

EFFECT OF TAXES ON CAPITAL STRUCTURE DECISIONS: EVIDENCE FROM NON-FINANCIAL FIRMS IN NIGERIA

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This study examines the effect of taxation on capital structure in Nigeria, using pool data collected from 45 non-financial companies within the period of 10 years (2007-2016). The study used ex-post facto research design and analyzed the data using descriptive, correlation and regression. The analysis result shows that there is a significant relationship between corporate tax and capital structure. This finding provides strong support for the trade-off theory of capital structure. The study decomposed the different tax components along individual and companies line. The result reveals positive significant relationship between tax (interest tax and tax shield) of debt and the companies' debt ratio. The results suggest that tax shield has positive significant effect on capital structure debt ratio. In principle, the results support the view that capital structure choices are significantly affected by taxation both at individual and corporate level. Based on the analysis, result and findings, the study recommended among others that in making capital structure decisions, firms should consider the effect of taxes at both individual and companies level.

Keyword: Capital structure, Interest tax, Tax shield, Dividend tax, Company income tax

1.0: INTRODUCTION

The taxation of corporate profits has been one of the most widely discussed issues in the area of public finance. Corporate revenues are currently subject to double taxation. Profits are taxed first at the corporate level and then, when distributed as dividends or when capital gains are realized, taxed a second time at the individual level. Brealey and Myers, (2000) however, believe that firms can avoid double taxation if they organize their activities like as sole proprietorships, partnerships, and pass all profits and losses onto their shareholders but in the process lose some of the special privileges enjoy by public firms. Firm can finance its investments using equity, debt or both. Using equity financing mean the raising fund by issuing stock, primarily common stock. Dividend are paid to stockholder as reward, the dividends paid to stockholders are not tax- deductible; thus, dividends are paid from after-tax income. A firm finances its investment using debt by borrowing from its shareholders, from financial institutions, or from the public. All interest paid by a corporation to its lenders is tax-deductible, thus generating a tax shield. Clearly, there is a tax incentive for a taxable corporation to use debt instead of equity. So, double taxation directly affects the corporate capital structure.

STATEMENT OF THE PROBLEM

The Nigerian tax law provides firms with an incentive to use debt financing. But the extents to which firms take advantage of this opportunity in debt financing remain unclear.

The potential costs of using excessive debt became more apparent in the recent financial crisis and equalizing the tax treatment of debt and equity has been the subject of numerous tax proposals (Mirrlees et al., 2011). Although theories of capital structure predict tax effects to be of first-order importance, researchers have found it difficult to identify clear effects of taxation on the choice between debt and equity finance. Previous empirical research has however faced the difficulty in identifying with any precision the variation across companies in the marginal tax rate that they face, and it has typically found rather small effects of taxation on capital structure. Fama and French (1998) are unable to find evidence of a positive relation between leverage and firm value. In contrast, Graham (2000) estimates that the tax benefits of debt are large and that the typical firm could add considerably to its value by increasing its leverage ratio. In survey evidence, Graham and Harvey (2001) find that managers consider interest tax savings to be moderately important for debt policy, ranking behind financial flexibility and cash flow volatility concerns, but ahead of transaction costs and distress costs. Reviewing the evidence, Myers concludes that although there are examples of specific tax- driven financing tactics such

as financial leases, "finding clear evidence that taxes have a systematic effect on financing strategy, as reflected in actual or target debt ratios, is much more difficult (Myers, 2003).

Since previous studies were done in developed economy and mainly focuses on the taxation of corporate profits, empirical evidence with respect to the possible impact of personal capital income taxation on capital structure choices in emerging economy is still scarce. Therefore, this paper aims at analyzing the effects of taxation of debt on capital structures of Nigerian non financial firms while taking into account both personal and corporate income taxation.

However, the few studies that have been done on determinant of capital structure using tax as a variable were done using the banking sector and selected companies, these studies include; Odesa and Ugbah (2016), Ogbulu and Emeni (2012), Ogebe, Patric and Alewi, (2013).

The findings from those studies differs on the degree of the effect of tax on capital structure decision, for instance Ogebe, Patric and Alewi, (2013) Odesa and Ugbah (2016) finds positive effect of tax on capital structure decision, Ogbulu and Emeni (2012), finds no impact while the study of Salawu (2007) shows a negative effect of taxation on capital structure decision. The findings from these studies are inconclusive therefore difficult to draw policy implication from. No study has been done on the effect of corporate profit tax and personal income tax on capital structure decision of quoted non financial firms in Nigeria using cross sectional data up to 2016. This is the gap this study seeks to fill.

The main objective of this paper is to contribute to the debate by evaluating the impact of taxes in firms' debt decisions. Hence, this paper find answer to the question of: To what extent does corporate profit tax and personal income tax impact on the capital structure decision of quoted non financial firms in Nigeria?

2.0: REVIEW OF RELATED LITERATURE

Capital structure of a company is combination of debt and equity that make up the sources of corporate assets. The company which has no debt, its capital structure is only equity. Different companies have different capital structure. But the financing resources of companies based on their financial policies are divided in two part: internal financial resources" and external financial resources. On internal financial resources, the company fund from accumulated earning, i.e. instead of divide profit among shareholders, uses profit mainly in the company's operational activities to obtain more return. And in external financial resources, the company fund from debt and stock (Titman and Grinblatt, 1998).

TAXATION AND CAPITAL STRUCTURE

Taxation remains one of the most determinants of capital structure and probably the most debated across empirical. However, the trade-off theory of debt holds that the optimal level of debt in a firm's capital structure can be determined by the balance of the tax shield provided by debt and the present value of financial distress costs (Myers, 2003). Hence, there is positive relationship between the corporate tax shield and firm value given that each increase in the debt portion of a firm's capital structure decreases the after-tax cash flow. On the Other hand, when excessive amount of debt has been accumulated by the firm, it risks a default resulting in the transfer of control to the creditors and the incurrence of deadweight costs which further reduce firm value (Frank and Goyal, 2008). Thus, the lower the tax advantages of debt, the lower the optimal debt-equity ratio.

Despite trade-off theory's straightforward appeal, empirical tests have produced mixed results. More specifically, the empirical evidence for a tax effect on capital structure has been less than definitive due to (a) the difficulty of calculating accurately the marginal tax benefits, which are influenced by non-debt tax shields and various tax rules, and (b) the limited availability of non-US firm data on statutory corporate tax reforms.

DEBT FINANCING AND CAPITAL STRUCTURE

Since all interest paid is tax-deductible, one would expect that taxable corporations would rely heavily on debt to finance their investments, but empirical evidence shows that they use significant amounts of equity capital. There can be significant nontax costs involved with debt financing. These costs include both the standard costs of borrowing and risks of financial distress that fixed liabilities imply. Firms fall into financial distress when they have difficulty making their debt payments. Extended periods of financial distress can lead to bankruptcy. The higher the debt payment levels, the higher the probability that the firm could fall into financial distress. As the probability of distress increases the risk for the firm's debtor increases, so they demand higher return for their investments. Consequently, the value of debt tax shields decreases as these forms of nontax costs increase.

The value of tax shields also depends on the marginal tax rate of the firm, and the availability of non-debt tax shields and tax credits. The marginal tax rate is the tax liability generated, today and in the future, by an ad-ditional dollar of income earned today. Estimating the marginal tax rate is not straightforward because of the uncertainty of future earnings, the carry back and the carry forward provisions of the tax law, and the alternative minimum tax (AMT). Corporations can "carry back" and "carry forward" operating losses and tax credits--mean--ing they can apply them to reduce tax liabilities incurred in past or future years. As Graham (1996) explains, the relationship among operating losses, marginal tax rates, and the value of tax shields is not always obvious. For example, tax shields have very low, if

no, value to corporations that expect operating losses in the future. Such firms will have very low marginal tax rates because they can use those net operating loss deductions (NOL's) in the future to refund any taxes paid today.

The incentive to operate with high leverage because of the tax deductibility of interest paid on debt is a popular policy issue. Some policymakers advocate lowering the corporate tax rate to induce firms to take on less debt. They argue that these lower debt levels would reduce firms' risk of bankruptcy and aggregate risk in the economy.

Though there are other theory relevant in explaining the relationship between taxation and capital structure, this study was anchored on the pecking order theory.

PECKING ORDER THEORY

The pecking order was first suggested by Donaldson in 1961 and it was modified by Myers and Majluf (1984). The theory states that companies prioritize their sources of financing (from internal financing to equity) according to the principle of least effort, or of least resistance, preferring to raise equity as a financing means of last resort. Hence, internal funds are used first, and when that is depleted, debt is issued, and when it is not sensible to issue any more debt, equity is issued. The theory capture the costs of information asymmetric and maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required (equity would mean issuing shares which meant 'bringing external ownership' into the company). Hence, the form of debt a firm chooses can act as a signal of its need for external finance.

Agency theory explains the relationship that exist between the principal and the agent, and how the principal incurred cost to limit the agent excess and authority to make decision that will not be in their favour. In practice, the principal do favour the capital structure which will enhance its stake in the business and increase their wealth. While the agent will prefer the capital structure that will reduce the influence of the shareholder and increases his own benefit. For instance, the agent will prefer financing a project with new stock, this will result to share split and reduces the influence of the existing shareholder. While the principal will prefer the use of debt in financing project, debt will increase the operating cost on the average (despite the tax shield benefit) and reduce the operating profit. When manager's performances are judge using net profit, they may be judge inefficient if the operating profit is low. So they will prefer raising fund through the issue of new stock. This reduces the control/influence of the existing stock holder, so they may not support such decision.

REGARDING EMPIRICAL STUDIES,

Liang Yongjia (2016) studies the peer effect of capital structures of listed companies in the same industry in the Chinese A-share market using the average industry capital structure as the explanatory variable, by constructing the instrumental variable(equity shock), Through the empirical analysis, she found that the peer effect's ability to explain the capital structure of the company itself is more important than the common capital structure influence factors in the previous literatures and that peer firms play an important role for the company's own capital structure. The result of her findings show that capital structure of listed companies in China is not independently decided by the company managers, but in the process of decision-making, the capital structure of peer firms is considered as the important reference factor.

Pepur, Curak and Poposki (2016) examined the effect of internal firm specific factors such as profitability, company size and liquidity on capital structure of large Croatian companies from 2001-2010 and found that neither of the two competing theories exclusively and completely explain the financing behavior of the analysed companies.

Arsov and Naumoski (2016) examined the determinants that influence capital structure in Balkan countries applying a panel regression; they found that larger companies and those with higher fixed asset investment exhibit higher leverage while the more profitable companies have not been found statistically significant.

Karashahin and Kucuksarac (2016) in their Turkey study found that firm-specific factor have similar effects on both book and market leverage ratios except the effect of growth opportunity and that the size of a firm is positively associated with its leverage ratio, particularly with long-term leverage ratio. Tangibility is negatively related to the short-term leverage ratio whereas it is positively related to the long-term leverage ratio while profitability and liquidity have negative effects on leverage, particularly on short-term leverage ratio. There seems to be positive association between inflation and leverage. On the other hand, firm leverage and economic growth are negatively related.

Dwenger and Stainer (2014) studied the effects of tax rate on capital structure and found positive effects. Another study that has attempted to use company-level tax return data to estimate the tax effect on capital structure is Graham and Mills (2008). They simulated the effective marginal tax rate separately using tax return data and financial statements for a sample of US public companies during the period between 1998 and 2000.

Hassan et al. (2013) examined tax shield and its impact on corporate dividend policy with evidence from Pakistani stock market using a sample panel data of 33 companies listed at Karachi Stock Exchange for the period of 6years from 2005 to 2010. They found that the firm size and profitability are positively related to the dividend payout policy while there is insignificant relationship between tax shield and leverage on the dividend payout policy.

In a Belgian study, Panier, Perez-Gonzalez and Villanueva (2012) found that the notional interest deduction led to a significant increase in the share of equity in the capital structure and that both incumbent and new firms increase their

equity ratios after the introduction of the notional interest deduction. They also discovered that the largest responses to these changing tax incentives are found among large and new firms.

Andrew (2012) finds the effect of taxes on firms' overall debt usage to be insignificant. Rather than influencing the total debt in firms' capital structure, taxes affect the relative composition of debt. The study observed that Firms shift from private intermediated debt to public bond debt in response to increases in marginal tax rates. Hence, Firms' debt policy is most sensitive to tax rates in high interest rate environments.

Teraoui, Chichti and Ecstra (2012) examined the behavior of practitioners about the corporate investment and financing choices using a qualitative analysis (survey study) by questionnaire sent to Tunisian managers. Their results reflect the importance of interest deductibility in which is an important advantage that encourages leaders to use debt as a major source of financing.

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Ogbulu and Emeni (2012) using a cross-sectional survey data from 110 firms listed on the Nigerian stock exchange and analysis of data by the OLS method, finds that tax and size has a positive and significant impact on capital structure while age has a negative and significant influence. Tangibility (TANG), growth of a firm (GROWTH) and profitability (PROF), on the other hand, do not have any significant impact on the capital structure of firms in Nigeria.

Klapper and Tzioumis (2008) examined the effect of taxation on financing policy using the corporate tax reform in 2007 in Croatia between 1998 -1999 and 2002-2003 periods respectively using pooled regression analysis. They found that effective tax rate had positive and significant effect on firms' capital structure of which resulted in increased equity levels and decreased long-term debt levels.

Leora and Konstantinos (2008) examine the effect of taxation on financing policy using the corporate tax reform of 2001 in Croatia as a natural experiment. The findings provide significant evidence that lower taxes affected the capital structure of Croatian firms, which resulted in increased equity levels and decreased long-term debt levels. It also reveals that smaller and more profitable firms were more likely to reduce their debt levels.

But Ayers et al. (2001), using a sample of small U.S. firms finds a negative relationship between effective tax rate and debt. In particular, they find a negative effect of marginal tax rates on the use of outside debt (loans from non-owners), and no effect of marginal tax rates on the use of inside debt (loans from owners). Notably, this evidence comes exclusively from publicly listed U.S. firms. As with many aspects of firm financing, bankruptcy costs and asymmetric information in financing decisions of firms in transition and developing countries remain unclear (Prasad et al., 2005).

Michael and Dennis (2008) empirically analyze whether both personal and corporate taxation have an impact on companies' capital structure decisions. The study effect of the difference in taxation of debt and equity financing on capital structures was examined also. The empirical results, suggest that a higher tax benefit of debt has the expected significant positive impact on a company's financial leverage. The study provide evidence that the capital structures of smaller companies respond more heavily to changes in the tax benefit of debt. Additional analysis confirms that not only corporate taxes are relevant for corporate financial planning, but variation in capital income tax rates at the shareholder level implicates significant capital structure adjustments as well. Also a substitutive relationship between non-debt tax shields and the effect of the corporate tax rate on capital structures was found by the study.

Michael, Giorgia and Jing (2015) examine how companies' capital structure is affected by the corporate income tax system. The study analysis employs confidential company-level corporation tax return data in the UK. Using a dynamic adjustment model of capital structure, find a positive and substantial long-run tax effect on companies' financial leverage. The study reveals that there are considerable discrepancies between estimates of taxable profits reported in tax return data and in financial statements and that the estimated tax effect on capital structure using financial statements is likely to be biased downward. They find that companies adjust their capital structures gradually in response to changes in the marginal tax rate. Moreover, we find that the external leverage of domestic stand-alone companies and of multinational companies responds strongly to corporate tax incentives.

Givoly et al. (1992) find a positive relation between changes in US corporate taxes and changes in leverage, as well as a substitution effect between debt and non-debt tax shields as a result of the Tax Reform Act of 1986.

Graham, Lemmon, and Schallheim (1998) is the first paper to find a positive relationship between the tax incentive and debt financing using debt levels. They provide evidence that the corporate tax status is endogenous to financing decisions, producing a spurious relationship between the debt ratio and the marginal tax rate of the firm; in other words, the estimated effects of tax status on the debt levels will be biased because companies that have high levels of debt also have low marginal tax rates.

Gropp (2002) investigates the effects of cross sectional variation in corporate tax rates. He employs regional variation in German local tax rates and identifies a positive effect of higher tax rates on the use of debt.

3.0 METHODOLOGY

The study was based on descriptive design. It used a panel data collected from the published financial statement of 45 quoted non financial firms between 2007 and 2016. The firms were selected using stratified random sampling techniques.

Data and Variables Description

The study used effective tax on dividend, interest, company income tax and tax shield as (independent variables); while debt was used as Dependent variable; profit was used as controlled variable.

Table 1: Data and Variable Description

Variables	Measures/Proxy
Debt ratio (DEBR)	Debt / Total Asset
Effective tax on interest income (INTAX)	Tax on interest income /debt
Effective tax on dividend income (DIVTAX)	Tax on interest dividend /equity (with-holding tax)
Company income tax (CIT)	CIT/Operating expenses
Debt Tax Shield (TAS)	Debt Tax Shield / Profit before interest and tax
Profit before interest and tax (PBIT)	PBIT/ Total asset. (Control)

Model Specification

The linear regression model was design to test each of the Null hypotheses. The model used was adopted from the work of and Panier et al (2015), was modify to suite the variables used in this study. $DEBR = F(INTAX, DIVTAX, CIT, TAS, PBIT)$

Based on the above we specify the equation

$DEBR_{it} = d_0 + d_1INTAX_{it} + d_2 DIVTAX_{it} + d_3 CIT_{it} + d_4 TAS_{it} + d_5 PBIT_{it} + E_{it}$ - - 1
 $d_0 = \text{Constant}; d_1 \dots d-5 = \text{are the coefficient of the regression equation}; E_{it} = \text{Error term}; i = i \text{ is the firm } t = \text{time series.}$

DATA ANALYSIS

In analyzing the data, the study used multiple regressions to identify the possible effects of tax (corporate and individual tax) on capital structure of quoted non financial firm in Nigeria. The study conducted some preliminary analysis such as descriptive statistics and correction matrix.

Table 2 below, provides the summary of the descriptive statistics of the sampled firms.

Variables	Mean	Max	Min	Std. Dev.	JB (P-value)
DEBR	6.6367	13.0000	2.0000	3.2939	0.0000*
DIVTAX	12.0940	2.4133	0.7345	1.5653	0.0434**
INTAX	1.1007	1.9700	0.1244	0.9896	0.0057*
CIT	6.5000	5.5882	5.3794	5.8155	0.0034*
TAS	5.6223	6.0343	1.3190	2.2271	0.0395**
PBIT	5.8318	6.2353	5.5323	0.2110	0.0782***

Source: Author's summary of descriptive statistics computation using Eviews8.5

Note: *1%, **5% and ***10% level of significance.

Table: 2 Shows the mean (average) for each of the variables their maximum, minimum, standard deviation and Jarque-Bera (JB) statistics (Normality test). The result provided some insight into the nature of the data from the quoted firm used for the study. Firstly, the large difference between the maximum and minimum values of debt ratio shows that the sampled firms in the study are not dominated by either high indebted (leverage) or low indebted (leverage) companies. The small difference between the maximum and minimum value of equity finance ratio indicates most of the sampled firm uses similar or close equity finance ratio.

Lastly, in table 2, the Jarque-Bera (JB.) which test for normality or existence of outliers or extreme value among the variables shows that all the variable are normally distributed at 1%, 5% and 10% level of significance. Debt ratio, interest tax and company income tax except were significant at 1%; equity ratio, dividend tax and tax shield were significant at 5% while profit before interest and tax is significant at 10%. This means that any variables with outlier are not likely to distort the conclusion and are therefore reliable for drawing generalization. This also justify the use of ordinary least square estimation techniques.

Table3: Person Correlation Matrices The Pearson correlation metrics shows the extent to which the variables move together with each other over time within the study period

	<i>DEBR</i>	<i>INTAX</i>	<i>DIVTAX</i>	<i>CIT</i>	<i>TAS</i>	<i>PBIT</i>
<i>DEBR</i>	1.0000					
<i>INTAX</i>	0.4853	1.0000				
<i>DIVTAX</i>	0.1627	-0.0052	1.0000			
<i>CIT</i>	0.1568	0.2122	-0.2493	1.0000		
<i>TAS</i>	0.6541	0.4795	0.2509	0.2227	1.0000	
<i>PBIT</i>	0.3544	0.3645	0.1446	0.5019	0.3611	1.0000

Source: Author's summary of correlation computation using Eviews9.5 (2017)

The use of correlation matrix is to check for multi-collinearity and to explore the association between each explanatory variable and the dependent variable. The table above shows the correlation between equity and debt finance ratio, interest tax, dividend tax, company income tax, tax shield and profit before interest and tax.

The findings from the correlation matrix table, shows that there exist a strong positive association between equity and debt finance ratio (0.5877), this clearly shows that equity and debt finance ratio are both close proxy for capital structure. In the case of interest tax (*INTAX- DIVTAX*= -0.0052, *CIT*= 0.2122, *TAS*= 0.4795, *PBIT*= 0.3645) we observed that interest tax was positively and strongly associated with *CIT* *TAS*, *PBIT* but weakly and negatively associated with *DIVTAX*. Dividend tax (*DIVTAX- CIT*= -0.2493, *TAS*= 0.2509, *PBIT*=0.1446) it was observed that dividend tax was positively and strongly associated with *TAS*, and *PBIT* but negatively associated with *CIT*. We observed that company income tax (*CIT- TAS*= 0.2227, *PBIT*= 0.5019) was positively and strongly associated with *TAS* and *PBIT*. We also observed that tax shield is strongly and positively associated with profit before interest and tax. In checking for multi-collinearity, we observed that no two explanatory variables were perfectly correlated. This includes our control variable. This means the absence of multi-collinearity problem in our model. Multi-collinearity between explanatory variable may result to wrong signs or implausible magnitudes in the estimated model coefficients, and the bias of the standard errors of the coefficients.

DEBT FINANCING RATIO MODEL

The debt financing ratio pool OLS and WLS regression result examine how taxation impact on company's choice of using debt stock in financing investment. The results obtained are presented in table 3.

Table 4: Debt Financing Ratio Model

	<i>Expected Sign</i>	<i>Debt Financing Ratio (OLS)</i>	<i>Debt Financing Ratio (WLS)</i>
<i>INTAX</i>	+	10.121 (5.300) [0.020]**	7.991 (2.399) [0.106]
<i>DIVTAX</i>	+	6.7013 (3.990) [0.029]**	5.0915 (3.861) [0.028]*
<i>CIT</i>	+	3.6084 (3.378) [0.648]	3.975 (4.855) [0.023]*
<i>TAS</i>	+	11.348 (4.509) [0.057]***	13.247 (7.107) [0.000]*
<i>PBIT</i>	+	4.3440 (2.401) [0.348]	3.968 (3.621) [0.037]**
<i>R.Sq (Adj)</i>		0.6328	0.677
<i>F. St (P. value)</i>		12.85 [0.00]*	18.44 [0.00]*

Note: 1. Parentheses () are t-statistics which Bracket [] are P-Value

2. *1%, ** 5%, *** 10% level of significance.

In testing for the cause-effect relationship between the dependent and independent variables in the Debt financing ratio, we reported the OLS and WLS pooled regression results. In estimating the OLS result, we follow the assumption of no heteroscedasticity while in the case of WLS we assume the presence of heteroscedasticity and we adopted a weighted transformation process to obtain a more robust result. In selecting from the two pooled regression result we used the WLS, since the results would be more appealing statistically in the context of difference in our sampled companies.

Following the above, we therefore discuss the pooled WLS result from table 4, we observed that the WLS results. The R.sq. adjusted value (0.68) indicated that all the explanatory variable jointly explain about 68% of the systematic variations in Debt financing ratio of our sample companies over the five years period. The adjusted R. sq value clearly shows that taxation (at private and corporate level) can help in better understanding the debt financing choice of

companies. The F-statistics (18.44) and its P-value (0.00) shows that the Debt financing ratio WLS regression model is generally significant and well specified at 1% significance levels.

In addition to the above, the specific finding from each explanatory variable from the WLS regression models is provided as followings:

Interest Tax (INTAX), based on the coefficient 7.9910 and p-value of 0.016, interest tax appears to have a positive influence on our sample quoted companies choice of debt financing but the influence is not statistically significant even at 10% since the p-value was above the 0.10. The result suggests that the tax on interest (individual level) does not have impact on firm decision to finance invest with debt stock. This follows the finding of Michael and Dennis (2008) which shows that there is a positive but not statistical significant relationship between interest tax and debt financing decision.

Dividend Tax (DIV TAX), based on the coefficient value of 5.092, t-value of 3.86 and p-value of 0.029, appear to have a positive effect on debt financing decision and the influence/effect is statistically significant at 5%. This means tax on dividend (individual level). The ability of firm to shift tax burdens to the individual influence their decision to finance investment by debt.

Company Income Tax (CIT) – based on the coefficient value of 3.9751, t-value of 4.86 and p-value of 0.022 appears to have a positive effect/influence on sample quoted company choice of debt financing and the influence is statistically significant at 5% level. This indicates that a firm considering the company income tax burden prefers the use of debt financing which allows them enjoy tax shield.

Tax shield (TAS) – based on the coefficient value of 13.25, t-value of 7.11 and p-value of 0.00 appears to have positive effect on debt financing choice of the sample firm and the effect/influence is statistically significant at 1% level. This means firm used debt financing in other to enjoy the interest tax shield which reduces their tax burden and increase their net operating profit. This follows that of Odesa and Ugbah (2016) but negates that of Michael and Dennis (2008).

CONCLUSION

Theoretical considerations about companies' capital structure choices suggest that the total tax benefit of debt financing relative to equity taxation does in fact matter. We have empirically analysed the tax effects of both personal capital income and corporate profit taxation on capital structure choices using a comprehensive panel of firm-level data from 45 non-financial firms in Nigeria. We collected detailed tax rates for the corporate profit tax, dividend tax and taxes on interest income. First, we combine data from individual tax return data and corporate tax return for a panel of non-financial companies in Nigeria during the fiscal years 2007-2016. Using a dynamic capital structure model we find a strong and positive effect of taxation on companies capital structure. This finding provides strong support for the trade-off theory of capital structure. We then calculated the tax benefit of using debt relative to equity financing by decomposing the different tax components along individual and companies line.

Secondly, our empirical results identify a statistical significant positive effect of the relative tax benefit (interest tax and tax shield) of debt on the companies' debt ratio. The results suggest that differences in the tax levels of the return on debt capital do in fact play a significant role in capital structure decision. Subsequently, we find a significant impact of the dividend tax rate and the tax imposed on interest income on companies' debt ratios. In principle, the results support the view that capital structure choices are significantly affected by personal capital income taxation.

Finally, our results can be used to predict effects of tax reforms on companies' capital structure choices.

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