Book Tax Difference, Effective Tax Rate and Corporate Performance of Selected Quoted Consumer Goods and Industrial Goods Manufacturing Companies in Nigeria

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ABSTRACT

This study examines book tax difference and corporate performance with evidence from quoted consumer goods and industrial goods manufacturing companies in Nigeria. This study was prompted by the need to undertake a quantitative examination of book tax difference on corporate performance amongst selected quoted manufacturing firms in Nigeria. Two research hypotheses were formulated for the study. Ex-post facto research design was employed in the study. The dependent variables is returns on assets (ROA) while the independent variables are book tax difference and effective tax rate proxied using income effective tax of various companies. The sample was restricted to only twenty-three (23) quoted consumer goods and industrial goods manufacturing companies on the Nigerian Stock Exchange for the period, 2010 to 2019. Data were analyzed using Panel least square (PLS) regression with the aid of E-views, 9.0. The study found a positive statistically significant relationship for book tax difference and corporate performance. Effective tax rate was not significant. Consequent on the findings, the study recommends amongst others that policy makers, accounting standards developers and industry regulators can utilise the study findings to develop an insight on industry effect of book tax difference for ease of bankruptcy prediction from financing cash flow deficiency.

Keywords: Corporate performance, Book tax difference, Effective tax rate

1.0 INTRODUCTION

1.1 Background to the Study

Corporate income taxes 'are non-discretionary expenditure imposed by the government on all profitable firms' (Edwards, Schwab, & Shevlin, 2013). Corporate tax avoidance which had been translated to the effective tax rate by prior studies, refers to managerial practice that aims to reduce the taxable income through tax planning activities, whether these are legal, questionable, or even illegal (Edwards, Schwab, & Shevlin, 2013). In Nigeria, the administration of CIT is complex and ambiguous; thus, creating possibilities for tax

avoidance and non-compliance. Over the past few decades, corporate tax avoidance has grown steadily and formed a core issue globally (Amuzu, 2010).

Several studies have been conducted both globally and locally on the effective tax rate which is an offshoot of tax avoidance behaviour. However, the vast majority of studies are limited due to their focus on the income statement or the statement of financial position (Rui, 2019). Cash flow analysis is very effective in examining a firm's competitiveness in the market because it is a more dynamic examination of the actual return on assets and equity (Amuzu, 2010). Thus, researchers are paying greater attention to cash flow information (Aktaş & Karğın, 2012). Some of these studies focused on the relationship between cash flows, firm valuation, stock price changes, earnings, and prediction of the future cash flows (Aktaş & Karğın, 2012), and financial distress (Sayari &Mugan, 2013). The current study therefore is set to tackle the following issues, which are in four folds.

The relatively lack of empiricism on the effect of book tax difference and effective tax rate on corporate performance of quoted manufacturing firms in Nigeria (Amah, Michael, & Ihendinihu, 2016; Bingilar & Oyadenghan, 2014; Duru, Okpe, & Ifunanya, 2015; Nwaiwu & Oluka, 2017; Nwanyanwu, 2015).

Studies have suggested alternative proxies of effective tax rate which is an offshoot of tax avoidance to capture the full dimensionality of corporate tax avoidance and provide more robust results (Khuong, Ha, Minh, & Thu, 2019; Noga & Schnader, 2013). However, these studies were studies were conducted internationally (Edwards, Schwab, & Shevlin, 2013). The current study therefore focuses on the cash effective tax rate and book tax differences to capture the various dimensionality of tax avoidance that can also infer earnings management in Nigeria.

Furthermore, prior studies employed the dynamic generalized method of moments (GMM) to empirically validate the hypotheses. This approach is consistent with the study by Khuong, Ha, Minh, and Thu (2019) that used GMM to tackle the endogeneity problem. Similarly, in the Nigerian context, Salawu and Adedeji (2017) also employ the GMM in investigating the relationship between corporate governance and tax planning. There is however a need to explore other methods in validating the hypotheses most especially the panel least square regression techniques. Consequently, the current study intends to carry out an in-depth study on book tax difference, effective tax rate and corporate performance of quoted consumer goods and industrial goods manufacturing companies in Nigeria.

The main objective of the study is thus to ascertain the effect of book tax difference and effective tax rate on corporate performance of quoted manufacturing firms in the Nigerian Stock Exchange. The specific objectives of the study are as follows:

- 1. To determine the effect of book tax difference on returns on assets of quoted consumer goods and industrial goods manufacturing firms in Nigeria.
- 2. To ascertain the effect of effective tax rate on returns on assets of quoted consumer goods and industrial goods manufacturing firms in Nigeria.

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 Book Tax Difference

Book tax difference (BTD) refers to the gap between pre-tax incomes, as shown in a company's published financial statement, and the taxable incomes reported to tax authorities (Tang, 2006). Taxable income refers to the amount calculated in line with the rules established by the tax authorities of a particular country and on which the income taxes are levied (Chytis, 2019). Thus, BTDs are mainly caused by differing local GAAP and tax treatment of revenue and expense items (Harrington, Smith, & Trippeer, 2012). Prior studies, such as Revsine, Collins, Johnson, and Mittelstaedt (2005) and Pratt (2005) found that ratio of pre-tax book income to taxable income is a useful indicator for assessing the degree of conservatism in a firm's accounting choices.

BTDs can be subdivided into three components which reflect variations of BTD sources, namely permanent differences, temporary differences and statutory tax rates differences (Harrington, Smith, & Trippeer, 2012; Tye & Abdul Wahab, 2018). Temporary differences are differences in the timing of accrual recognition between pre-tax book and taxable income (e.g., warranty reserve, bad debt reserve, depreciation, etc.) (Hanlon, Krishnan, & Mills, 2012). Temporary differences combine "the choices a firm makes in terms of accruals for financial accounting and the choice of what is allowed for tax purposes" (Hanlon, Krishnan, & Mills, 2012, p.4). Temporary differences can be positive or negative. Positive temporary differences arise when the accounting income is higher than the taxable income, while negative temporary differences occur when the accounting income is lower than the taxable income (Hanlon, 2005).

2.1.2 Effective Tax rate

According to Lee, Dobiyanski, and Minton (2015) a firm's tax strategy and practice are proprietary information as its tax return is not public information. Tax scholars have used several proxies to infer on a firm's tax policy. For example, Lisowsky, Robinson, and Schmidt (2013) illustrate five empirical proxies over the continuum of legal tax avoidance to illegal tax evasion, such as a Generally Accepted Accounting Principles (GAAP) effective tax rate, a cash effective tax rate, total book-tax differences, permanent book-tax differences, discretionary permanent book-tax differences, and reportable transactions. The most widely used measure of corporate tax avoidance is the effective tax rate, the effective tax rate, is computed by dividing the tax income to pre-tax income. Alternatively, is the ratio of tax expense to cash flow from operations (Richardson & Lanis, 2007).

2.2 Theoretical Framework

The study is anchored on the agency theory. The justification for this theory is that effective tax rate and book tax differences activities are attempts by managers (agents) -who form part of the corporate governance system of modern corporations- to take advantage of the loopholes in the tax laws to influence its tax pay-out which may be detrimental for the company in the long run.

2.2.1 Agency Theory

Agency theory can be traced to the early works of Berle and Means (1932), and was first formulated by Ross in the 70's (Ross, 1973). The theory was first associated to agency costs by Jensen and Meckling (1976). Jensen and Meckling (1976, p. 308) defined agency relationship as a "contract under which one or more persons (the principals) engage another

person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent".

According to Namazi (2012) the theory relates to a situation in which one individual (agent) is engaged by another individual (principal) to act on his/her behalf based upon a designated fee schedule. Agency costs are the sum of the monitoring expenditures by the principal, the bonding expenditures by the agent, and the residual loss (Jensen & Meckling, 1976). In the business context, agents correspond to managers, whereas principals correspond to shareholders (Ruangviset, Jiraporn, & Kim, 2014). Thus, agency relationship exists when shareholders (principals) hire managers (agents) as decision makers in corporations (Ruangviset, Jiraporn, & Kim, 2014).

Agency theory provides "a useful way of explaining relationships where the parties' interests are at odds and can be brought more into alignment through proper monitoring and a well-planned compensation system" (Davis, Schoorman, & Donaldson, 1997). According to Daily, Dalton and Canella (2003), two factors have influenced the prominence of agency theory. *Firstly*, the theory is conceptually simple by reducing the corporation to two participants, managers and shareholders. *Secondly*, the notion of human beings as self-interested is a generally accepted idea. Agency theory may be applied to any contractual relationships in which the principal and agent have partly differing goals and risk preferences, for example, compensation, regulation, leadership, impression management, whistle-blowing, vertical integration, merge & acquisition, and transfer pricing (Eisenhardt, 1989).

Assumptions of agency theory:

- 1. The divergence of interest between shareholders (principals) and mangers (agents): Both seek to maximise their own interest, shareholders seek to maximise wealth while managers succumb to self-interest and, unless restricted from doing otherwise, would be interested in protecting and enhancing his pay and perks.
- 2. Information asymmetry: The mangers have better access to information about entity's position vis-a-vis shareholders. This implies that, agents have private information which the principal cannot gain access without cost.
- 3. The agent is usually assumed to be work averse and risk averse (Baiman, 1990, p.343).
- 4. The conflict of interest creates agency problem; which jeopardises the fiduciary relationship between boards and shareholders and leads to agency costs. For instance, monitoring costs in large corporations (Shleifer & Vishny, 1997), etc.

2.3 Empirical Review

Khuong, Ha, Minh, and Thu (2019) undertook a study titled 'Does corporate tax avoidance explain cash holdings? The case of Vietnam'. The sample comprised of 125 non-financial firms listed on the Ho Chi Minh City Stock exchange and Ha Noi Stock exchange from 2010 to 2016. The study relied on financial statement data obtained from the data stream of Thomson Reuters EIKON. The data were analysed using the two step GMM estimator to validate the hypotheses. The results showed that current ETR, cash ETR and BTD all had a significant positive relationship with firm's cash holding.

Kim and Jang (2018) conducted a study titled 'Relationship between tax avoidance and key financial indicators in Koreas Construction Waste Disposal Industry'. The final sample consisted of 23 Korean construction waste disposal companies from the year 2006 to 2016. The study is based on secondary data obtained from the firm's financial results in the DART system of the Korean Financial Supervisory Service's website. The data were analysed using multiple regression technique. The results showed that a positive significant relationship between cash flow from operations and book tax difference; the effect of non-current assets

to non-current financing is positive and significant; and, lastly, debt is positive but not significant.

Rui (2019) conducted a study titled 'Effect of corporate tax avoidance on the investment-cash flow sensitivity'. The final sample comprised of 5056 firm year observations from enterprises listed on shanghai and shenzen stock exchanges (a-share enterprises) from 2009 to 2015. The study used on secondary data obtained from the Wind Economic Database. The data were analysed using the regression technique analysis. The results confirm that firms with higher levels of tax avoidance have higher investment-cash flow sensitivity.

Goldman (2016) evaluated 'The effect of tax aggressiveness on investment efficiency'. The final sample comprised of a total of 12,876 firm-year observations. The study relied on secondary data obtained from Compustat and Execucomp with fiscal year ends between 1992 and 2014. The data were analysed using multiple regression technique. The results revealed that tax aggressiveness is associated with more investment for firms with access to investable funds. Secondly, auditor provided tax services significantly moderates the relation between tax aggressiveness and investment efficiency.

Santa and Rezende (2016) evaluated 'Corporate tax avoidance and firm value: From Brazil'. The sample comprised of 323 publicly traded firms (i.e., 1,704 firm-year observations) listed on the BM & FBovespa. The study relied on secondary financial statements data; obtained from CVM (Brazilian regulatory agency), and Economatica from the period 2006 to 2012. The data were analysed using multiple regression technique. The results showed a negative significant effect of tax avoidance proxied as BTD on Tobin's q; however, the variable of net income scaled by total assets had a positive significant effect.

3.0 METHODOLOGY

3.1 Research Design

The research work adopted an *ex-post facto* research design. *Ex-post facto* means "after the event", meaning that the events under investigation had already taken place and data already exist. The choice of *ex-post facto* research design is based on the fact that the study relies on historical accounting data obtained from annual reports and accounts.

3.2 Population of the Study

The population of the study comprised of quoted consumer goods and industrial goods manufacturing firms on the Nigerian exchange group (NXG) as at end of 2021 financial year. The number of firms included in the study population of the study is shown in the table below:

Table 1: Number of firms by sector

S/No	Sector	Number of firms	
1	Consumer Goods	10	
2	Industrial Goods	16	
	Total	26	

Source: The Nigeria Exchange Group (2021)

3.3 Sample Size of the Study

The study was employed all twenty-six (26) companies selected. During the data analysis companies whose required data are incomplete or unavailable were eliminated from the sample. The final sample percentage with respect to the population is approximately 100% of the entire quoted consumer goods and industrial goods companies on the Nigeria Exchange Group (NXG). The full list of the companies is shown in Appendix I.

3.4 Sources of Data

Data collection is a crucial stage of dissertation that entails gathering all the necessary and required information from essential sources to be used for the analysis (Kumar, 2011). The data for this study was obtained from secondary sources. Secondary data is information or data that has previously been collected and recorded for other purposes (Blumberg, Cooper, & Schindler, 2008).

3.5 Reliability of Data

Annual reports and accounts are widely used document in secondary data analysis. The reliability of the data is ensured because annual reports are standardized and produced regularly (Buhr, 1998). They are also widely available to a larger audience (Deegan & Rankin, 1996), have a high degree of credibility and reliability due to audit verification (Tilt, 1994).

3.6 Methods of Data Analysis

The study employs both *descriptive* and *inferential* statistical techniques to analyse the data. The following descriptive statistics was computed such as the mean, median, standard deviation, minimum, maximum values, and Skewness-Kurtosis statistics, etc.

The correlation matrix was constructed to identify the correlation between the dependent and independent variables. Lastly, multiple regression will be used to validate the hypotheses.

$$ROA = f(btd, etr, fsize, flev)$$
(1)

Equations 1 can be written econometrically as presented in equations 2 as follows:

$$ROA_{it} = B_0 + B_1btd_{it} + B_2etr_{it} + B_3fsize_{it} + B_4flev_{it} + +++ \sum_{t.....}$$
 (2)

Where:

etr = Effective tax rate btd = Book tax differences fsize = Firm size

flev = Firm leverage roa = Return on assets

t = Time dimension of the variables

 η_0 = Constant or Intercept.

 η_{1-6} = Coefficients to be estimated or the Coefficients of slope

parameters.

The expected signs of the coefficients (a priori expectations) are such that η_2 η_4 and $\eta_5 > 0$; while, η_1 and $\eta_6 < 0$

List 1: Description of Variables

	Dependent variables					
Label	Description	Source				
ROA	Returns on assets = PAT/Total Asset	Statement of cash				
		flows (IAS7)				
	Independent variables					
ETR	Effective Tax Rate = Income effective tax	Manzon and				
		Plesko (2002)				
BTD	Pretax book income – <u>current tax expense</u>	Manzon and				
	Statutory tax rate	Plesko (2002)				
	Control variables					
Firm size	Natural logarithm of the value of total assets	Kim and Jang				

		(2018); Riguen and Jarboui (2017); Goldman (2016)
Firm leverage	Ratio of debt to total assets	Kim and Jang (2018); Riguen and Jarboui (2017)

Source: Authors' Compilation, 2021

3.6.1 Decision Rule

The decision rule is based on the sign and significance of the computed t-statistic from the regression output. If the p value of the t-statistic < .05 (the chosen alpha level) the null hypothesis is rejected; and, the variable is postulated to have a significant effect.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Data presentations

Table 2: Descriptive statistics of variables

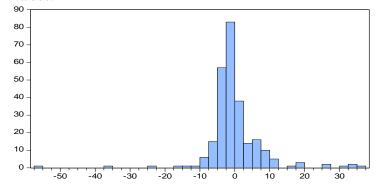
	BTD	Income	Firm SIZE	Leverage	ROA
		Effective			
		Tax			
Mean	6.304119	-36.28266	7.218082	-11.10562	6.109834
Median	8.150343	-25.32500	7.233900	1.221900	5.986550
Maximum	49.88250	89.49280	9.240900	202.9019	53.95940
Minimum	-344.1751	-4108.395	5.092700	-3123.057	-179.9173
Std. Dev.	28.75631	259.8191	0.976846	194.9778	17.21845
Skewness	-7.553994	-14.99003	-0.086468	-15.73082	-5.211498
Kurtosis	87.84280	234.1643	2.105167	251.5306	56.20128
Jarque-Bera	80454.32	588637.1	8.998531	679870.8	31839.33
Probability	0.000000	0.000000	0.011117	0.000000	0.000000
Sum	1639.071	-9433.493	1876.701	-2887.461	1588.557
Sum Sq. Dev.	214173.6	17484040	247.1452	9846232.	76787.01
_					
Observations	260	260	260	260	260

Source: Authors computation, (2021)/E-Views, 9.0 output.

The descriptive statistics of the variables utilised in the study are presented in Tables 2 which shows the mean, median, standard deviation, observations, minimum and maximum values of each selected variable. The description helps in showing the nature of the data in terms of dispersion and central tendencies.

The observations row shows the number of cases included in each analysis of the variables of the study as two hundred and sixty for all variables. The Mean of each variable shows the measure of central tendency which calculates as the average of a set of observations; while, the Standard Deviation (SD) is the measure of the average distance between the values of the data in the set and the mean. A low SD indicates that the data points tend to be very close to

the mean; while a high SD indicates that the data points are spread out over a large range of values.



Series: Standardized Residuals Sample 2010 2019 Observations 260					
Mean	-6.18e-16				
Median	-1.313230				
Maximum	35.75921				
Minimum	-55.42058				
Std. Dev.	8.067262				
Skewness	-0.064316				
Kurtosis	16.85224				
Jarque-Bera	2078.930				
Probability	0.000000				

Figure 1: Histograms of the main variables

The histograms displayed above show that the main variables in the study are fairly normally distributed as they cluster towards the centre and are also peaked. This however can reveal different result for the variables if considered separately.

4.2 Test of Hypotheses

Table 3: PLS Regression Dependent Variable: ROA Method: Panel Least Squares

Sample: 2010 2019 Periods included: 10

Cross-sections included: 26

Total panel (balanced) observations: 260

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.695999	3.980118	1.179864	0.2392
BTD	0.530064	0.018637	28.44117	0.0000
Income effective tax	0.000946	0.001947	0.485798	0.6275
Firm Size	-0.258938	0.551070	-0.469883	0.6388
Leverage	0.002198	0.002615	0.840477	0.4014
R-squared	0.780485	Mean dependent	var	6.109834
Adjusted R-squared	0.777042	S.D. dependent	var	17.21845
S.E. of regression	8.130288	Akaike info crite	erion	7.048113
Sum squared resid	16855.91	Schwarz criterion	1	7.116588
Log likelihood	-911.2547	Hannan-Quinn o	eriter.	7.075641
F-statistic	226.6629	Durbin-Watson	stat	0.906597
Prob(F-statistic)	0.000000			

Source: E-view, 9.0

Table 3 shows the regression model with two independent variables (IV) and two control variables (CV), as follows: log of total asset and debt to asset ratio (Leverage). The overall R-squared is 0.780485 and the Adjusted R-squared 0.777042. The *p*-value of the F-statistic is less than .05 (i.e., margin of error), which confirms the statistical significance of the model.

4.2.1 Hypothesis one

 H_{01} : There is no significant effect of book tax difference on returns on assets of quoted manufacturing firms.

The probability value of the variable of interest; Book tax difference was (0.0000) and *t-statistic* (28.441) positive and statistically significant (*p*-value<.05). Therefore, the null hypothesis is rejected and alternate, accepted. Hence, there is a significant effect of book tax difference on returns on assets of quoted manufacturing firms.

4.2.2 Hypothesis two

 H_{01} : Effective tax rate has no significant effect on returns on assets of quoted manufacturing firms.

The *coefficient* of the variable of interest: Income effective tax was (0.6275) and *t-statistic* (0.485798) positive but non statistically significant (*p*-value>.05). Therefore, the null hypothesis is accepted and alternate, rejected. Hence, effective tax rate has no significant effect on returns on assets of quoted manufacturing firms.

4.3 Discussion of findings

The current study focused on book tax difference, effective tax rate and performance. From our hypotheses testing, the study found a significant effect of book tax difference on returns on assets of quoted manufacturing firms. This finding is consistent Khuong, Ha, Minh, and Thu (2019) who undertook a study on corporate tax avoidance and cash holdings and found that current ETR, cash ETR and BTD all had a significant positive relationship with firm's cash holding. Also, the findings of Kim and Jang (2018) is consistent with the current study. with results showing that a positive significant relationship between cash flow from operations and book tax difference; the effect of non-current assets to non-current financing is positive and significant; and, lastly, debt is positive but not significant.

The current study however found no significant effect on returns on assets of quoted manufacturing firms. Although Goldman (2016) reveals a contrary result where he evaluated the effect of tax aggressiveness on investment efficiency and found that tax aggressiveness is associated with more investment for firms with access to investable funds. Santa and Rezende (2016) in Brazil also showed a contrary result where they evaluated corporate tax avoidance and firm value using multiple regression technique and found a negative significant effect of tax avoidance proxied as BTD on Tobin's q; however, the variable of net income scaled by total assets had a positive significant effect.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

This section summarises the results of the empirical findings from the test of hypotheses.

- 1. There is a significant effect of book tax difference on returns on assets of quoted manufacturing firms.
- 2. Effective tax rate has no significant effect on returns on assets of quoted manufacturing firms.

5.2 Conclusion

The study draws a conclusion that there is an effect of book tax difference on returns on assets of quoted manufacturing firms in the Nigerian Stock Exchange. The issue of book tax difference has raged on in local and international business scenario as governments, policy makers and managers offer reasons against or for it. The study therefore empirically

examines this issue, using a recent updated dataset of manufacturing firms listed on the Nigerian Stock Exchange (NSE), more especially as prior studies present inconsistent results. The data were analysed using the panel least square regression technique revealed which revealed a significant positive effect of book tax difference on returns on asset and a non-significant positive effect of effective tax rate on returns on assets. The study makes several contribution and recommendations based on the findings in the last chapter.

5.3 Contribution to Knowledge

The study has several academic contributions to the literature and more broadly to the corporate social responsibility discuss. Firstly, it developed causal links between book tax difference and returns on assets which can be beneficial to managers in understanding actual effect of tax aggressiveness on investing and financing outcome. It also provides additional evidence from a developing country perspective.

5.4 Recommendations

The study makes the following recommendations for policy, business managers, and shareholders:

- 1. Policy makers, accounting standards developers and industry regulators can utilise the study findings to develop an insight on industry effect of book tax difference for ease of bankruptcy prediction from financing cash flow deficiency.
- 2. It is also recommended that managers utilise potential tax savings for credit defrayment, such as long-term loans interest and also for community development thereby aligning the sustainable development goal of the firm with the financial bottom line.

5.5 Suggestions for Further Studies

The study offers the following suggestions which researchers and policy developers can further explore, as follows: *firstly*, studies should further examine the issue of book tax difference on corporate performance using alternative proxies of effective tax rate and book tax difference and more refined models, such as Dynamic Panel Models to account for endogeneity and simultaneity. *Secondly*, future studies may examine individual elements of the Statement of profits and loss and other comprehensive income in order to fully disintegrate the effect of book tax difference on corporate performance.

REFERENCES

- Adelegan, O. J. (2003). An empirical analysis of the relationship between cash flow and dividend changes in Nigeria. *African Development Review*, 15(1), 35-49.
- Aktaş, R., & Karğın, S. (2012). Predictive ability of earnings and cash flows: Evidence from Turkish firms' cash flow statements that prepared by IAS 7. *Journal of Money, Investment and Banking*, 25(2012), 172-180.
- Al-Najjar, B. (2013). The financial determinants of corporate cash holdings: Evidence from some emerging markets. *International Business Review*, 22(1), 77-88.
- Amah, K. O., Michael, C. E., & Ihendinihu, J. U. (2016). Relationship of cash flow and financial performance of listed Banks in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 4(4), 89-87.
- Amuzu, M. S. (2010). Cash Flow Ratio as Measure of Performance of Listed Companies in Emerging Economies: The Ghana Example (Unpublished Dissertation). St. Clements University, Turks and Caicos Islands.
- Avi-Yonah, R. S. (2006). The three goals of taxation. Tax Law Review, 60(1), 1-28.

- Baiman, S. (1990). Agency research in managerial accounting: A second look. *Accounting, Organization and Society*, 15(4), 341-371.
- Berle, A., & Means, G. (1932). *The Modern Corporation and Private Property*. New York: Macmillan.
- Bingilar, P. F., & Oyadenghan, K. J. (2014). Cash flow and corporate performance: A study of selected food and beverage companies in Nigeria. *Journal of Business Management*, 14(3), 10-24.
- Blumberg, B., Cooper, D. R., & Schindler, P. (2008). *Business Research Methods* (2nd Ed.). London: McGraw-Hill Higher Education.
- Buhr, N. (1998). Environmental performance, legislation and annual report disclosure: The case of acid rain and Falconbridge. *Accounting, Auditing & Accountability Journal*, 11(2), 163-190.
- Center on Budget and Policy Priorities, (2015). Policy basics: Where do our federal tax dollars go? Available online at: http://www.cbpp.org/research/ policy-basics-where-do-our-federal-tax-dollars-go.
- Chytis, E. (2019). The informative value of taxes: The case of temporal differences in tax accounting. *Journal of Accounting and Taxation*, 11(8), 130-138. doi: 10.5897/JAT2019.0350
- Daily, C. M., Dalton, D. R., & Cannella Jr, A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review*, 28(3), 371-382.
- Davis, J.H., Schoorman, F.D., & Donaldson, L. (1997). Toward a Stewardship Theory of Management. *Academy of Management Review*, 22, 20-37.
- Deegan, C., & Rankin, M. (1996). Do Australian companies report environmental news objectively? An analysis of environmental disclosures by firm prosecuted successfully by the environmental protection authority. *Accounting, Auditing & Accountability Journal*, 9(2), 50-67.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.
- Duru, A.N., Okpe, I., & Ifunanya, L. C. (2015). Effect of cashflow statement on company's performance of food and beverages companies in Nigeria. *World Applied Sciences Journal*, 33(12), 1852-1857.
- Edwards, A., Schwab, C., & Shevlin, T. (2013, February). Financial constraints and the incentive for tax planning. In 2013 American Taxation Association midyear meeting: New faculty/doctoral student session (Vol. 2216875).
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Epstein, B. J., & Jermakowicz, E. K. (2007). *Interpretation and Application of International Financial Reporting*. John Wiley & Sons, New Jersey.
- Goldman, N. C. (2016). The Effect of Tax Aggressiveness on Investment Efficiency (Unpublished Dissertation). University of Arizona. Available online at http://hdl.handle.net/10150/612100
- Hanlon, M. (2005). The persistence and pricing of earnings, accruals, and cash flow when firms have large book-tax differences. *The Accounting Review*, 80(1), 831–863.
- Hanlon, M., Krishnan, G. V., & Mills, L. F. (2012). Audit fees and book-tax differences. *The Journal of the American Taxation Association*, 34(1), 55-86.
- Harrington, C., Smith, W., & Trippeer, D. (2012). Deferred tax assets and liabilities: tax benefits, obligations and corporate debt policy. *Journal of Finance and Accountancy*, 11, 1-18.

- Jensen, C., & Meckling, H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, *3*, 305-360.
- Jim-Suleiman, S. L. (2015). Competition and Corporate Tax Avoidance: Empirical Evidence from Nigerian Deposit Money Banks (Unpublished Dissertation). School of Postgraduate Studies, University of Jos, Jos, Nigeria.
- Khuong, N. V, Ha, N. T. T., Minh, M.T.H., & Thu, P. A. (2019). Does corporate tax avoidance explain cash holdings? The case of Vietnam. *Economics and Sociology*, 12(2), 79-93. doi:10.14254/2071-789X.2019/12-2/5
- Kim, J. B., Li, Y., & Zhang, L. (2011). Corporate tax avoidance and stock price crash risk: Firm-level analysis. *Journal of Financial Economics*, 100(3), 639-662.
- Kim, J. H. & Jeong, J. W. (2006). The effect of corporate financial characteristics on tax avoidance. *Korean Journal of Taxation Research*, 23(4), 97-124.
- Kim, W. J., & Jang, G. B. (2018). Relationship betweentax avoidance and key financial indicators in Koreas Construction Waste Disposal Industry. *Academy of Accounting and Financial Studies Journal*, 22(3). Available online at https://www.abacademies.org/articles/relationship-between-tax-avoidance-and-key-financial-indicators-in-koreas-construction-waste-disposal-industry-7265.html
- Kumar, R. (2011). *Research Methodology-A Step by Step Guide for Beginners* (3rd Ed.). Thousand Oaks,CA: Sage Publications.
- Lee, S. C., & Hong, J. H. (2015). A study on the corporate characteristic factors influencing long term tax avoidance in KOSDAQ-listed firms. *Journal of Accounting Information Research*, 33(4), 335-369.
- Lisowsky, P., Robinson, L., & Schmidt, A. (2013). Do publicly disclosed tax reserves tell us about privately disclosed tax shelter activity? *Journal of Accounting Research*, 51(3), 583-629.
- Manzon, G., & Plesko, G. A. (2002). The relation between financial and tax reporting measures of income. *The Law Review*, 55(2), 175-214.
- Martinez, L. P. (2013). Structural impediments to tax reform: The environment as case study. *Florida Tax Review*, 14(2), 45-75.
- Mohammed, A. N. (2017). Effect of Corporate Governance Mechanisms on Tax Avoidance in Deposit Money Banks in Nigeria (Unpublished Doctoral Dissertation). Department of Accounting, Faculty of Administration, Ahmadu Bello University, Zaria, Nigeria.
- Mussalo, V. (2015). The Effect of Earnings Management on Audit Fees: Evidence from the Manufacturing Industry (Unpublished Master's Thesis). Department of Accounting, Aalto University, School of Business.
- Namazi, M. (2012). Role of the agency theory in implementing management's control. *Journal of Accounting and Taxation*, 5(2), 38-47.
- Noga, T. J., & Schnader, A. L. (2013). Book-tax differences as an indicator of financial distress. *Accounting Horizons*, 27(3), 469-489. https://doi.org/10.2308/acch-50481
- Nwaiwu, N. J., & Oluka, N. O. (2017). IFRS: Cashflow accounting and financial performance of quoted companies in Nigeria. *International Journal of Innovative Finance and Economics Research*, 5(4), 116-127.
- Nwanyanwu, L. A. (2015). Cash flow and organizational performance in Nigeria: Hospitality and printmedia industries perspectives. *European Journal of Business, Economics and Accountancy*, 3(3), 66-72.
- Onyali, C. I., & Okafor, T. G. (2018). Effect of corporate governance mechanisms on tax aggressiveness of quoted manufacturing firms on the Nigerian Stock Exchange. *Asian Journal of Economics, Business and Accounting*, 8(1), 1-20.

- Pratt, J. (2005). Financial Accounting in an Economic Context (6th Ed.). Hoboken, NJ: John Wiley & Sons.
- PwC (2013). International Transfer Pricing. Available online at:https://www.pwc.com/gx/en/international-transfer-pricing/assets/itp-2013-final.pdf
- Rego, S. O. (2003). Tax-avoidance activities of U.S. Multinational Corporations. Contemporary Accounting Research, 20(4), 805-833.
- Reuters, (2013). Charities say graft, tax evasion hold back poor countries' development. Available online at http://www.reuters.com/article/2013/04/10/india-tax-haven-graft
- Revsine, L., Collins, D., Johnson, W. B., & Mittelstaedt, H. F. (2005). *Financial Reporting and Analysis*. New York, NY: Pearson/Prentice Hall.
- Richardson, G., & Lanis, R. (2007). Determinants of the variability in corporate effective tax rates and tax reform: Evidence from Australia. *Journal of Accounting and Public Policy*, 26(6), 689-704.
- Riguen, K. R., & Jarboui, A. (2017). Normal, abnormal book-tax differences and accounting conservatism. *Asian Academy of Management Journal of Accounting and Finance*, 13(1), 113-142. https://doi.org/10.21315/aamjaf2017.13.1.5
- Ross, S. A. (1973). The economic theory of agency: The principal's problem. *The American Economic Review*, 63(2), 134-139.
- Ruangviset, J., Jiraporn, P., & Kim, J. C. (2014). How does corporate governance influence corporate social responsibility? *Procedia-Social and Behavioral Sciences*, 143, 1055-1057.
- Rui, J. (2019, June). Effect of Corporate Tax Avoidance on the Investment-cash Flow Sensitivity. In *Journal of Physics: Conference Series* (Vol. 1237, No. 2, p. 022050). IOP Publishing.
- Salawu, R. O., & Adedeji, Z. A. (2017). Corporate governance and tax planning among non-financial quoted companies in Nigeria. *African Research Review*, 11(3), 42-59.
- Salawu, R. O., & Ololade, B. M. (2018). Corporate tax avoidance of listed firms in Nigeria. Journal of Taxation and Economic Development, 17(2), 1-12.
- Salawu, R. O., Ogundipe, L. O., & Yeye, O. E. (2017). Granger causality between corporate tax planning and firm value of non-financial quoted companies in Nigeria. *International Journal of Business and Social Science*, 8(9), 91-103.
- Santa, S. L. L., & Rezende, A. J. (2016). Corporate tax avoidance and firm value: From Brazil. *Revista Contemporânea de Contabilidade*, *13*(30), 114-133.
- Sayari, N., & Mugan, F. N. C. S. (2013). Cash flow statement as an evidence for financial distress. *Universal Journal of Accounting and Finance*, 1(3), 95-103.
- Shleifer, A. & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, 52, 246-253.
- (2006). T. Tang, Book-tax differences: function of accounting-tax empirical misalignment, earnings management and tax management: evidence from China. In American Accounting Association Annual Meeting, Washington DC.
- Tilt, C.A. (1994). The influence of external pressure groups on corporate disclosure: Some empirical evidence. *Accounting Auditing & Accountability Journal*, 7(4), 47-72.
- Tye, W. L., & Abdul Wahab, N. S. (2018). Roles of tax planning in market valuation of corporate social responsibility. *Cogent Business & Management*, 5(1), 1482595.
- Uadiale, O. M., Fagbemi, T. O., & Ogunleye, J. O. (2010). An empirical study of the relationship between culture and personal income tax evasion in Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, 20, 116-126.

Williams, R. (2011). The numbers: How does federal government spend its money? Tax Policy Center. Available online at http://www.taxpolicycenter.org/briefing-book/background/numbers/expenses.cfm.

Appendix I

SN	Company	Sector
1		Industrial
	Berger Paints Nig	Goods
2		Industrial
	Beta Glass Company	Goods
3		Consumer
	Cadbury Nig	Goods
4		Consumer
	Champion Breweries	Goods
5		Industrial
	Chemical & Allied Product	Goods
6		Industrial
	Cutix	Goods
7		Industrial
_	Dangote Cement	Goods
8		Consumer
	Dangote Sugar	Goods
9		Consumer
	Flour Mills Of Nigeria	Goods
10		Industrial
	Greif Nig	Goods
11		Consumer
	Guinness Nig	Goods
12		Consumer
	Honywell Flour Mill	Goods
13		Consumer
	International Breweries	Goods
14		Industrial
	Lafarge Cement Wapco Nig	Goods
15		Consumer
	Menichols Consolidated	Goods
16		Consumer
	Meyer Plc	Goods
17		Consumer
	Nascon Allied	Goods
18		Consumer
	Nestle Nig	Goods
19		Consumer
	Nigeria Breweries	Goods
20		Industrial
	Nigerian Enamelware	Goods
21		Consumer
	Nigerian Northen Flour Mill	Goods
22		Industrial
	Portland Paint Nig	Goods
23		Industrial
	Premier Paints	Goods
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24		Consumer
	Pz Cussons	Goods
25		Consumer
	Unilever Nig	Goods
26		Consumer
	Vitafoam Nig	Goods

Source: Nigerian Stock Exchange Website (2021)

APPENDIX 2

Companies	Fiscal Year	ETR	BTD	ROA	Fsize	Leverage
Berger Paints Nig	2010	17.5007	14.02231	16.9822	6.4159	0.5522
Berger Paints Nig	2011	38.3156	12.49767	8.5164	6.4273	0.5468
Berger Paints Nig	2012	32.5017	9.773993	6.606	6.4634	0.6383
Berger Paints Nig	2013	-29.4162	11.97068	7.1069	6.5486	0.452
Berger Paints Nig	2014	-40.2996	8.500917	4.088	6.5611	0.4798
Berger Paints Nig	2015	-41.5589	18.47399	8.4786	6.5906	0.5057
Berger Paints Nig	2016	-17.5748	10.34668	5.4606	6.613	0.5753
Berger Paints Nig	2017	-27.4498	9.277777	5.7122	6.6346	0.6324
Berger Paints Nig	2018	-29.4543	13.01153	7.067	6.6566	0.6122
Berger Paints Nig	2019	-15.8256	14.30565	8.857	6.7047	0.6485
Beta Glass Company	2010	-19.6441	16.26733	9.105	7.2088	0.6474
Beta Glass Company	2011	22.8528	17.7978	9.8474	7.2558	0.591
Beta Glass Company	2012	28.459	12.93282	5.9162	7.3513	0.8029
Beta Glass Company	2013	-28.1873	13.9816	5.4013	7.434	0.9753
Beta Glass Company	2014	-28.4506	19.65695	8.8762	7.4302	0.688
Beta Glass Company	2015	-36.0752	18.73246	7.3281	7.4341	0.5457
Beta Glass Company	2016	-27.1484	27.16256	11.4494	7.5209	0.5452
Beta Glass Company	2017	-29.7126	22.67894	10.7693	7.5822	0.5196
Beta Glass Company	2018	-29.7068	26.25911	10.9654	7.6635	0.5553
Beta Glass Company	2019	-30.3564	26.77936	10.7146	7.7167	0.507
Cadbury Nig	2010	-40.1725	6.657153	4.1234	7.4522	1.1883
Cadbury Nig	2011	-27.3592	14.77801	10.906	7.5271	1.0288
Cadbury Nig	2012	-37.3133	16.30395	8.6038	7.6038	1.0039
Cadbury Nig	2013	-18.8407	20.58069	13.9515	7.6352	0.7992
Cadbury Nig	2014	3.0922	3.127223	5.2487	7.4597	1.497
Cadbury Nig	2015	-27.2322	5.275153	4.0585	7.4536	1.3131
Cadbury Nig	2016	-47.3409	-1.04961	-1.0439	7.4532	1.5679
Cadbury Nig	2017	-14.3638	1.16391	1.0555	7.4537	1.4205
Cadbury Nig	2018	-32.6902	3.38762	2.99	7.4398	1.1716
Cadbury Nig	2019	-30.4259	3.624497	3.718	7.4594	1.1239
Champion Breweries	2010	0	-45.7983	-44.1613	6.4474	-1.8057
Champion Breweries	2011	-32.5548	-98.8215	-17.1559	6.8425	-4.3254
Champion Breweries	2012	-30.7007	-108.039	-19.6595	6.8325	-2.9823
Champion Breweries	2013	-31.9231	-77.4846	-12.8919	6.9608	-2.9828
Champion Breweries	2014	-29.6	-32.4543	-7.8659	6.9819	0.634
Champion Breweries	2015	-53.5491	7.07519	0.7468	7.0141	0.4504
Champion Breweries	2016	-15.6926	17.47532	5.3245	6.9983	0.2986
Champion Breweries	2017	-14.1934	10.80444	5.13	7.0038	0.2401
Champion Breweries	2018	3.2784	-5.44745	-2.5156	7.0207	0.3215
Champion Breweries	2019	-18.4289	0.27647	1.5345	7.0407	0.3672
Chemical & Allied Product	2010	-22.4895	30.11156	37.2466	6.3748	1.3209
Chemical & Allied Product	2011	-22.6899	28.91744	34.1813	6.4867	1.1042

Chemical & Allied Product	2012	32.8457	30.19166	38.7911	6.4588	1.571
Chemical & Allied Product	2013	-32.1131	32.70292	46.6817	6.4822	1.3933
Chemical & Allied Product	2014	-31.9275	33.302	53.9594	6.4887	1.6096
Chemical & Allied Product	2015	-32.3134	23.18226	51.0239	6.5327	1.2428
Chemical & Allied Product	2016	-30.1923	20.50001	32.6151	6.6916	1.1528
Chemical & Allied Product	2017	31.3048	29.40671	29.891	6.7002	1.2362
Chemical & Allied Product	2018	-21.8832	33.06172	32.1544	6.8001	1.2468
Chemical & Allied Product	2019	-31.5684	28.73628	25.7669	6.83	1.6811
Cutix	2010	-34.9119	12.08462	13.014	6.0257	1.2348
Cutix	2011	-32.7297	7.9994	9.0146	5.971	0.8874
Cutix	2012	-33.3974	1.616987	8.3914	5.9739	0.8459
Cutix	2013	-33.0786	10.68686	14.1007	6.0309	0.7971
Cutix	2014	-21.7949	10.27387	11.8714	6.2417	1.4934
Cutix	2015	-26.1733	8.163673	7.5786	6.2942	1.6473
Cutix	2016	-31.4846	8.65787	10.0729	6.2769	1.1738
Cutix	2017	-30.4328	8.470747	11.0524	6.3673	1.2977
Cutix	2018	-33.4462	12.62563	15.5238	6.4527	1.1829
Cutix	2019	-29.7737	11.11909	16.673	6.4566	0.7738
Dangote Cement	2010	5.2006	49.8825	26.5162	8.6043	0.9008
Dangote Cement	2011	6.7112	47.09499	23.0616	8.7214	0.8131
Dangote Cement	2012	12.0058	45.39462	22.5532	8.8284	0.604
Dangote Cement	2013	5.4711	49.3745	23.8612	8.9259	0.5328
Dangote Cement	2014	-13.6378	47.1544	16.1976	8.9933	0.6637
Dangote Cement	2015	-3.7022	38.26764	16.3215	9.0457	0.7231
Dangote Cement	2016	3.1476	29.4009	12.2143	9.1841	0.9162
Dangote Cement	2017	-29.4699	35.91689	12.2606	9.2216	1.132
Dangote Cement	2018	29.7597	33.27877	23.0353	9.229	0.7175
Dangote Cement	2019	-19.945	28.05501	11.5153	9.2409	0.9393
Dangote Sugar	2010	-30.1276	26.96291	18.1113	7.7944	0.5233
Dangote Sugar	2011	32.2091	9.005193	10.1677	7.8622	0.8438
Dangote Sugar	2012	33.8928	14.81999	13.0145	7.9189	0.7929
Dangote Sugar	2013	-33.318	17.36005	13.0423	7.9199	0.7702
Dangote Sugar	2014	-23.8155	15.12887	12.5384	7.9676	0.805
Dangote Sugar	2015	-30.2946	15.23494	11.24	8.0113	0.7649
Dangote Sugar	2016	-26.6054	11.10089	8.0703	8.2514	1.6965
Dangote Sugar	2017	-25.7753	25.44455	20.3934	8.2902	1.1036
Dangote Sugar	2018	-36.4861	21.43184	12.5496	8.2433	0.7693
Dangote Sugar	2019	-25.0136	17.44544	11.5439	8.2871	0.7913
Flour Mills Of Nigeria	2010	65.8118	5.298973	2.7116	8.1569	1.6944
Flour Mills Of Nigeria	2011	42.5359	6.160663	5.7884	8.2129	2.2655
Flour Mills Of Nigeria	2012	30.4771	-0.55632	3.5973	8.3671	1.828
Flour Mills Of Nigeria	2013	30.7983	2.95161	2.7571	8.4475	2.3405
Flour Mills Of Nigeria	2014	34.7607	2.125637	1.8058	8.4731	2.5573
Flour Mills Of Nigeria	2015	9.5574	2.177167	2.4684	8.5351	3.0645
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Flour Mills Of Nigeria	2016	25.5108	3.30993	4.1756	8.5383	2.6062
Flour Mills Of Nigeria	2017	-15.6251	2.14557	1.831	8.6836	3.7063
Flour Mills Of Nigeria	2017	-17.8442	2.96897	3.3344	8.611	1.7112
Flour Mills Of Nigeria	2019	-59.7921	1.767077	0.9597	8.62	1.7609
Greif Nig	2010	-40.3056	9.018887	6.4633	5.8294	0.9775
Greif Nig	2010	-45.3835	8.137013	6.166	5.7941	0.6963
Greif Nig	2012	-35.1038	6.430763	5.0974	5.8536	0.8276
Greif Nig	2012	-41.6303	5.853337	4.4879	5.834	1.1381
Greif Nig	2013	-25.1357	6.14726	6.5449	5.822	0.9695
Greif Nig	2014	-38.6685	4.42365	3.4405	5.8547	1.1297
Greif Nig	2015	-38.0085	3.547643	3.7517	5.8588	1.1402
Greif Nig	2010	-38.013	2.795997	6.2827	5.8958	1.1766
Greif Nig	2017	7.0791	-43.2107	-55.1969	5.6774	3.8134
	2018	0.2231	-43.2107	-179.917	5.2394	-1.8132
Greif Nig Guinness Nig	2019	-31.2795	17.66591	17.5216	7.8943	1.2924
Guinness Nig	2010	-31.2793	20.10643	17.3210	7.8943	1.2924
	2011	-31.3120	16.61974	13.4088	8.0253	1.7455
Guinness Nig Guinness Nig	2012	-30.2498	13.17668	9.7998	8.0233	1.7433
Guinness Nig	2013				8.1217	1.0293
0		-18.0462	10.01823	7.2346		
Guinness Nig	2015	-27.7922	8.954323	6.3764	8.0872	1.5288
Guinness Nig	2016	-14.1168	2.26237	-1.4715	8.1367	2.2883
Guinness Nig	2017	-27.7362	2.00462	1.3173	8.1645	2.4007
Guinness Nig	2018	-32.44	6.837833	4.3833	8.1854	0.075
Guinness Nig	2019	-22.8038	4.804097	3.4104	8.2063	0.8054
Honywell Flour Mill	2010	-49.5372	6.692683	3.9187	7.4772	1.221
Honywell Flour Mill	2011	-29.1084	9.325157	8.5539	7.4645	0.9257
Honywell Flour Mill	2012	-26.2263	9.371263	6.0134	7.6526	1.6746
Honywell Flour Mill	2013	-25.4569	8.755387	5.1292	7.7438	1.988
Honywell Flour Mill	2014	-20.9058	7.28334	5.2507	7.805	2.0978
Honywell Flour Mill	2015	-21.9232	2.681127	1.6488	7.8321	2.3444
Honywell Flour Mill	2016	5.3849	-5.67125	-3.9763	7.8811	3.6476
Honywell Flour Mill	2017	-21.2964	10.93473	3.8046	8.0537	1.1621
Honywell Flour Mill	2018	-9.1397	6.72703	3.5463	8.0963	1.2137
Honywell Flour Mill	2019	-88.7514	0.640107	0.0497	8.1383	1.4265
International Breweries	2010	0	4.153	2.0091	6.9961	-118.687
International Breweries	2011	-22.5875	1.921	1.0195	7.1599	10.0946
International Breweries	2012	-22.5875	1.921	1.0195	7.1599	10.0946
International Breweries	2013	2.3545	21.51324	10.8804	7.3624	1.4559
International Breweries	2014	-11.4968	21.2259	8.6395	7.3869	1.1624
International Breweries	2015	-15.9361	13.15771	6.4514	7.4796	1.4795
International Breweries	2016	-18.512	15.53787	7.9229	7.5248	1.392
International Breweries	2017	-64.2307	8.452767	2.3005	7.6529	2.2397
International Breweries	2018	-51.9709	-6.53029	-1.2461	8.4918	7.8245
International Breweries	2019	-23.1601	-27.3371	-7.6108	8.5625	47.923

					1	
Lafarge Cement Wapco Nig	2010	42.3304	19.18886	4.12	8.0736	1.7368
Lafarge Cement Wapco Nig	2011	16.5218	16.5333	5.6649	8.1833	1.7188
Lafarge Cement Wapco Nig	2012	30.8155	24.04488	9.682	8.1817	1.2228
Lafarge Cement Wapco Nig	2013	1.9924	28.03056	17.5484	8.207	0.7326
Lafarge Cement Wapco Nig	2014	-15.869	19.80856	11.3315	8.4855	0.7948
Lafarge Cement Wapco Nig	2015	-7.7766	10.82511	5.9597	8.6561	1.5717
Lafarge Cement Wapco Nig	2016	-174.057	-10.6584	3.363	8.7011	1.0184
Lafarge Cement Wapco Nig	2017	0.8201	-11.1111	-5.9892	8.7617	2.6801
Lafarge Cement Wapco Nig	2018	-54.882	-6.55008	-1.6277	8.733	3.0191
Lafarge Cement Wapco Nig	2019	-9.8587	8.037377	3.1213	8.6965	0.4414
Mcnichols Consolidated	2010	5.5528	-5.66053	-3.6364	5.2473	0.3567
Mcnichols Consolidated	2011	-12.0544	-1.57103	2.6805	5.3513	0.6477
Mcnichols Consolidated	2012	-23.2261	2.984897	3.4963	5.4195	0.5167
Mcnichols Consolidated	2013	-12.7711	6.2264	7.2904	5.5066	0.6942
Menichols Consolidated	2014	-10.8506	8.748	10.7166	5.5778	0.7043
Mcnichols Consolidated	2015	-7.5648	6.37982	14.3609	5.6234	0.6131
Mcnichols Consolidated	2016	-21.3179	4.918323	12.1749	5.6768	0.5756
Mcnichols Consolidated	2017	-7.9287	3.983053	7.0891	5.7318	0.6552
Menichols Consolidated	2018	-7.8893	5.323917	4.7524	5.9168	1.4784
Menichols Consolidated	2019	-8.7383	2.598083	2.3706	5.8589	1.0857
Meyer Plc	2010	1.9139	-19.654	-8.7031	6.4339	3.6239
Meyer Plc	2011	4.519	-6.8788	-1.9823	6.436	3.4457
Meyer Plc	2012	-6.5444	-1.53216	-1.0439	6.4119	2.969
Meyer Plc	2013	-8.0506	3.213333	1.7913	6.4196	2.7915
Meyer Plc	2014	-2.1064	-2.92609	-1.4852	6.3914	2.7957
Meyer Plc	2015	-12.5688	3.595717	2.2703	6.367	2.3976
Meyer Plc	2016	1.5586	-19.1098	-9.9385	6.3435	3.7319
Meyer Plc	2017	1.1461	-23.5994	-13.9664	6.2828	4.5546
Meyer Plc	2018	75.0869	18.43379	17.1434	6.2709	1.8134
Meyer Plc	2019	89.4928	-0.65501	-0.3629	6.5737	4.7681
Nascon Allied	2010	-19.9232	21.1989	21.9485	6.8756	0.5153
Nascon Allied	2011	29.7873	29.83675	21.934	7.002	0.7737
Nascon Allied	2012	31.4649	29.23678	25.8786	7.029	0.6251
Nascon Allied	2013	-33.1533	34.69152	23.6156	7.0581	0.6585
Nascon Allied	2014	-34.6367	24.42626	14.8698	7.0988	0.9907
Nascon Allied	2015	-30.2203	18.0228	12.9222	7.212	1.2989
Nascon Allied	2016	-31.3153	18.43396	9.8165	7.391	2.0577
Nascon Allied	2017	-32.4407	29.01167	17.7391	7.4789	1.6114
Nascon Allied	2018	-31.463	18.36121	14.6024	7.481	1.5451
Nascon Allied	2019	-33.3626	9.156267	4.7719	7.5874	2.487
Nestle Nig	2010	-30.9264	21.05397	20.8827	7.7807	3.0596
Nestle Nig	2011	9.1849	18.25148	21.2232	7.8906	2.3489
Nestle Nig	2012	15.6202	21.24698	23.7596	7.9492	1.6024
Nestle Nig	2013	-14.5476	19.22347	20.57	8.0343	1.6656
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Nestle Nig	2014	-9.0417	16.72236	20.9647	8.0256	1.9511
Nestle Nig	2015	-19.0492	19.15571	19.9109	8.0763	2.1367
Nestle Nig	2016	-63.2225	11.59885	4.6731	8.2294	4.4921
Nestle Nig	2017	-27.9849	17.74583	22.9719	8.1667	2.2712
Nestle Nig	2018	-28.0211	22.11817	26.4935	8.2104	2.2324
Nestle Nig	2019	-35.7696	23.96021	23.6242	8.2864	3.2446
Nigeria Breweries	2010	32.4154	23.04216	26.5165	8.0584	1.2799
Nigeria Breweries	2011	32.5316	25.95146	16.1436	8.3724	2.0304
Nigeria Breweries	2012	31.6078	20.963	14.9991	8.4042	1.7142
Nigeria Breweries	2013	30.7839	22.6651	17.044	8.4027	1.2496
Nigeria Breweries	2014	-30.8184	21.96974	12.1755	8.5431	1.0308
Nigeria Breweries	2015	-30.1914	17.68001	10.6834	8.5517	1.0672
Nigeria Breweries	2016	-28.3748	11.93046	7.74	8.5648	1.2129
Nigeria Breweries	2017	-29.1261	12.81195	8.6463	8.5823	1.1438
Nigeria Breweries	2018	-33.9339	6.57867	5.0064	8.5891	1.3273
Nigeria Breweries	2019	-31.0291	6.2453	4.2076	8.5829	1.2818
Nigerian Enamelware	2010	-27.2716	5.784863	5.2511	6.1543	5.083
Nigerian Enamelware	2011	-28.7607	5.061077	8.6457	6.0083	2.4288
Nigerian Enamelware	2012	-36.2968	4.929363	4.0579	6.3359	5.0432
Nigerian Enamelware	2013	-37.142	10.03627	3.3571	6.3431	0.8611
Nigerian Enamelware	2014	-22.8403	4.541057	2.7936	6.4891	1.4839
Nigerian Enamelware	2015	39.119	4.728223	1.4805	6.7009	2.8469
Nigerian Enamelware	2016	-24.5732	6.25101	2.9402	6.657	2.2183
Nigerian Enamelware	2017	-33.5908	2.758213	0.7733	6.7654	3.0828
Nigerian Enamelware	2018	-60.705	-0.53981	-0.0728	6.6605	2.2141
Nigerian Enamelware	2019	1.1275	-32.3348	-5.5147	6.6416	2.7065
Nigerian Northen Flour Mill	2010	-35.1167	6.709967	5.813	6.4095	1.1113
Nigerian Northen Flour Mill	2011	-29.85	5.05647	11.0206	6.6164	1.6624
Nigerian Northen Flour Mill	2012	-89.3452	0.876907	0.1502	6.5261	1.4664
Nigerian Northen Flour Mill	2013	-31.8521	2.4894	6.2136	6.5591	1.2566
Nigerian Northen Flour Mill	2014	-31.672	3.799347	7.1494	6.5141	0.8415
Nigerian Northen Flour Mill	2015	-7.3676	-2.46944	-4.8522	6.6141	202.9019
Nigerian Northen Flour Mill	2016	-15.3734	-23.7134	-5.0129	6.5949	0.1651
Nigerian Northen Flour Mill	2017	-4108.4	0.05391	-0.3743	6.6372	2.4991
Nigerian Northen Flour Mill	2018	-46.1175	-3.82488	-1.0306	6.7721	4.0395
Nigerian Northen Flour Mill	2019	-39.5265	-1.29068	-0.6348	6.6984	3.339
Portland Paint Nig	2010	46.6768	7.867097	8.4715	6.1914	1.6307
Portland Paint Nig	2011	-42.9401	9.666537	6.8627	6.3591	1.2679
Portland Paint Nig	2012	-14.6609	-7.30128	-9.5708	6.3777	2.0725
Portland Paint Nig	2013	-13.0406	0.307333	4.927	6.3387	1.4674
Portland Paint Nig	2014	-23.497	6.384963	6.5264	6.3575	1.4633
Portland Paint Nig	2015	-9.8247	-12.9662	-12.267	6.2786	1.7461
Portland Paint Nig	2016	14.5828	0.316033	0.49	6.2441	1.5054
Portland Paint Nig	2017	-53.0387	5.36143	2.86	6.3083	0.4601
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Portland Paint Nig	2018	-32.79	10.5193	9.1804	6.3525	0.4649
Portland Paint Nig	2019	-33.2568	6.231003	3.7648	6.3531	0.4252
Premier Paints	2010	-52.4652	-34.3944	-70.3448	5.0927	-9.4087
Premier Paints	2011	-5.3324	-35.3461	-22.3254	5.4389	-3123.06
Premier Paints	2012	-29.7734	-16.5687	-10.3606	5.4649	23.5231
Premier Paints	2013	-40.7631	4.4932	-8.3908	5.4011	-28.2712
Premier Paints	2014	-30.704	3.01736	2.7998	5.4609	-253.828
Premier Paints	2015	-41.9807	-21.7364	-8.6428	5.5331	12.1909
Premier Paints	2016	-4.2763	-14.4332	-12.0939	5.5032	-9.6403
Premier Paints	2017	-29.4417	-39.7677	-18.9743	5.4534	-3.613
Premier Paints	2018	-4.265	-43.8768	-26.3705	5.4186	-3.0132
Premier Paints	2019	-44.2892	-22.98	-6.9372	5.3775	-2.6195
Pz Cussons	2010	-29.7657	12.24126	9.4706	7.7706	0.5234
Pz Cussons	2011	-29.0109	27.2802	8.2654	7.8384	0.6732
Pz Cussons	2012	41.0513	4.048997	3.9419	7.8089	0.5262
Pz Cussons	2013	30.4444	10.33399	7.3602	7.8591	0.5862
Pz Cussons	2014	26.8668	8.490163	7.1623	7.851	0.6373
Pz Cussons	2015	30.2896	6.918587	6.7828	7.8286	0.6263
Pz Cussons	2016	-32.3521	4.208153	2.8613	7.8717	0.7149
Pz Cussons	2017	-23.3742	4.363133	4.0922	7.9547	0.9958
Pz Cussons	2018	-16.7014	2.136513	2.1747	7.9475	0.9645
Pz Cussons	2019	-40.4951	2.668197	1.446	7.9027	0.7472
Unilever Nig	2010	-30.7925	13.0066	16.1191	7.4138	2.1111
Unilever Nig	2011	-31.2156	14.16292	17.1015	7.5085	1.693
Unilever Nig	2012	-31.6196	13.58626	15.3369	7.5623	1.8676
Unilever Nig	2013	-30.45	10.80053	10.9862	7.641	3.539
Unilever Nig	2014	-16.0409	7.5064	5.2745	7.6603	5.1154
Unilever Nig	2015	-32.6751	2.939883	2.3765	7.7005	5.269
Unilever Nig	2016	-25.1931	5.79646	4.2376	7.8603	5.2012
Unilever Nig	2017	-33.5242	12.01066	6.1528	8.0831	0.5951
Unilever Nig	2018	-27.6484	12.13546	6.9265	8.1201	0.5925
Unilever Nig	2019	-26.3332	-15.4457	-7.1565	8.0157	0.5584
Vitafoam Nig	2010	-37.7125	6.167907	8.6407	6.7746	1.4109
Vitafoam Nig	2011	36.9996	4.906627	5.5834	6.9681	2.3112
Vitafoam Nig	2012	38.2582	4.884923	4.8171	7.018	2.3802
Vitafoam Nig	2013	-34.8487	3.228647	4.1192	6.9983	2.2029
Vitafoam Nig	2014	-38.6246	3.864163	3.6357	7.0785	2.9553
Vitafoam Nig	2015	-53.3728	2.95914	1.7182	7.1612	2.1274
Vitafoam Nig	2016	-152.342	0.802153	-0.24	7.1253	2.8038
Vitafoam Nig	2017	-804.186	-0.09274	-0.9522	7.1275	2.9752
Vitafoam Nig	2018	-24.1769	31.77727	3.7536	7.2051	3.1301
Vitafoam Nig	2019	-29.496	15.47483	17.8323	7.1406	1.3153

Source: www.nxg.com