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# Organizational Culture Re-Engineering and Service Innovativeness the Influence of Effective Corporate Tax Rate and Corporate Board Characteristics on Corporate Performance of Listed Consumer Goods Companies in Nigeria

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**Abstract:** *The study examined the influence of effective corporate tax rate and corporate board characteristics on corporate performance of listed consumer goods companies in Nigeria from 2011 to 2021. Archived secondary data explored and collated via purposive sampling were tested for robustness, skewness and kurtosis and found fit for purpose. The OLS regression results reveal the cumulative  $R^2$  (0.11) which is the multiple coefficient of determination that gives the proportion or percentage of the total variation in the dependent variable (corporate performance) explained by the corporate effective tax rate and board characteristics. Therefore, the Federal Inland Revenue Service together with Financial Reporting Council of Nigeria's committee on corporate governance is advised to set a more inclusive, effective, thoughtful and more flexible tax laws and code of corporate governance in other to improve the corporate performance of consumer good companies in the short-run and the Nigerian economy in the long run.*

**Keywords:** *Effective Corporate Tax, Corporate Board Characteristics and Corporate Performance*

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## 1.1 INTRODUCTION

In every country of the world, whether developing or developed, government undertakes a lot of activities for the common good, and government extracts in various proportions from the wealth of the citizens for this purpose. It is in this sense that taxation connotes a sense of rights and responsibility, rights owed to individuals and duties owed by the individuals to the society. As a result of the process of taxation, some taxpayers find themselves with less money to spend and the government finds itself with more money to execute common projects for the common good. This transfer of wealth right from citizens to the government gives rise to obligation on the government to use this right in a way that is most beneficial to the citizens as a whole (Soyode & Kajola, 2006). Tax assessment is an arrangement of fund-raising for bankrolling some government disbursements on consumption through commitments from citizens or corporate bodies; also, it is suggested that, tax assessment is an arrangement of enforcing certain equal sum of cash on people, organizations and workplaces by a legitimate regime to make resources accessible to empower the government to play out her obligations. The fact that some corporations pay less tax than the others give rise to the furor about the concept of Effective Corporate Tax Rate (ECTR).

ECTRs are regularly utilized by firm managers as well as corporate strategists as a device to make extrapolations about corporate levy assessment frameworks since they give an advantageous outline measurement of the aggregate impact of different duty motivating force and corporate ECTRs modifications (Richardson & Lanis, 2007, p.3; Gupta & Newberry, 1997, p.4). Empirical explorations from the US has shown that there are ECTRs deviations athwart corporations, these variations in ECTR depicts that the company income tax framework was unjust, hence, it was utilized as a significant legitimization for restructuring corporate taxation. Notwithstanding, there is a paucity of exploration on ECTRs as well as it determinants, particularly in nation states outside the US (Richardson & Lanis, 2007, p.3). According to Albertazzi and Gembucorta (2006), tax obligation of consumer goods companies may not be properly determined by applying a blanket rate because of their operational and highly regulated nature which influences their capital structure. As such there have been agitations for determining tax obligations of consumer goods companies using the concept of Effective Corporate Tax Rate (Neghina, 2014). The prevailing economic downturn that affects so many corporations of recent make explorations on ECTR, corporate governance and corporate performance a timely priority for consequential scholars.

The last two decades have witnessed several economic downturns and a large number of corporate scandals and corporate failures in financial and service institutions across the world. Corporate governance was a central issue to these corporate failure scandals as it portrays an inefficient corporate governance mechanism, and hence, taken in to consideration for further investigation by scholars as well as investors (Nodeh, Anuar, Ramakrishnan, & Raftnia, 2016). Entrusting unlimited authority to executives also provide desirable ground for abuse of trust in tune with the maxim, absolute power corrupts absolutely; all these conditions among others are some of the factors that contribute to scandals in big companies around the world. To mitigate such situations, efficient corporate governance mechanisms with board characteristics as it major component should be put in place by stakeholders through regular monitoring and auditing of the executive management for their stewardship intermittently; this process of holding corporate managers to account for their stewardship by stakeholders in other to checkmate corporate excesses is known as corporate governance.

Jensen and Meckling (1976) defined such problem (Corporate governance and Performance) as a principal-agent problem which could affect firm performance and value, where the principal is the shareholder and the agent is the manager. Taking these conflicts into consideration, rules and guidelines are needed to make sure that firms are well governed and directed to achieve success and stability, as without such guidelines and regulations these conflicts will affect firm performance. Understanding different aspects of performance measurement and choosing relevant measures are important for pursuing research objectives. Performance measurements offer insights into appropriate measures for answering research questions. However, it is not always agreed as to what performance measures should be employed and used (Haniffa & Hudaib, 2006). The outcomes obtained in the collected works are neither conclusive nor definitive and, accordingly, the contribution of new evidence will improve the state of knowledge vis-à-vis the questions raised in this exploration; in essence, to know whether the composition of the corporate governance structure gives priority to the functions of supervision and, furthermore, determining if that composition (corporate governance structure) affects the performance of the firm.

It is against these background and considering the huge amount of resources in form of agency costs that shareholders commit to good corporate governance structure for the sake of sustainability and posterity vis-à-vis performance that this study sought to examine the influence of effective corporate tax rate, board characteristics (an element of corporate governance) on the financial performance of listed consumer goods companies in Nigeria. Developing countries are often faced with a myriad of problems, such as underdeveloped and illiquid stock markets, economic uncertainties, weak legal controls and investor protection, frequent government intervention, weak financial markets, ineffective legal system, weak corporate governance, predominance of concentrated shareholding, low information disclosure level and desire to maintain control over firms by the majority shareholder in connivance with firm managers; however, in Nigeria, it is not the lack of corporate governance structures that is the issue, but their appropriateness, as well as the effectiveness of monitoring the compliance mechanisms (Garko, 2014). These structural characteristics, demand effective corporate governance in these countries (Gonenc & Aybar, 2006). It is suggested by Okike (2007), that corruption fueled by unreliable audit firm is a major obstacle to the enforcement of standards in Nigeria. Nigerian stakeholders see that some auditors are unreliable because they connive with management to defraud their companies (Okike, 2007). The recent events that follows the aftermath of the 2009 world financial crisis involving the much publicized corporate governance failure in Nigeria's banking sector (that led to collapse, merger, acquisition and eventual recapitalization order of a minimum of ₦25 billion by the CBN) reveal common trends in the affected institutions; this makes investors and other stakeholders to lose faith in most organizations, resulting in a negative effect on total assets, turnover and the profitability potentials of organizations (Garko, 2014). The reasons being the pervading culture of corruption and lack of institutional capacity to implement a credible code of corporate governance, that has also earned Nigeria a bad reputation and made private and institutional investors (local and foreign) hesitant to invest in the Nigerian economy. These postulations made provides the need for more investigations into the corporate governance culture in Nigeria's consumer goods companies and how it impacts performance of the firms. Hence, using different variables, methods, scope, and domain, among others; the need to reinvestigate effective corporate taxation as well as corporate board characteristics elements and how it affects performance in Nigeria (a developing country) are some of the problems identified in line with the philosophy of positivism and critical realism. It is against these background and considering the huge economic importance of ECTR and corporate board characteristics on the performance of all the firms in various domains in the economy and the raising insecurity bedeviling Nigeria as a result of variants of socio-economic problems that this study examines the influence of corporate effective tax rate, and board characteristics on the performance of listed consumer goods companies in Nigeria. The main objective of this study is to examine the influence of corporate effective tax rate, and board characteristics on the corporate performance of listed consumer goods companies in Nigeria.

## **2.0 REVIEW OF RELATED LITERATURE**

By and large, empirical literature on the Effective Corporate Tax Rate, Corporate Board Characteristics and Corporate Performance are focused on developed countries and developed capital markets such as the works of Lima, Dob, and Vu, (2020); Rajkovic, (2020); Lu and Zhu, (2020); Li, Li, and Xie, (2020); Nodeh, *et al.*, (2016); and Farhat (2014). The findings of these studies may not be applicable to African countries including Nigeria which have different regulatory and cultural environments. By contrast, a limited number of research studies have

examined CG practices of companies in developing economies such as Amedu, (2016); Garko, (2014) among others. The findings of these studies are mixed. Some scholars like, Gul and Leung (2004) and Wallace and Naser (1995) argue that socio-economic and political environments between countries, organizational structures and construction of corporate disclosure indices may also lead to different results between effective corporate tax, corporate board characteristics and corporate performance. As a result, an investigation, in other settings of ECTR, different corporate governance element that correlate with the extent of performance disclosure seems justified. A further motivation for this study was to examine whether the variables that prior researchers have found to be significant in explaining performance of companies in developed countries also apply in a developing country like Nigeria.

Although, in Nigeria, Amedu (2016) examines the impact of CEO Power on Company Performance in Nigerian quoted firm for the year 2016, with corporate governance element utilized as proxies for CEO power and Tobin's Q and ROA as proxies for performance, in a cross-sectional study that used hierarchical regression analysis and survey research strategy; this study differs from Amedu (2016) in terms of the variables examined, scope to be covered, domain, and methodology. Again, this study sought to cover the period 2011 to 2020 as against the period 2016 covered by the study of Amedu (2016). Moreover, the findings in Amedu's study is generalized on Nigerian quoted firms, hence making it difficult to ascertain the effect of corporate governance element (CEO power) on performance due to industry-specific bias. This study in addition to the explanatory variables used by Nigerian and other developed economies corporate governance studies also uses effective corporate tax rate and board characteristics as explanatory variables which are not covered by most of the Nigerian corporate governance studies.

Therefore, this study distinguishes itself from prior studies in many aspects, among which are: First the study contributes to three streams of literature, the performance literature, effective corporate tax rate and corporate governance literature, by providing up to date empirical evidence on the association between effective corporate tax rate, board characteristics and corporate performance in emerging markets - Nigeria where corporate governance studies are relatively limited compared to developed countries. Second, the study recognizes the fact that, corporate governance and firm performance are not immune to cyclical changes of boom, doom and gloom in the economy, hence, an expose of evidence before and after the COVID-19 pandemic fueled recession are going to be empirically discussed and tested in the study as well.

### **3.0 METHODOLOGY**

Exploration design was explained by Saunders *et al.*, (2016, p.55) as a "blueprint, idea, structure or strategy that guide the research process which may include the bases upon which a researcher propose to gather data, how data will be collected and analyzed". It also refers to the general plan and conditions for collection and analysis of data, relevant to the research purpose. A combination of quantitative, descriptive and exploratory research design was utilized in the study. The choice of this qualitative and descriptive design was due to the fact that numerical data are collected and described in a quest to answer some of the research questions. Epistemologically, an archival research strategy (ex facto/non-survey) and deductive approach was adopted for this study. The choice was borne out of the fact that the study utilizes archived secondary data. Likewise, this study is a longitudinal time-horizon single-country study, by and large, facts for this study is collated from the financial records of the consumer goods companies listed on Nigerian Exchange Group for epoch of eleven years (2011 - 2021).

The working population (sample) extracted from the population of consumer goods companies listed on the Nigerian Exchange Group were filtered based on some criteria's (a judgmental/purposive sampling technique). The under listed criteria as adapted from the works of Rodriguez *et al.*, (2020); Greeff, (2019); Rodriguez *et al.*, (2019); Delgado *et al.*, (2018); Kraft, (2014); Adhikari *et al.*, (2006); Derashid and Zhang, (2003); Gupta and Newberry, (1997); and Zimmerman (1983), are as follows:

- i. Companies that are not listed within these period are excluded.
- ii. Companies without financial data required for exploration are excluded.
- iii. Companies that record an operational-loss and or adverse cash-flows or tax-refund are declared and simulated where possible.
- iv. Companies with an ECTR that exceeds 1 are excluded.
- v. Companies with so many omitted information as well as those with no reported activity from 2011-2021 are excluded.

The earliest and last filter condition were to safeguard the comprehensive reflection of the disclosure behavior of consumer good companies in the whole epoch captured by the study as well as to satisfy the minimum requirements of a non- survey study. The application of the above criteria results lead to the emergence of the working population utilized for this study.

Multiple regressions analysis and all it associated robustness tests was utilized to examine the affiliation amongst the explained-variable (corporate performance) and explanatory variables (ECTR and board characteristics). Panel data analysis is adapted for data analysis due to longitudinal nature of the data. The multiple regressions are deployed to test the hypotheses of the study due to Prior studies of Corporate performance, Board Characteristics and ECTR such as Rodriguez *et al.*, (2020), Stamatopoulos *et al.*, (2019), (2007), Derashid and Zhang (2003), Omer and Molloy (1991), and Zimmerman (1983).

#### Model Specification

$$COPER = \beta_0 + \beta_1 it ECTR + \beta_2 it BSZ + \beta_3 it BCOM + \varepsilon \dots\dots\dots (1)$$

Where;

$\beta_0, \dots, \beta_k$  is the regression model coefficients of the independent variables

$x_0, \dots, x_k$  is the parameters of the explanatory variables

$\varepsilon$  is the random error term

$it$  at a given period or point in time

Where,;

ECTR=GAAPECTR= Income statement variant of

Effective Corporate Tax Rate

BSZ= Board Size

BCOM= Board Composition

COPER= Corporate performance to be proxied by ROA= Return On Assets

#### 4.0 RESULTS AND DISCUSSION

The normal p-plot of the regression standardized residual (see Appendix B) indicates a good fit and does not suggest the presence of outliers among the regression standardized residuals. In other words, the points on the plot do not appear to deviate significantly from the line of best fit indicating that the normality assumption is valid and fulfilled. The VIF in excess of 10 should be taken as an indication of harmful Multicollinearity (Neter, Wasserman, & Kutner, 1989 and Gujarati, 2003). Therefore, Multi-collinearity test carried out to check whether there is a

sequential correlation between independent variables which will mislead the result of the study shows that the maximum VIF is 1.70, average is 1.46 and the minimum VIF is 1.21 and this is less than 10 which indicate absence of Multi-collinearity (See Appendix B). Skewness and Kurtosis test carried out on all the variables indicates that, none of the variables were highly skewed with a value of 0.22, 0.13 and 0.06 respectively (Appendix B). The results of the tests therefore affirm that the dependent variable data of the research did not differ significantly from a normal distribution, as evidenced by the normal Skewness and Kurtosis test. Hence, there is no need to normalize the variable data found to be highly skewed using Winsorization by limiting extreme values in the statistical data to reduce the effect of possibly spurious outliers.

The result of Breusch-pagan/Cook-Weisberg test for heteroscedasticity reveals that errors have constant variance (it is homoscedastic and not heteroskedastic), which indicates that the Ordinary Least Square (OLS) estimators will be the Best Linear Unbiased Estimators (BLUE), and also the P-values will be reliable. This is evidenced by the insignificant probability (p-value) of the chi square of 0.7967 (See Appendix B). This signifies presence of homoscedasticity and absence of heteroscedasticity in the model (Garko, 2014). GLS is no longer an unbiased estimator when homoscedasticity is present (Gujarati, 2003). From the results of the robustness tests performed to determine the accuracy and reliability of research data used in testing the study hypotheses, it shows that the data is free of regression errors capable of invalidating the research's regression assumptions. In other words, the data is suitable and the regression estimates obtained are reliable.

The OLS regression results reveal the cumulative  $R^2$  (0.11) which is the multiple coefficient of determination that gives the proportion or percentage of the total variation in the dependent variable (corporate performance) explained by the corporate effective tax rate and board characteristics (Garko, 2014). Hence, it signifies that 11% of the total variation in corporate performance of listed consumer good companies on the Nigerian Stock Exchange are caused by effective tax rate, board size, and board composition, while the remaining 89% of the total variation in the corporate performance (proxied by return on assets) are caused by factors not explained by the model. This indicates that the model is fit and the variable are properly selected, combined and used. This can be confirmed by the p-value statistics of 0.04 at 5% level of significance, confirming the rejection of the null hypotheses and acceptance of the alternate hypotheses, that, corporate effective tax rate, board size and board composition have significant impact on the corporate performance of listed consumer goods companies in Nigeria.

## **5.0 CONCLUSION AND RECOMMENDATION**

Corporate governance as set and dictated by the Nigerian Code of Corporate Governance under the auspices of the Financial Reporting Council of Nigeria as amended in 2018 by the Federal Executive Council of Nigeria determines to some extent the position of the returns on assets of the listed consumer goods companies in Nigeria. Thus, the fluctuations of the NCCG practice and Effective Corporate Tax rate in Nigerian consumer goods companies does result in high or low returns accruing to the companies in Nigeria. Therefore, the Federal Inland Revenue Service together with Financial Reporting Council of Nigeria's committee on corporate governance is advised to set a more inclusive, effective, thoughtful and more flexible tax laws and code of corporate governance in other to improve the corporate performance of consumer good companies in the short-run and the Nigerian economy in the long run.

## References

- Aczel, A. D. (1993). *Complete Business Statistics*. Homewood, Illinois: Irwin.
- Adhikari, A., Derashid, C., & Zhang, H. (2006). Public policy, political connections, and effective tax rates: Longitudinal evidence from Malaysia. *Journal of Accounting and Public Policy*, 25, 574-595. Retrieved from [www.elsevier.com/locate/jaccpubpol](http://www.elsevier.com/locate/jaccpubpol)
- Albertazzi, U., & Gembucorta, L. (2006). Bank profitability and business cycle. *Journal of Financial Stability*, 5(4), 393-409.
- Alonso, J. A., & Garcimartm, C. (2011). Criterios y factores de Calidad institucional. *Un estudio empirico Review and Economy*, 5-32.
- Andrea, B., & Giovanna, P. (2015). Bank Leverage and Profitability: Evidence from a Sample of International Banks. *Review of Financial Economics*, 27, 46-57  
doi:<http://dx.doi.org/10.1016/j.rfe.2015.08.002>
- Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of Accounting and Economics*, 39(1), 83-128.  
doi:[doi:http://dx.doi.org/10.1016/j.jacceco.2004.04.001](http://dx.doi.org/10.1016/j.jacceco.2004.04.001)
- Bassey, O. A. (2014). An empirical analysis of tax leakages and economic growth in Nigeria. *European Journal of Economics, Finance and Administrative Science*, 84, 1450-2275.
- Bremus, F., Schmidt, K., & Tonzer, T. L. (2020). Interactions between bank levies and corporate taxes: How is bank leverage affected? *Journal of Banking and Finance*, 105874, 1-18. Retrieved from [www.elsevier.com/locate/jbf](http://www.elsevier.com/locate/jbf)
- Buracom, P. (2014). ASEAN Economic Performance, Institutional Effectiveness, and Foreign Direct Investment. *Asian Affairs: An American Review*, 41(3), 108-126.  
doi:[10.1080/00927678.2014.936801](https://doi.org/10.1080/00927678.2014.936801)
- C I A. (2020, June 5). *Nigeria: The World Fact Book*. Retrieved from Central Intelligence Agency: <https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html>
- CBN. (2016). Central Bank of Nigeria Statistical Bulletin. *Central Bank of Nigeria*.
- Chang, H.-J., & Andreoni, A. (2020). Industrial Policy in the 21st Century. *Development and Change*, 51(2), 324-351. doi:[10.1111/dech.12570](https://doi.org/10.1111/dech.12570)
- Chen, A.-S., & Anh, P. T. (2020). The firm's asset volatility, effective tax rate and leverage effect: Evidence from Taiwan. *Investment Analysts Journal*, 1-19. Retrieved from <https://www.tandfonline.com/action/journalInformation?journalCode=riaj20>
- Chena, X., Lub, M., & Shana, Y. (2020). Changes in corporate effective tax rates during three decades in Japan. *Pacific-Basin Finance Journal*, 1-11. Retrieved from [www.elsevier.com/locate/pacfin](http://www.elsevier.com/locate/pacfin)
- Crabbe, K. (2010). *The Impact of the Auditor and Tax Advice on the Effective Tax Rate*. Retrieved from University of Leuven, Department of Accountancy, Finance and Insurance: [https://lirias.kuleuven.be/bitstream/123456789/289353/1/AFI\\_1050.pdf](https://lirias.kuleuven.be/bitstream/123456789/289353/1/AFI_1050.pdf)
- Davidson, S., & Heaney, R. (2012). Effective tax rates and the political cost hypothesis: a reevaluation of Australian evidence. *AUSTRALIAN TAX FORUM*, 27, 79-105.

- Delgado , F. J., Rodriguez, E. F., & Arias, A. M. (2018). Corporation effective tax rates and company size: evidence from Germany. *Economic Research-Ekonomska Istrazivanja*, 31(1), 2081-2099. doi:10.1080/1331677X.2018.1543056
- Derashid, C., & Zhang, H. (2003). Effective tax rates and the “industrial policy” hypothesis: evidence from Malaysia. *Journal of International Accounting, Auditing & Taxation*, 12, 45-62. doi:10.1016/S1061-9518(03)00003 -X
- DiMaggio, P. J., & Powell, W. W. (1991). *The new institutionalism in organizational analysis* (Vol. 17). Illinois, USA: University of Chicago Press Chicago.
- Drake, K. D., Hamilton, R., & Lusch , S. J. (2020). Are declining effective tax rates indicative of tax avoidance? Insight from effective tax rate reconciliations. *Journal of Accounting and Economics*, 1-24. doi:https://doi.org/10.1016/j.jacceco.2020.101317
- F I R S. (2013, March 3). Federal Inland Revenue Service. Abuja, Nigeria. Retrieved from <http://www.taxationnews.com/nigeria/FIRS/firs-federal-inlandrevenue>
- Felipe, J. (2015). *Development and Modern Industrial Policy in Practice*. (E. Elgar, Ed.) MA: Cheltenham and Northampton .
- Ferreira, J. M., Fernandes, C., & Ratten, V. (2019). The effects of technology transfers and institutional factors on economic growth: evidence from Europe and Oceania. *The Journal of Technology Transfer*, 1-24. doi:https://doi.org/10.1007/s10961-019-09730-3
- Fonseca-Diaz, A. R., Fernandez-Rodriguez, E., & Martinez-Arias, A. (2019). Geographic and institutional determinants of international tax burden for corporate income tax. *Journal of Global Competitiveness and Governability*, 8, 16-32. doi:https://doi.org/10.3232/GCG.2014.V8.N3.01.
- Garcia, J. L. (2017). *The Influence of Corporate Social Responsibility on Lobbying Effectiveness: Evidence from Effective Tax Rates*. Blacksburg, Virginia: Published PROQUEST Doctoral Dissertation, Virginia Polytechnic Institute and State University.
- George, G., Haas, M. R., & Pentland, S. (2014). Big data and management. *Academy of Management Journal*, 57(2), 321-360.
- Greeff, C. (2019). Corporate effective tax rates: An exploratory study of South African listed firms. *South African Journal of Accounting Research*, 1-16. Retrieved from <https://doi.org/10.1080/10291954.2019.1638589>
- Gujarati, D. N. (2003). *Basic Econometrics*. London: McGraw-Hill.
- Gupta, S., & Newberry, K. (1997). Determinants of the Variability in Corporate Effective Tax Rates:Evidence from Longitudinal Data. *Journal of Accounting and Public Policy*, 16, 134.
- Hakim, C. (2000). *Research Design: Successful Designs for Social and Economic Research* (2nd ed.). London: Routledge.