

CORPORATE TAX MIX AND FINANCIAL PERFORMANCE OF LISTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

This study examines the effect of corporate tax mix on the financial performance of listed manufacturing firms in Nigeria. Data were collected from 10 listed manufacturing firms across sectors listed on the Nigerian Stock Exchange for the period of 2014 to 2018 based on firms with complete information for the years under review. The study adopts ex post facto research design and the use of both the Pearson correlation and multiple linear regression in analyzing the data. Findings revealed that tax mix has a positive insignificant effect on the net income of listed manufacturing firms in Nigeria while deferred tax has a negative insignificant effect on the net income of listed firms in Nigeria. Further, findings revealed that company income tax has a positive and significant effect on net income of listed manufacturing firms in Nigeria. The study implication is that the tax incentives available for manufacturing firms is not enough to boost manufacturing activities for business growth, and this compels the firms to defer their tax payment which ends up becoming deferred tax liabilities. It is recommended that government should provide more tax incentives that will reduce corporate income tax payment, encourage tax deferral to boost manufacturing activities to boost net income of the listed manufacturing firms to increase manufacturing activities. Also, manufacturing firms should explore the various tax incentives available to determine effective corporate tax mix.

Keywords: Company income tax, deferred tax, net income, tax incentives, tax mix

1.1 Introduction

Sebastian and Costel (2018) defined corporate tax mix as all public finance-related liabilities borne by a company, which includes not only profit taxes, but also non-profit taxes such as real-estate taxes and labour-related taxes such as social security charges. Without a proper classification and understanding of the concept, many corporate managers have strayed in formulating the appropriate tax plans as regards the available corporate tax mix which encompasses corporate income tax, deferred tax, and tax incentives. (Sebastian & Costel, 2018).

Corporate tax mix refers to consideration of corporate tax payout and the available tax incentives as well as policies that allow for tax deferral by corporate managers in order to make effective tax plans and decisions. These are neglected as a result of the dicey nature of finding perhaps the right corporate tax mix; how much tax is to be paid, how much tax is to be deferred, and what tax

incentive is available to be enjoyed. Taking into consideration this tax issues, there is no doubt about the importance of corporate tax mix when making corporate tax plans, the purpose of which is to cushion the perceived adverse effect of corporate tax payment on net income of firms (Citron, 2014). The concept of corporate tax mix has a certain history, development and experience in Nigeria but it cannot be said that in its practical application it is a self-evident and seamless part of current financial practice. Literature on corporate tax in Nigeria and scholars often neglect to put forth arguments that pertain to corporate tax mix; they are more likely concerned with a singular view of each of these aspects of corporate tax mix.

While corporate income tax is seen as a source of revenue to the government and a burden on the part of firms, deferred tax ameliorates the current tax burdens by legally shifting a current tax burden of a firm to a future specific period when it will be more convenient for the firm to pay, as well sustain their business operation. Also, in a bid to cushion the tax burden of firms and encourage business productivity that in-turn enhances economic growth, the government offers tax incentives to the firms to help achieve the aim of economic growth. Within this purview, corporate tax managers have used the various provision of tax laws to make financial plans ranging from investment plans to dividend policies which are hinged on the net income realized after tax deductions.

The knowledge of corporate tax mix encompasses the effective application of tax management skills which entails the strategic structuring of business operations to minimize tax liabilities. Tax mix activities of firms are designed by tax consultants of firms seeking to avoid huge tax payment and its negative effects on net income of firms. Mucai, Kinya, Noor and James (2014) asserted that tax incentives as a part of tax planning is in a way a tax mix used by an entity's financial planners without violating the law or as per the stipulated requirements geared towards profit maximization. As part of the efforts by the government to provide an environment that is conducive for the growth and development of industries, inflow of foreign direct investment, shielding of existing investment from unfair competition and stimulating the expansion of domestic production capacity, tax incentive is been allowed by the government to foster such policy plans. The various tax incentives allowed by the Federal Government of Nigeria for various sectors has encouraged an overall development in the Nigerian economy (Onuorah & Chigbu, 2013). Haskins and Simko (2011) added that tax incentives and planning activities consist of a tax avoidance scheme which

influences the financial plans of companies due to variations in state tax regulation. Also, Nwaorgu, Abiahu, Arzizeh and Iormbagah (2019) asserted that to cushion the immediate burden of corporate tax payment vis a vis the available tax incentives firms can defer their taxes to a future more appropriate time. This nature of corporate tax mix proves to be mutual, dependent on one another. Authors like Uwuigbe, (2016) argued that for an entity to pay tax, it must first explore the tax incentives available to the entity. Also, where the need is, a firm can legally proclaim to defer payment of current tax burden to a future time which is more conducive for the firm to pay. The way and manner these taxes are used for the benefit of the firm portray a causal relationship between each aspect of the corporate tax to another, and each aspect of the corporate tax to the income of the firm.

The most effective way to study how each aspect of corporate tax (Corporate income tax, tax incentive & deferred tax) enhances the other; or influences the net income as a financial performance measure of the firm is to examine the causal relationship between the aspects of corporate tax mix and the net income of the firms. Previous studies have focused on an aspect of corporate tax mix like corporate tax paid, and failed to explore the causal relationship between the aspects of corporate tax mix and net income of firms. Mohammad and Ahmed (2019); Vržina and Dimitrijević (2020), Iormbagah, Nwaorgu and Ihendinihu (2020), Nwaorgu, Oyekezie and Abiahu (2020) carried out their studies with emphasis on corporate income tax, James, Poterba, Rao and Jeri (2011); Nwaorgu, Abiahu, Arzizeh and Iormbagah (2019) focused their studies on deferred tax and financial performance of firms, while, Gumo (2013) and George and Bariyima (2015) focused their studies on tax incentives and financial performance of firms. These researchers looked at the various aspects of corporate tax but they failed to lay down a method for effective corporate tax mix determination which has been a lingering problem to corporate managers.

This is a methodological gap this study seeks to bridge by using a paired-wise method in examining the causal relationship between corporate tax mix and financial performance of listed manufacturing firms in Nigeria. This forms the core objective which the paper aims to fulfil. To do this, the study will be accomplished in 5 sections. The first section is the introduction, where the background to the study is discussed. The second section is the theoretical literature, there in the concepts of corporate tax mix and financial performance is discussed and relevant articles reviewed. The third section concerns the method and model adopted for the study. In the fourth

section, the data analysis is done in line with the model specified. In the fifth and final section, conclusion and recommendation is drawn from the findings established in line with the data analysis.

2.1 Concept of corporate tax mix

Authors like Tatu (2006) and Savka and Radojka (2013) who have written on corporate taxes focus their studies on one or the other aspects of corporate taxes; ranging from corporate income tax to deferred tax and tax incentives. This has streamlined the knowledge of most readers to think each aspect of corporate tax is in its' sense mutual of the other, which in most cases if tax burdens from corporate income tax become high, failure on corporate managers to explore other aspects of corporate tax as a result of limited knowledge leads to a possibility of tax evasion. According to Albertazzi and Gambacorta (2006), corporate taxes are taxes levied against profits earned by businesses during a given tax period. Also, authors like Rohoya, Nor'Azam and Bardai (2010), Onourah and Chigbu (2013) and Abiahu and Amahalu (2017) defined corporate tax as the statutory transfer or payment made from private individuals, institutions or groups to the government. According to these authors, corporate taxes are majorly applied to companies operating earnings after expenses are deducted from sales. These definitions by authors have given a lopsided view of the true nature of corporate taxes. To counter this lopsided view of corporate taxes; Myles, (2001) and Lederman (2002) are of the view that tax incentives and benefits such as limited liability to incorporation which add value to firms serve as a basis for corporate tax. Myers (2007) further defined corporate tax as a firm activity other than tax payment but taking advantage of tax incentives for investment decisions. In the same regards, Nwaorgu, Abiahu, Arzizeh and Iormbagah (2019) stated that deferred tax is another aspect of corporate taxation that is used when making tax plans. It then means corporate tax can better be understood from the point of the tax mix.

Tax mix pertains the various taxes that are available to be explored (Hamilton, Kuo & Poddar, 1998). Hamilton et al., (1998) stated that tax mix can further be divided into personal tax mix for individuals and corporate tax mix for firms. While individual tax mix is about taking advantages of tax reliefs to reduce the burden of tax borne by individuals, corporate tax mix pertains taking advantage of tax incentives and deferred tax to reduce the burden of tax by corporate firms. Corporate tax mix is a tax planning activity that involves the combination of corporate income tax

to be paid, tax incentives to be enjoyed and deferred tax for effective tax rate determined by the firm. Ihe (2012) had a general definition of tax incentives which is an eye-opener to this research work. He defined tax incentives as a deliberate reduction in the liability granted by the government to encourage a particular business activity of the firm. The tax incentives in Nigeria include but not limited to Pioneer legislation, capital allowance, initial allowance. On the other hand, deferred taxes are constructs of financial reporting (Savak & Radojko, 2013). Poterba, Rao and Seidman, (2007) stated that the purpose for deferred tax accounting is to account for future tax effects that will arise as a result of different recognition and measurement principles of accounting standards against tax law. Therefore, the deferred tax represents future tax consequences of items and business transactions that have been recognized differently in the financial statement than in the tax report. Specifically, deferred taxes reflect the taxes that would be payable or receivable if the entity's assets and liabilities were recovered or settled at their present carrying amount (Halim, Veysel & Baykut, 2015).

Taking into consideration the most appropriate corporate tax mix when making tax plans by corporate managers is an issue that cannot be overemphasized. Firm managers in the corporate world have been faced with the issue of establishing the best model and method of corporate tax mix that will enhance an effective tax plan. Having adequate knowledge of the various corporate taxes and the characteristics of these corporate taxes is a veritable tool in modelling a well thought corporate tax plan that will ensure an efficient financial performance (net income).

2.2 Theoretical Literature

In modelling an effective corporate tax mix, a firm must consider its' resources; which in this case refers to the firm's specific capital, investment, profit, available tax laws and incentives. If these resources are rightly considered it will enable corporate managers to evaluate their tax burden and decide the best approach in offsetting the tax burden considering the best possible corporate tax mix. This proposition is premised on the firm's ability to pay based on the firms' available resources. This preposition was propounded by Grant (1991) in his resource-based theory and Smith (1776)'s ability to pay theory.

Pearce and Robinson (2011) define the resource-based theory as “a method of analyzing and identifying a firm's strategic advantages based on examining its distinct combination of assets, skills, capabilities and intangibles as an organisation”. This theory views the firm-specific factors

and their effect on performance. Grant (1991) views the firm resources as “a bundle of resources which are combined to create organizational capabilities which it can use to earn above average profitability and in turn settle its tax obligation”. To these early scholars, the firms’ resources vis a vis tax incentives/laws must be explored to the firms’ advantage in earning more income. According to Smith (1776), the proposition on the ability to pay theory holds that “taxes are based on taxpayers’ ability to pay; there is no quid pro quo”. Taxes paid are seen as a sacrifice by taxpayers (individuals and firms) who raise the issues of what the sacrifice of each taxpayer should be and how it should be measured (Iormbagah, Nwaorgu & Ihendinihu 2020). Both the resource-based theory and ability to pay theory as propounded by Grant (1991) and Smith (1776) prove that effective corporate tax mix is crucial in a firms' bid to maximize profit. Firms must consider their available resources and effectively carry out a tax plan that minimizes the firms' tax burden and maximizes the firms' net income (profit).

2.3.1 Corporate tax mix and net income of firms

HO₁: Tax incentives have no significant effect on the net income of listed manufacturing firms in Nigeria.

Authors like Gumo (2013), Iormbagah et al., (2020), Mohammad and Ahmed (2019) have argued how corporate taxes influence the financial performance of firms. While Gumo (2009) looked at tax incentives and foreign direct investment, he proved that tax incentives attract foreign direct investment whilst having a positive effect on foreign direct investment in Kenya. Iormbagah, et al (2020) on the other hand focused their study on corporate income tax payment on return on equity and debt to equity ratio of Nigerian firms. Iormbagah et al., (2020) proved that while corporate tax reduces the number of returns on equity, corporate tax fosters investment ratios as firm managers take on debt to shield against corporate taxes. Mohammad and Ahmed (2019) examined the effect of the corporate income tax rate on investment decisions of listed deposit money banks in Nigeria and found that after-tax cash flow is the major factor that affects investment decisions of listed deposit money banks in Nigeria. These uncertainties do not only exist concerning the timing of the associated tax cash flow but also concerning the reliability of implied tax payments and tax benefits since the realization of these cash flows depends on the firm's development and future operations which is seen in the consistency to which the firms’ net income is maintained by corporate managers.

Gumo (2013) researched the effect of tax incentives on foreign direct investments in Nigeria. In his research. Descriptive statistics, correlation and multiple linear regression models were used in data analysis. It was discovered that foreign direct investment (FDI) creates employment and acts as a vehicle of technology transfer, provides superior skills and management techniques, facilitates local firm's access to international markets and increases product diversity. The study concludes that tax incentive would have a positive resultant effect on FDI. Meanwhile, George and Bariyima (2015) researched tax incentives and foreign direct investment in Nigeria given the significance of foreign direct investment (FDI) to economic growth and the use of tax incentives as a strategy among the government of various countries to attract FDI, this study examines the influence of tax incentives in the decision of an investor to locate FDI in Nigeria. Data were drawn from the annual statistical bulletin of the Central Bank of Nigeria and the World Bank World Development Indicators Database. The study employs a model of multiple regressions using static Error Correction Modelling (ECM) to determine the time-series properties of tax incentives captured by annual tax revenue as a percentage of Gross Domestic Product (GDP) and FDI. The result showed that FDI response to tax incentives is negatively significant, that is, the increase in tax incentives does not bring about a corresponding increase in FDI.

HO₂: Deferred tax has no significant effect on the net income of listed manufacturing firms in Nigeria.

As earlier stated, part of the efforts by the government to provide an environment that is conducive for the growth and development of industries, inflow of foreign direct investment, shielding of existing investment from unfair competition and stimulating the expansion of domestic production capacity, is through tax rebate. Allowing firms to make plans for tax deferment give them an avenue to cushion the harsh effect of immediate tax payment (Nwaorgu et al., 2019). As stated above, Haskins and Simko (2011) noted that tax mix activities consist of a tax avoidance scheme which influences the financial plans of companies due to variations in state tax regulation. Nwaorgu, et al., (2019) reiterated that to cushion the immediate burden of corporate tax payment vis a vis the available tax incentives firms can defer their taxes to a future more appropriate time. This nature of corporate tax mix proves to be mutual, dependent on one another.

On deferred tax and financial performance, James, Poterba, Rao and Jeri (2011) carried out a study on deferred tax positions and incentives for corporate behaviour around corporate tax changes

from one tax regime to another. They compiled disaggregated deferred tax position data for a sample of large U.S. firms between 1993 and 2004 to explore how these positions might affect firm behaviour before and after a pre-announced change in the statutory corporate tax rate. Their results suggest that the heterogeneous deferred tax positions of large U.S. corporations create substantial variation in the short-run effects of tax rate changes on reported earnings. Also, Viola and Katherina (2017) carried out a study aimed at filling the gap in the literature related to the disclosure of relevant deferred tax value in accounting under a merger concerning the valuation of the participating companies. They used both the description, synthesis, and comparison methods of analyses. They found out in their model there exist a possible method of deferred tax accounting solutions and their influence on the value of assets with a different approach to this solution. Also, they found out that non-disclosure of deferred tax in the opening balance sheet could harm the economic decision-making of the acquiring company. On the other hand, Olaoye and Bamisaye (2018) examined the effect of deferred tax and financial performance of firms in Nigeria by analyzing the effect of both deferred tax asset and deferred tax liability on firms' performance measured in terms of profit after tax, earnings per share, return on asset and return on equity. They used panel-based estimation techniques including pooled OLS panel estimator, fixed effect OLS estimator and random GLS estimator for analyzing their data gotten from 10 listed firms on the Nigerian stock exchange market. They found out that deferred tax asset and deferred tax liability exert a negative impact on the performance of firms sampled in the study. Similarly, Nwaorgu et al., (2019) examined the effect of deferred tax accounting on the financial performance of listed agricultural firms in Nigeria. The study employed ex post facto research design using data from 4 quoted agricultural firms and analysis was done using simple linear regression. Findings from the study revealed that deferred tax accounting has a positive and significant relationship with the profitability of the listed firms. Further findings revealed that deferred tax has no statistically significant effect on both the cash flow and earnings per share of the listed agricultural firms in Nigeria.

HO₃: Company income tax payment has no significant effect on the net income of listed manufacturing firms in Nigeria.

According to Sebastian and Costel(2018), “two broad theoretical approaches have emerged in respect to the schools of thought on firms' performance; a market-based view which focuses on

market characteristics and firm's external environment as performance determinants and resource-based view which relies on firm-specific determinants in explaining what drives performance up and down". Which one is more appropriate is often a matter of context. For this study, the resource-based view approach is adopted, as a result, the net income as a measure of the firms' financial performance which is seen as the major firm resource for offsetting and making tax plans will be used. The adoption of the resource-based view approach is supported by authors like Albertazzi and Gambacorta (2006), Onourah and Chigbu (2013), and Abiahu and Amahalu (2017) who argued that corporate taxes are taxes levied against profits (net income) earned by businesses during a given tax period. Again, there is strong evidence that in developing countries, the resource-based view has greater influence because the instability of markets renders the firms' market positions less relevant for their performance (Grant, 1991).

On corporate tax payment, Iormbagah et al., (2020) examined the effect of corporate tax on the sustainable financial performance of listed firms in Nigeria, specifically the listed manufacturing firms. The study data were analyzed using simple linear regression. Findings from the study revealed that corporate tax payment has no significant effect on the return on equity of firms. Further findings revealed a positive and significant effect of corporate tax payment on the debt to equity ratio of the listed firms. While, Sabastian and Costel (2018) investigated the impact of overall firm-specific tax-mix on firm performance for Romanian listed companies during the 2000–2011 period. By overall tax-mix, they mean all public finance-related liabilities borne by a company, thus including not only profit taxes, but also non-profit taxes and labour-related taxes. Developed around the corresponding tax wedge, the variable of interest they used is a firm-specific effective tax rate that aggregates all public finance liabilities, based on a unique set of hand-collected data from publicly available corporate reports. Using a fixed-effect model, their results show that one percentage point increase in overall firm-specific tax rate triggers 0.15 percentage points decrease in return on assets. Similarly, Mohammad and Ahmed (2019) examined the effect of corporate income tax rate on investment decisions of listed deposit money banks in Nigeria. The descriptive research design was used in their study. Panel data were generated from annual reports and accounts of the sampled banks covering the periods of 2014 to 2018. Ordinary Least Square (OLS) regression was used in analyzing the data of their study. Findings of their study indicated that after-tax cash flow is the major factor that affects investment decisions of listed deposit money banks in Nigeria. Whereas depreciation tax shield and interest tax shield had an

insignificant effect on investment decisions of listed deposit money banks in Nigeria and corporate tax rate does not affect investment decisions of listed deposit money banks in Nigeria as the company income tax rate of 30% has been constant over decades. Finally, Vržina and Dimitrijević (2020) analyzed the financial performance of agricultural companies and corporate income tax as key determinants of financial performance. They analyzed the corporate income tax burden of agricultural companies in Vojvodina, as well as its impact on company profitability. They carried out a simple descriptive statistics test which showed that effective corporate income tax rates (ETRs) in agricultural companies are significantly lower than the statutory corporate income tax rate. Their result further revealed that nearly 69% of observations have both a current effective tax rate and cash effective tax rate of 0%, which indicates that agriculture is an industry with an exceptionally low corporate income tax burden. They further used Panel regression which showed that agricultural companies with lower effective tax rates are more profitable than companies with the higher effective tax rate.

METHOD

This study seeks to investigate the effect of corporate tax mix on the financial performance of listed manufacturing firms in Nigeria using a paired-wise analysis approach. The study adopts ex post facto research design and employed a two-tailed Pearson correlation and multiple least square (OLS) regression in analyzing the data collected from the annual financial statement of ten (10) manufacturing firms listed on the Nigerian stock exchange market from 2014-2018 (a period 5 years), with a complete set of comparable financial information over the period under review. To ensure data validity, the variance inflation factor (VIF), tolerance level and the Dublin Watson statistics is employed. This is to enable the study ascertain the level of autocorrelation and multicollinearity of the set in order to ensure that the outcome of the regression result is not spurious. **Model Specification**

This study formulates the following model to be used by the researcher in the investigation.

Causal model of corporate tax mix:

$$CIT_{it} = TINC_{it} + U_{it} \dots \dots \dots \text{Model 1}$$

$$CIT_{it} = DTAX_{it} + U_{it} \dots \dots \dots \text{Model 2}$$

$$TINC_{it} = CIT_{it} + U_{it} \dots \dots \dots \text{Model 3}$$

$$TINC_{it} = DTAX_{it} + U_{it} \dots \dots \dots \text{Model 4}$$

$$DTAX_{it} = CIT_{it} + U_{it} \dots \dots \dots \text{Model 5}$$

$$DTAX_{it} = TINC_{it} + U_{it} \dots \dots \dots, \text{model 6}$$

Regression Model:

$$NI_{it} = \alpha + \beta_1 CIT_{it} + \beta_2 TINC_{it} + \beta_3 DTAX_{it} + U_{it} \dots \dots \dots \text{Model 7}$$

Where:

α = Constant

NI = Net income (Log of net income of the firm at a time)

CIT = Corporate income tax (Log of corporate tax paid of the firm at a time)

TINC = Tax incentive (Log of total tax incentives or all the available tax incentives enjoyed by the firm each year)

DTAX = Deferred Tax (Log of deferred tax liability of the firm at a time)

it = Cross-sectional(i) at time (t)

U = Error term used in the model.

$\beta_1 \beta_3$ = Beta coefficient of the independent variable.

Decision Rule: Accept the null hypothesis if the calculated probability value is greater than the accepted significant probability level of 0.05.

RESULT AND ANALYSIS

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
NI	50	4.98	6.98	6.0817	.06989	.49419
CIT	50	4.63	6.71	5.5505	.07675	.54274
TINC	50	4.12	7.67	5.8370	.14281	1.00983
DFT	50	3.52	7.13	5.4511	.13584	.96051
Valid N (listwise)	50					

Source: Author's Computation, 2020

CIT records a mean and standard deviation of 5.5505 and 0.54274. It also reveals minimum and maximum values of 4.63 and 6.71 respectively. TINC reveals a mean and standard deviation of 5.8370 and 1.00983, it also records a minimum and maximum value of 4.12 and 7.67. For DFT, a minimum and maximum value of 3.52 and 7.13 is recorded, while its mean and standard deviation

reveals 5.4511 and 0.96051 respectively. Lastly, NI reveals a mean and standard deviation of 6.0817 and 0.49419. It also records a minimum and maximum value of 4.98 and 6.98 respectively.

The various levels of deviation values show the level of fluctuations and variations in the manufacturing sector corporate tax mix and sustainable income. Also, the minimum and maximum values represent the lowest and highest values of CIT, TINC, DFT and NI recorded by the firms under review.

Table 2: Paired Wise Correlation Analysis

		Paired wise correlations table			
		CIT	TINC	DFT	NI
CIT	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	50			
TINC	Pearson Correlation	-.164	1		
	Sig. (2-tailed)	.257			
	N	50	50		
DFT	Pearson Correlation	.409**	-.156	1	
	Sig. (2-tailed)	.003	.278		
	N	50	50	50	
NI	Pearson Correlation	.717**	-.070	.181	1
	Sig. (2-tailed)	.000	.627	.209	
	N	50	50	50	50

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Author’s Computation, 2020

The paired wise correlation result above shows that:

There is a negative relationship (correlation) between CIT and TINC at -0.164. This means that the tax incentives in place reduce the amount of company income tax to be paid by 16.4%. Although the amount reduced is not significant (0.257), it proves the effectiveness of tax incentives in reducing the company income tax to be paid after-tax adjustments for incentives. The correlation result for CIT and DFT records a positive significant (0.003) correlation of 40.9%. This means that companies in Nigeria incur future tax liabilities despite adjusting for deferred tax since the deferred taxes are more of deferred tax liabilities probable to be paid in the future. Finally, the result revealed a positive significant correlation between CIT and NI. This is proof that the more income the companies are left with after deducting business expenses, the more company income tax is paid by the companies.

The relationship between TINC and DFT records a negative insignificant (0.278) correlation (-0.156). The result reveals that the available tax incentives are responsible for a 15.6% reduction in

the amount of deferred tax to be paid after adjustments. Furthermore, there is an insignificant negative weak relationship between tax incentives and net income (NI) of the companies. As a result of the weak paired wise relationship between tax incentives and company income tax, the tax incentives available is weak (-0.070) and cannot significantly (0.627) increase the net income of the companies.

Finally, the result revealed an insignificant positive relationship between DFT and NI. This shows that huge tax liability of the firms is deferred to be paid in the future. Despite the deferred tax liability, the tax incentives available are insignificant to offset deferred tax liabilities thus, the deferred tax liability cannot significantly improve the net income of the companies.

Table 3: Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.729 ^a	.531	.501	.34924	.531	17.372	3	46	.000	.712

a. Predictors: (Constant), DFT, TINC, CIT

b. Dependent Variable: NI

Source: Author’s Computation, 2020

To enable a more robust result, the Dublin Watson statistic for auto correlation test is adopted. The table above reveals a Dublin Watson Statistic of 0.712, which is below the accepted standard of 2 indicating the absence of serial correlation of the data collected. According to Gujarati and Sangeetha, (2007) value Dublin Watson above 2.00 often regarded as indicating auto correlation, which is not the case in this study.

Furthermore, the above results in table 2 show that there exists a strong positive relationship between CIT, TINC, DFT as a proxy for corporate tax mix and variable of sustainable performance (NI) at (0.729) 72.9% R-value which also explains that the model. Also, the R² value stood at 0.531. The R² otherwise known as the coefficient of determination shows the percentage of the total variation of the dependent variable (NI) that can be explained by the independent or explanatory variables CIT, TINC and DFT. Thus the R² value of 0.531 indicates that 53.1% of the variation in the sustainable performance (NI) of listed manufacturing firms can be explained by a variation in corporate tax mix (CIT, EDT & DFT) while the remaining 46.9 (i.e. 100-R²) could be accounted by other factors not included in this model. Factors like debt level, macroeconomic issues and political legislations.

The adjusted R² of 0.501 above indicates that if the other factors are considered, this result will deviate by only 0.030 (i.e. 0.531 – 0.501). This result shows that there will be a deviation of the sample variables examined from the ones to be considered by 3%. The Fisher Change statistics shows that the over linear model is fit at a level of 17.372 with an F statistic probability (Significance) value of 0.000.

Table 4: Test of Hypotheses

Model Coefficients Table								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	2.420	.647		3.737	.001		
	TINC	.018	.050	.036	.351	.727	.964	1.038
	DFT	-.067	.057	-.131	-1.180	.244	.825	1.212
	CIT	.707	.101	.777	6.981	.000	.823	1.215

a. Dependent Variable: NI

Source: Author's Computation, 2020

To test for multiplicity robustness of the model, the study adopts the tolerance level and Variance Inflation Factor (VIF) statistics. According to Gujarati and Sangeetha, (2007) values of VIF that exceed 10 and tolerance level values that are below 0.1 are often regarded as indicating multicollinearity of the independent variables data, which is not the case in this study; as the tolerance levels are above 0.1 and the VIF statistics are below 10 which further substantiates the absence on multi-collinearity and the validity of the study model.

HO₁: Tax incentives have no significant effect on the net income of listed manufacturing firms in Nigeria.

Given that the accepted significant level is 0.05 and the calculated probability significance level for TINC against NI is 0.727 which is above the accepted significance level, the study, therefore, accepts the null hypothesis and rejects alternative hypothesis which means that tax incentives has no significant effect on the net income of listed manufacturing firms in Nigeria.

HO₂: Deferred tax has no significant effect on the net income of listed manufacturing firms in Nigeria.

Given that the accepted significant level is 0.05 and the calculated probability significance level for DFT against NI is 0.244 which is above the accepted significance level, the study, therefore, accepts the null hypothesis and rejects alternative hypothesis; which means deferred tax has no significant effect on the net income of listed manufacturing firms in Nigeria.

HO₃: Company income tax payment has no significant effect on the net income of listed manufacturing firms in Nigeria.

Given that the accepted significant level is 0.05 and the calculated probability significance level for CIT against NI is 0.000 which is below the accepted significance level, the study, therefore, accepts the alternative hypothesis and reject the null hypothesis; which means company income tax payment has a significant effect on the net income of listed manufacturing firms in Nigeria.

Discussion of Results

Findings from the first and second specific objectives revealed that both tax incentives and deferred tax have no significant effect on the net income of the listed manufacturing firms in Nigeria. This findings is in line with that of George and Bariyima (2015), Olaoye and Bamisaye (2018), and Nwaorgu et al., (2019). George and Bariyima (2015) carried out a study to ascertain the effect of tax incentives on foreign direct investment in Nigeria using Error correction model. In their study, they found out that tax incentives do not bring a corresponding increase in FDI of Nigeria. Also, Olaoye and Bamisaye (2018), and Nwaorgu et al., (2019) both carried out studies on deferred tax and financial performance of firms in Nigeria. They all found out that deferred tax has no significant effect on the financial performance of firms in Nigeria. Although Nwaorgu, et al., (2019) in their work suggest tax incentives as a measure to cushion the adverse effects of deferred tax liability on net income of companies, they also, found that deferred tax after-tax incentives adjustment has no significant effect on the profitability of companies. The choice by manufacturing firms in deferring tax obligation is a subject of debate. This assertion is in line with that of Miller (1963) who opined that firms' investment decision is influenced by corporate income tax.

In the third specific objective, findings revealed that corporate tax payment positively and significantly affects the net income of the listed manufacturing firms in Nigeria. This is owing to the fact corporate tax payment has a directional correlation with net income of manufacturing firms (the more income made from business the more corporate income tax to be paid). This does not impede the manufacturing firms' objectives in any way. Nigerian manufacturing firms have faced harsh economic realities as such, soft paddles in the form of tax incentives are given to manufacturing firms to cushion such effects.

CONCLUSION

From the study findings, it is concluded that tax incentive is a major determinant of deferred tax adjustment and corporate income tax to be paid. Tax incentive as well reduces the amount of corporate income tax to be paid as it has a negative paired wise relationship with corporate income tax and deferred tax.

Finally, both tax incentive and deferred tax have an insignificant relationship on net income of listed manufacturing firms in Nigeria while corporate income tax paid after-tax incentive deductions and adjustment for deferred tax has a significant paired wise relationship with net income of listed manufacturing firms in Nigeria

Implications of the study finding

The study implication is that tax incentives available for manufacturing firms are not enough to boost manufacturing activities for the adequate financial performance of the firms, this compels the firms to defer their tax payment which ends up becoming deferred tax liabilities and huge burden against the future income of the listed manufacturing firms in Nigeria. The net income of listed manufacturing firms in Nigeria will be improved by adopting the most effective corporate tax mix as a financing tool since remittance is not immediate in the case of deferred tax. Net income (Residual) can be used to finance the listed manufacturing firms working capital needs. This will make the listed manufacturing firms have more residual income for further investment as well as meet up with their corporate tax payment obligations to relevant tax authorities to attain business growth and sustainability.

Recommendations

Based on the study's conclusion/implication, it is recommended that:

- i. Government should provide more tax incentives that will reduce corporate income tax payment, encourage tax deferment to boost manufacturing activities, such that there will be enough net income left in the hands of the listed manufacturing firms to increase manufacturing activities;
- ii. Also, manufacturing firms should consider the need to explore the various tax incentives available as a way to determine an effective corporate tax mix, such that

- continues company income tax payment will be sustained; this will discourage future deferred tax liabilities accruable to the firm and improve government tax revenue needed for funding key public infrastructural projects that will improve the ease of doing business for the listed manufacturing firms; and
- iii. Finally, manufacturing firms should consider highly the need to engage the services of tax experts that will help the firms in making tax plans; knowing when to use deferred tax approach as a way of shielding against the consequences of immediate corporate tax payment against the net income of the manufacturing firms during economic crises; this will enable the manufacturing firms to have enough residual net income to fund alternative investment for easy diversification in times of economic uncertainties where diversity is the crux of business survival.

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