positive return on asset which test for the trade off theory influence

the capital structure. However it is also observed that negative growth which is used in testing the agency theory exerts a significant influence on the capital structure in 2002. Although negative growth is a consistent test for the pecking order theory of capital structure.
3.   That our result is inconclusive about which of the two theories among pecking order theory and trade off theory exerts the most dominant effect on capital structure on Nigeria quoted firms during the period under review between. This is evident from equation 4.4 in which the average return on asset (MROA) is negative and is also the only significant determinant of capital structure in this model. This is consistent with the pecking order theory as against the other equation which supports the trade off theory as having domineering influence on the variation of capital structure in those years. Thus, our various equations have shown that the capital structure theories do actually influence corporate financing choice in Nigeria.
4.   That our result is inconsistent with the findings of Myers and Majluf (1984) as supported by Clagget (1991) and Eboh (2004) that the main determinant of capital structure is log of asset (SZ) but rather we found return on asset to be the main determinant of capital structure in the period under review (1996- 2006).

5.0   CONCLUDING REMARKS

The leading conclusion is that capital structure of quoted firms in Nigeria are significantly influenced by the return on asset and growth which is proxied by market value of equity divided by book value of assets and not size proxied by natural logarithm of total asset during the period of study is inconsistent with the previous work in this area by Eboh (2004). Our empirical result, support both pecking order theory and static trade off theory as playing significant role in corporate financing choice of quoted firms but with the pecking order exerting more influence as reported in the average capital structure equation used in testing the stability of our result over the ten years period of study.

Other relevant conclusions are as follows:
i.   Tangibility defined as ratio of fixed asset to total asset and size do not influence the capital structure. This is inconsistent with the result found by Hall and Michael (2000)

in a study of three thousand U.K companies.

ii. The influence of agency theory as tested by growth variable is strong and significant.

Based on our empirical result and major findings obtained from the result, we wish to recommend the following.

1. That the Nigeria capital market be depended and well structured to removed information asymmetries between firm managers and the capital market, and also eliminate imperfections in the market in order to improve the confidence and integrity of the system.

2. That in order to optimize corporate financing choice in Nigeria; both the constituent of Trade off theory and Pecking order theory should be utilized in capital structure decision of firm since both of them exert an influence on Nigerian firms.

3. That firms should consider other relevant factor such as: concern for dilution of control, desire to maintain operating flexibility, ease of marketing, agency and bankruptcy costs, capacity for economies of scale and long run survivability of the firm; when taking their capital structure decision and not just rely on pecking order and trade off theory in their financing choice.

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APPENDIX A: Sample quoted firms variables

Company	Year	FIXED ASSET	ROA	TANG	PBT	TOTAL ASSET	DEBT	EQUITY
1. AUTOMOBILE AND TYRE DUNLOP NIG PLC	1996	558554	0.508282	0.650287	436,581	858,934	7,508	168,000
	1997	842660	0.467594	0.803666	490,282	1,048,519	40,000	252,000
	1999	831509	0.023611	0.452094	43,428	1,839,236	660,910	1,474,993
	2000	773889	0.133064	0.638458	161,290	1,212,121	786,832	1,546,528
	2001	1026767	0.158748	0.796108	204,743	1,289,733	533,347	1,667,478
	2002	1236221	0.111117	1.029430	133,438	1,200,878	766,425	1,526,235
	2003	2848225	-0.305429	3.150778	-276,101	903,975	-179,655	1,292,525
	2004	4771829	-0.693175	8.116073	-407,551	587,948	-1,307,723	1,090,301
	2005	10996684	-0.052842	2.794335	-207,953	3,935,349	-2,380,155	4,872,776
	2006	12995123	-0.100925	1.883261	-696,421	6,900,327	5,365,178	8,127,686
2. (BANKING) ACCESS BANK NIG PLC	1996	71198	0.024006	0.060532	28,236	1,176,203	667,167	100,000
	1997	6183	0.023210	0.034774	41,251	1,777,256	1,195,009	100,000
	1999	144284	0.022180	0.029580	108,187	4,877,256	2,732,604	600,000
	2000	540041	0.019751	0.064027	166,594	8,434,560	4,400,596	841,750
	2001	736217	0.014459	0.0917066	116,081	8,027,957	7,108,464	919,493
	2002	890230	0.001582	0.078483	-17,947	11,352,941	9,399,157	1,943,784
	2003	1400052	0.0305897	0.061998	810,639	22,582,040	20,216,683	2,365,356
	2004	1843687	0.030367	0.058825	951,750	31,341,507	28,638,677	2,702,830
	2005	2417425	0.011223	0.036125	751,033	66,918,315	52,846,391	14,071,924
	2006	3953161	0.006413	0.022647	1.119,449	174,553,866	145,659,980	28,893,886
3. (BREWERIES) GUINESS NIG PLC	1996	3665981	0.128122	0.800452	586,787	4,579,887	426,871	270,000
	1997	7613279	0.155369	0.808700	1,462,682	9,414,217	-	250,734
	1999	6530376	0.419373	0.703272	3,894,179	9,285,698	-	353,982
	2000	6530376	0.500043	0.703272	4,643,251	9,285,698	-2,087,137	10,681,154
	2001	7350320	0.529910	0.688157	5,660,054	10,681,154	-2,366,338	12,663,140
	2002	7945542	0.462082	0.627454	5,851,413	12,663,140	-2,138,282	14,157,810
	2003	12723046	0.699378	0.898659	9,901,668	14,157,810	-5,034,014	15,189,428
	2004	16012252	0.769449	1.054170	11,687,494	15,189,428	-5,892,322	16,908,244
	2005	29179564	0.344325	1.600858	6,276,167	18,227,442	-5,548,363	18,227,442
	2006	29531969	0.545965	1.409789	11,436,771	20,947,782	-6,968,521	25,667,544
4. (BREWERIES) NIGERIAN BREWERIES	1996				2,581,465	14,057,025	-	457,500
	1997				2,406,396	14,662,903	-	457,500
	1999				5,268,116	16,779,413	-	16,779,413
	2000	12074011	0.251630	0.485573	6,256,916	24,865,477	12,822,406	-24,865,477
	2001	15287003	0.297230	0.606696	7,489,351	25,197,125	13,068,092	-25,197,125
	2002	37022763	0.452681	1.614218	10,382,429	22,935,410	-10,718,921	-22,935,410
	2003	50014941	0.419756	1.910964	10,992,047	26,186,746	-16,752,267	-26,186,746
	2004	54448027	0.323782	1.927094	9,148,138	28,253,944	-16,511,021	-28,253,944
	2005	52428880	0.371433	1.509863	12,897,746	34,724,241	-7,391,506	-34,724,241
	2006	46677917	0.453421	1.287688	16,436,255	36,249,393	880,854	36,249,393
5. (BUILDING MATERIALS) ASHAKA CEMENT PLC	1996	765395	0.422649	0.412717	783,814	1,854,526	3,827	292,500
	1997	812609	0.397849	0.352564	916,983	2,304,850	3,827	292,500
	1999	867859	0.295905	0.291052	882,330	2,981,799	3,121	2,784,799
	2000	1152358			1,334,592	3,525,848	-	3,287,435
	2001				2,792,578	4,999,844	-	4,705,149
	2002				2,093,071	5,992,502	-	5,700,938

Company	Year							
	2003				3,135,497	6,637,252	-	6,324,108
	2004				4,892,887	7,556,687	-	7,218,717
	2005				6,519,249	8,293,207	-	11,633,603
	2006				4,951,464	7,198,831	-	11,618,084
6. (BUILDING MATERIALS) CEMENT COMPANY OF NORTHERN NIGERIA	1996	6685070	0.051907	34.610410	10,026	193,152	100,000,000	43,651
	1997	3802456	0.049684	18.095989	10,440	210,127	87,500,000	65,675
	1999	3492819	-0.120533	5.621809	-74,887	621,298	41,666,667	678,479
	2000	3080411	-1.692403	10.665984	-488,778	288,807	-588,434	265,890
	2001	917617	-2.148913	1.852791	-1,064,275	495,262	-1,329,414	195,262
	2002	1062659	-0.571209	0.908167	-668,380	1,170,114	-2,067,220	579,886
	2003	2074289	-0.093759	2.083362	-93,351	995,645	-2,648,768	675,716
	2004	2160468	0.507385	1.297141	845,081	1,665,561	-3,508,387	1,406,438
	2005	2140175	0.233917	1.331854	375,886	1,606,914	-4,328,601	1,606,914
	2006				-		-4,328,601	1,606,914
7. (CHEMICAL AND PAINTS) BERGER PAINTS NIG PLC	1996	20527	1.327119	0.356941	76,320	57,508	116,553	6,418
	1997	36361	1.263524	0.491411	93,492	73,993	146,626	115,003
	1999	146292	1.560188	4.186949	54,513	34,940	120,514	2,098,077
	2000	144861	0.089982	0.344122	37,879	420,958	23,109	1,569,923
	2001	213166	0.292342	0.458482	135,921	464,938	38,718	227,089
	2002	250502	0.250657	0.479918	130,835	521,968	81,538	439,323
	2003	235573	0.297086	0.416529	168,021	565,562	103,545	460,533
	2004	279571	0.274918	0.461864	166,411	605,310	106,961	496,385
	2005	1278937	0.064750	1.211655	-68,346	1,055,529	223,408	883,924
	2006	1251050	0.096369	1.092195	110,386	1,145,445	105,605	965,293
8. (CONGLOMERATES) CHELLARAMS PLC	1996	538829	2.208226	1385.164524	859	389	508,821	5,805
	1997	198584	1.418848	14.242558	19,783	13,943	186,460	548,417
	1999	338395	1.227914	11.511208	36,097	29,397	284,579	470,101
	2000	352547	0.034437	0.381667	31,810	923,703	-	914,567
	2001	452782	0.037646	0.448358	38,018	1,009,867	-	990,114
	2002	497387	0.045574	0.483162	46,916	1,029,440	-	1,009,370
	2003	936117	0.056275	0.778837	67,640	1,201,941	-	1,037,103
	2004	1279630	0.059140	0.826608	91,553	1,548,049	-	1,437,195
	2005	1326728	0.064717	0.813164	105,591	1,631,562	-	1,458,788
	2006	1931010	0.048726	0.875288	107,497	2,206,140	-	2,051,402
9. (CONGLOMERATES) JOHN HOLT PLC	1996	1623	0.124329	0.000791	255,000	2,051,000	154,000	195,000
	1997	1621	0.165632	0.000773	347,000	2,095,000	68,000	195,000
	1999	2100	3.768518	0.004861	-1,628,000	432,000	82,000	367,000
	2000	1951	0.097328	0.003723	51,000	524,000	1,408,000	483,000
	2001	2048	0.222222	0.001763	258,000	1,161,000	881,000	1,116,000
	2002	2632	0.138207	0.001317	276,000	1,997,000	596,000	1,952,000
	2003	2868	0.066901	0.001442	-133,000	1,988,000	868,000	1,971,000
	2004	3478	0.094122	0.001336	245,000	2,603,000	863,000	2,603,000
	2005	2922	0.006744	0.001313	15,000	2,224,000	503,000	2,224,000
	2006	3536	0.162700	0.001530	376,000	2,311,000	1,005,000	2,311,000
10. (CONGLOMERATES) UAC OF NIG PLC	1996	6609100	0.147709	0.842739	1,158,400	7,842,400	20,400	868,400
	1997	8319800	0.068101	0.969199	584,600	8,584,200	25,000	817,700
	1999	3685900	-0.108739	0.668340	-599,700	5,515,000	10,800	4,321,000
	2000	4347700	0.048113	0.751378	278,400	5,786,300	512,000	4,507,000
	2001		0.103533		805,800	7,783,000	1,555,400	5,365,000
	2002	9101800	0.163790	1.020735	1,460,500	8,916,900	1,562,600	6,429,000
	2003	9587600	0.137699	0.852792	1,548,100	11,242,600	1,835,600	7,920,000
	2004	9824000	0.129534	0.669022	1,902,100	14,684,100	1,671,200	11,150,000
	2005	11232000	0.169523	0.652442	2,918,400	17,215,300	2,069,400	14,180,253
	2006	10748700	0.153760	0.540407	3,058,300	19,890,000	1,200,000	16,099,218
11. (CONGLOMERA	1996	2400984	0.435410	0.544719	1,919,179	4,407,742	56,863	504,440
	1997	2586598	0.021295	0.597268	-92,223	4,330,714	56,863	504,440

Company	Year							
TES) UNILEVER NIGERIA PLC	1999	2615223	-0.144245	0.635024	594,046	4,118,301	332,112	3,659,733
	2000	2934680	0.371554	0.842145	1,294,780	3,484,765	332,112	3,484,765
	2001	3598035	0.385912	0.875633	1,585,738	4,109,065	984,844	4,109,065
	2002	4498208	0.492623	1.079311	2,053,089	4,167,664	1,222,697	4,167,664
	2003	4822861	0.711325	1.234873	2,778,116	3,905,550	1,713,043	3,905,550
	2004	6179653	0.489073	1.017595	2,970,047	6,072,800	2,089,461	3,954,154
	2005	7645186	0.409545	1.372414	2,281,416	5,570,611	2,927,564	5,570,611
	2006				-	-	2,927,564	3,953,347
12. (CONSTRUCTION) JULIUS BERGER NIG PLC	1996	958867	0.427159	1.993631	205,449	480,965	477,902	45,000
	1997	1254854	0.401864	2.019918	249,654	621,240	633,614	45,000
	1999	3289566	0.342362	2.022796	556,766	1,626,247	1,663,319	1,626,247
	2000	4384716	0.395889	2.259536	768,238	1,940,538	2,444,678	1,940,538
	2001	5557938	0.427289	2.412799	984,271	2,303,523	3,096,472	2,303,523
	2002	5915502	0.463152	3.084846	888,142	1,917,600	3,014,280	1,917,600
	2003	6178283	0.323252	2.746102	727,265	2,249,837	2,833,586	2,249,837
	2004	7323084	0.268742	2.837286	693,628	2,581,017	3,647,207	2,581,017
	2005	13443111	0.372302	4.484202	1,116,120	2,997,882	6,644,133	2,997,882
	2006	19931970	0.535536	4.841465	2,204,766	4,116,929	38,364,335	-
13. (ENGINEERING TECHNOLOGY) NIGERIAN WIRE AND CABLE PLC	1996	39618	0.264841	0.367964	28,515	107,668	-	30,000
	1997	51540	0.178242	0.223138	41,170	230,978	-	60,000
	1999	69308	0.229938	0.255758	62,311	270,990	-	270,990
	2000	65675	0.255145	0.221822	75,541	296,070	230,315	296,070
	2001	62093	0.282559	0.185918	94,369	333,979	271,886	333,979
	2002	51533	0.106122	0.091458	59,796	563,460	511,927	563,460
	2003	1255192	0.283095	2.029570	175,081	618,452	636,740	618,452
	2004	1127146	0.350698	2.157217	183,240	522,500	604,646	522,500
	2005	-	-	-	183,240	522,500	604,646	522,500
	2006	-	-	-	183,240	522,500	604,646	522,500
14. (FOOD / BEVERAGES AND TOBACCO) CADBURY NIG PLC	1996	1789843	0.780844	1.146628	1,218,869	1,560,962	773,123	176,096
	1997	1822254	0.493504	0.956146	940,536	1,905,832	798,434	176,096
	1999	1970971	0.507846	0.809232	1,236,913	2,435,604	373,260	2,491,064
	2000	2204575	0.624392	0.840774	1,637,205	2,622,077	430,053	2,616,681
	2001	2245052	0.727139	0.678577	2,405,720	3,308,469	2,830,425	3,302,398
	2002	3337240	0.474825	0.456125	3,259,866	6,865,401	505,244	6,859,572
	2003	3759882	0.460083	0.456125	3,792,506	8,243,089	595,278	8,233,855
	2004	6230817	0.406911	0.658667	3,849,273	9,459,727	1,086,759	9,446,559
	2005	7664695	0.354530	0.705242	3,853,094	10,868,170	6,932,062	10,848,768
	2006	-	-	-	-	-	-	-
15. (FOOD/ BEVERAGES AND TOBACCO) NESTLE NIG PLC.	1996	934109	0.491587	0.285217	1,609,986	3,275,076	2,466,959	105,688
	1997	1048404	0.244651	0.314419	815,768	3,334,413	2,333,283	211,375
	1999	1111279	0.455872	0.313326	1,616,849	3,546,710	1,686,266	1,161,532
	2000	1105529	0.477288	0.236898	2,227,348	4,666,674	2,645,870	1,288,009
	2001	1107319	0.535966	0.163698	3,625,493	6,764,401	4,306,954	1,489,121
	2002	1225635	0.530404	0.138805	4,683,388	8,829,843	5,629,279	1,492,576
	2003	2124548	0.490924	0.178383	5,846,923	11,910,016	8,005,041	1,597,628
	2004	3980527	0.455249	0.297057	6,100,281	13,399,870	8,464,422	1,734,059
	2005	6183324	0.468610	0.366417	7,907,848	16,875,084	7,233,743	1,752,812
	2006	7336015	0.433562	0.387980	8,197,897	18,908,215	7,325,189	6,360,492
16. (FOOD / BEVERAGES AND TOBACCO) NIGERIAN BOTTLING COMPANY PLC	1996	3616214	0.378799	0.737936	1,856,283	4,900	1,284,273	241,870
	1997	3683720	0.348877	0.642359	2,000,698	5,734,673	2,095,953	241,870
	1999	6864470	-0.047009	0.759716	-424,756	9,035,571	2,171,101	9,026,654
	2000	11511454	0.083420	1.016070	945,102	11,329,380	182,074	11,319,193
	2001	12641863	0.341127	1.034129	4,170,158	12,224,637	417,226	12,212,954
	2002	15596379	0.295986	0.800633	5,765,829	19,480,056	10,843,020	14,915,193
	2003	20759503	0.260168	0.893453	6,045,057	23,235,137	10,461,942	17,751,020

Company	Year							
	2004	22574120	0.144919	0.982322	3,330,594	22,982,385	12,965,667	17,140,526
	2005	28016068	0.142212	1.114081	3,576,257	25,147,236	18,842,581	18,556,656
	2006	30810971	0.074165	1.181554	1,933,982	26,076,649	19,811,365	20,047,083
17. (HEALTH CARE) MAY AND BAKER NIG PLC	1996	34941	0.396723	0.258531	53,618	135,152	45,591	22,623
	1997	46010	0.204572	0.114685	82,071	401,183	42,633	67,869
	1999	253116	0.322340	0.456859	178,588	554,035	76,530	477,505
	2000	294615	0.322340	0.456859	60,586	503,702	104,590	503,702
	2001	298997	0.028935	0.521400	169,593	573,450	90,802	573,450
	2002	306217	0.125923	0.498298	77,383	614,525	98,046	614,525
	2003	318919	0.210337	0.498780	134,489	639,397	122,490	639,397
	2004	302617	0.176408	0.423154	126,158	715,146	128,595	715,146
	2005	387196	0.189276	0.473979	154,621	816,905	-	751,751
	2006	940643	0.101702	0.359388	266,191	2,617,346	-	-
18. (HEALTH CARE) NEIMETH INT. PHARMACY PLC	1996	99147	.247919 .		45,640	184,092	-	31,641
	1997	87265	0.501396		97,644	194,744	-	31,641
	1999	-	-0.452658		-97,920	216,322	-	56,288
	2000	118014	0.128757		30,043	2,333,331	32,489	216,322
	2001	9696389	.134876		35,215	261,091	46,219	233,331
	2002	76010	0.134876		35,215	261,091	46,219	261,091
	2003	59352	0.234668		72,386	208,461	45,794	308,461
	2004	54800	0.212783		89,155	418,994	532,450	418,994
	2005	72221	0.283964		153,602	540,919	469,304	540,919
	2006	74774	0.082479		124,592	1,510,586	432,338	1,576,000
19. (HEALTH CARE) GLAXO SMITHKLINE CONSUMER PLC	1996	228578	0.121834	0.071246	390,875	3,208,250	19,973,332	781,823
	1997	248609	0.190750	0.089028	532,666	2,792,476	1,566,046	860,375
	1999	280804	0.028783	0.109601	73,745	2,562,038	1,128,449	1,044,078
	2000	423851	0.039115	0.170803	97,066	2,481,519	466,062	1,047,886
	2001	593528	0.063957	0.210121	180,659	2,824,688	528,723	1,072,091
	2002	917955	0.148759	0.206452	783,208	5,264,932	588,779	1,396,348
	2003	1086958	0.220510	0.225530	1,062,765	4,819,560	508,060	1,841,499
	2004	2127516	0.220070	0.352461	1,325,259	6,021,983	528,626	2,517,722
	2005	2694896	0.169852	0.324827	1,409,163	8,296,389	432,207	3,493,465
	2006	3114228	0.171654	0.351128	1,522,437	8,869,207	475,988	4,193,075
20. (INDUSTRIAL / DOMESTIC PRODUCT) B.O.C. GASSES PLC	1996	-	0.653604	-	104,033	159,168	-	32,760
	1997	134228	0.662030	0.843310	104,033	212,034	-	65,520
	1999	254549	0.521365	1.200510	160,263	307,391	-	307,391
	2000	262433	0.333507	0.853743	112,213	336,463	-	336,463
	2001	281083	0.346606	0.835405	104,359	301,088	61,742	301,088
	2002	306388	0.480428	0.895813	164,317	342,022	77,449	342,022
	2003	386577	0.446129	1.010627	170,650	382,512	99,580	382,512
	2004	795355	0.421534	2.674621	125,352	297,371	281,435	297,371
	2005	896177	0.258362	2.410678	96,047	371,753	202,036	371,753
	2006	1114753	0.391971	2.492917	175,277	447,168	408,593	447,168
21. (INDUSTRIAL / DOMESTIC PRODUCT) NIGERIAN ENAMELWARE	1996	18234	0.359595	0.427686	15,331	42,634	-	9,600
	1997	27006	0.297169	0.527254	15,221	51,220	-	9,600
	1999	63630	0.282224	0.957807	18,749	66,433	-	66,433
	2000	66138	0.276873	0.914034	20,034	72,358	12,367	72,358
	2001	66705	0.282061	0.768614	24,479	86,786	13,372	86,786
	2002	60938	0.264132	0.647505	24,858	94,112	14,506	94,112

Company	Year							
PLC	2003	49715	0.266341	0.505310	26,204	98,385	15,523	98,385
	2004	33819	0.258968	0.328866	26,631	102,835	55,119	102,835
	2005	19197	0.313812	0.171792	35,067	111,745	-	111,745
	2006	10315	0.265996	0.087350	31,411	118,088	-	-
22. (INSURANCE) LAW UNION AND ROCK INSURANCE PLC	1996	103558	0.222422	1.021765	22,543	101,352	-	10,000
	1997	166399	0.148740	0.634019	39,037	262,451	-	100,000
	1999	198890	0.083390	0.682277	24,309	291,509	-	291,509
	2000	208365	0.035340	0.295551	24,915	705,004	705,004	299,664
	2001	219246	0.043739	0.235971	40,639	929,119	929,118	312,283
	2002	237733	0.051400	0.248572	49,159	956,393	956,393	324,975
	2003	239860	0.059368	0.208897	68,168	1,148,220	1,148,220	381,376
	2004	226832	0.01854	0.161398	-16,661	1,405,412	1,405,412	648,876
	2005	-	-	-	-	-	-	1,091,474
	2006	-	-	-	-	-	-	-
23. (INSURANCE) NIGER INSURANCE P	1996	748274	0.023053	0.535439	29,465	1,278,141	124,193	40,000
	1997	827672	0.025013	0.659040	31,414	1,255,874	186,143	70,000
	1999	973319	0.034465	0.418106	80,232	2,327,921	476,863	738,212
	2000	1023104	0.040036	0.361808	113,214	2,827,753	334,280	770,006
	2001	1.165363	0.039078	0.326028	139,683	3,574,424	488,564	1,124,176
	2002	1141378	0.033278	0.215526	176,235	5,295,776	920,982	1,181,275
	2003	1281998	0.026754	0.178493	192,160	7,182,325	820,496	1,240,517
	2004	1311826	0.034589	0.159028	285,332	8,248,983	690,364	1,877,980
	2005	1316939	0.037218	0.156760	312,672	8,400,982	712,895	2,089,427
	2006	1344908	0.0065818	0.120566	734,196	11,154,881	700,030	5,487,465
24. (PETROLEUM MARKETING) MOBIL OIL NIG. PLC	1996	1644867	1.727347	2.271009	1,251,099	724,289	333,764	72,119
	1997	2539003	0.893750	2.602720	871,871	975,519	147,729	72,119
	1999	3092725	1.115262	1.599501	2,156,422	1,933,555	173,770	1,933,855
	2000	31572293	0.391771	2.335137	529,706	1,352,080	333,517	1,018,563
	2001	3998799	1.328161	2.550352	2,082,478	1,567,940	881,857	686,083
	2002	4756097	0.517544	2.964112	830,431	1,604,560	918,477	686,083
	2003	5224948	1.056279	2.545609	2,165,048	2,052,533	1,366,450	686,083
	2004	5760218	0.985461	2.656053	1,985,461	2,168,713	1,286,162	882,551
	2005	5913176	0.645102	1.123958	3,393,903	5,261,028	1,955,947	3,305,081
	2006	7134964	0.514920	1.449010	2,535,481	4,924,024	2,090,346	-
25. (PETROLEUM MARKETING) CHEVRON OIL NIG PLC (FORMERLY TEXACO)	1996	905786	0.729826	1.269199	520,853	713,667	2,323,138	56,694
	1997	888756	-0.204080	1.903346	-95,294	466,944	3,014,194	75,592
	1999	1035949	1.608134	1.358411	1,226,392	762,618	4,520,099	762,618
	2000	1434760	1.611362	1.508779	1,532,311	950,941	4,199,697	950,941
	2001	2130757	1.017149	1.895740	1,143,247	1,123,971	6,619,487	1,123,971
	2002	2559923	0.998003	1.644482	1,553,566	1,556,674	6,584,756	1,556,674
	2003	2600906	0.824688	1.295876	1,655,202	2,007,063	10,242,447	2,007,063
	2004	3219636	0.464210	1.137075	1,314,415	2,831,506	12,762,765	2,831,506
	2005	3620662	0.571366	1.162269	1,779,903	33,115,166	10,109,139	3,115,16

	Year								
	2006	3951386	0.546987	1.166819	1,852,352	3,386,459		12,708,245	3,386,459
26. (PRINTING AND PUBLISHING) LONGMAN NIG PLC	1996	99882	0.285614	0.706954	40,353	141,285		7,435	35,000
	1997	104456	0.220118	0.712391	32,276	146,630		7,435	35,000
	1999	158944	0.428618	1.039413	65,543	152,917		17,436	152,917
	2000	175054	0.539578	0.720502	111,770	207,143		17,436	189,707
	2001	188918	0.292885	0.647689	96,391	262,203		32,884	229,319
	2002	170703	0.292885	0.647689	77,192	263,557		29,043	234,514
	2003	168507	0.358786	0.570359	51,964	295,440		45,964	249,476
	2004	152677	0.358786	0.489565	111,892	311,862		36,174	275,690
	2005	189372	0.421782	0.460635	173,399	411,110		54,930	351,433
	2006	210837	0.457838	0.340418	283,561	619,347		64,163	555,184
27. (TEXTILE) UNITED NIG PLC	1996	5466864	0.146034	0.788368	1,012,663	6,934,402		502,052	205,632
	1997	5315176	0.101211	0.761591	706,362	6,979,035		64,590	246,758
	1999	5040341	0.100056	0.655335	769,560	7,691,234		32,247	6,289,603
	2000	5006003	0.087167	0.693034	629,640	7,223,307		1,037,175	5,591,875
	2001	7178103	0.073765	0.586372	903,006	12,241,532		2,162,836	9,235,454
	2002	7071027	0.123011	0.551736	1,576,683	12,817,344		2,207,374	10,003,955
	2003	6775027	0.026656	0.538799	335,184	12,574,302		2,333,896	9,644,724
	2004	6883708	0.027265	0.551248	340,475	12,487,478		2,202,162	9,713,363
	2005	6302122	0.018970	0.484766	246,626	13,000,338		2,630,842	9,812,662
	2006	5825521	-0.016126	0.445303	-210,965	13,082,122		3,239,789	9,016,410

Source: Author's computation, stock exchange factbook 2001, 2005 and 2007 edition, BSSG Issue Number 3 & 9.
ROA = Return on asset
TANG = Tangibility
PBT = Profit before Tax

APPENDIX B: REGRESSION RESULTS

Table A: Standard Multiple Regression Result for equation 4.1

Regressor	Coefficient	Standard Error	t-ratio
(Constant)	0.859	2.657	0.323
TANG21	-0.299	0.385	-0.778
ROA21	2.780	0.455	6.111
SZ21	-5.7E-02	0.185	-0.306

Dependent Variable: CS21
R_Square = 0.646   Adj. R_Square = 0.596 SER = 1.284046
F_statistics = 12.801 DW-Statistics = 2.713
Source: Research results compiled from the secondary data.

Table B: Standard Multiple Regression Result for equation 4.2

Regressor	Coefficient	Standard Error	t-ratio
(Constant)	4.805	2.461	1.953
TANG22	-3.8E-02	0.316	-1.121
ROA22	2.294	1.064	2.156
SZ22	-0.133	0.158	-0.845
GRT22	-3.194	0.678	-4.712

Dependent Variable: CS22
R_Square = 0.511   Adj. R_Square = 0.422   SER = 1.125266
F_statistics = 5.746 DW-Statistics = 1.911
Source: Research results compiled from the secondary data.

Table C: Standard Multiple Regression Result for equation 4.3

Regressor	Coefficient	Standard Error	t-ratio
(Constant)	4.009	4.927	0.814
TANG24	0.173	0.335	0.518
ROA24	-1.115	1.457	-0.765
SZ24	4.487E-02	0.290	0.155
GRT24	-4.349	1.576	-2.760

Dependent Variable: CS24
R_Square = 0.342   Adj. R_Square = 0.223   SER = 2.122880
F_statistics = 2.864 DW-Statistics = 1.990
Source: Research results compiled from the secondary data.

Table D: Standard Multiple Regression Result for equation 4.4

Regressor	Coefficient	Standard Error	t-ratio
(Constant)	134.339	91.839	1.463
MSZ	-5.754	6.513	-0.884
MROA	-12.507	4.624	-2.705

Dependent Variable: MCS
R_Square = 0.269   Adj. R_Square = 0.208   SER = 62.58751
F_statistics = 4.413   DW-Statistics = 1.606
Source: Research results compiled from the secondary data.