



MODERATING ROLE OF PROFITABILITY ON THE IMPACT OF OWNERSHIP STRUCTURE ON TAX AVOIDANCE OF LISTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

Tax avoidance is a scheme used by taxpayers to reduce tax liability in order to increase distributable profit for the owners to the detriment of the government. What role profitability plays in moderating how shareholders influence tax avoidance among listed manufacturing firms in Nigeria is the main focus in this study. The study targeted all 56 manufacturing firms listed on the Nigerian Exchange Group as of December 31, 2023, but after excluding firms with incomplete data, loss year observations, and those delisted during the study period, a final sample of 37 firms with 342 firm-year observations was selected. The quasi-experimental research design was adopted and secondary quantitative data from 2013 to 2023 on tax avoidance, ownership structure, return on assets and firm size were extracted and analyze using panel regression in STATA to test the study's hypotheses. The study found that the impact of both institutional and managerial ownership on tax avoidance is positive and significant while foreign ownership had significant and negative impact on tax avoidance of listed manufacturing firms in Nigeria. The study provide evidence that return on assets had a significant and positive impact on tax avoidance and its moderating role on institutional, managerial and foreign ownerships was significant and positive on tax avoidance among the sampled listed manufacturing firms in Nigeria. Therefore, the study concluded that profitability moderates the impact of ownership structure on tax avoidance and recommends among others that the management of listed manufacturing firms in Nigeria should ensure the protection of the firm's image and reputation while engaging in tax avoidance practices in view of the growing concerns on the link between such practice and business ethics.

Keywords: firm size, ownership structure, profitability, tax avoidance, listed manufacturing firms

1. Introduction

Tax revenues from companies' income are compulsory fiscal measures adopted by the state to raise funds from companies for public good. In terms of tax to GDP, while developed economies record as much as 30% tax to GDP, with the manufacturing sector playing a crucial role resulting in increased public spending's, most developing economies record less than 15% tax to GDP, thereby forcing them to borrow funds excessively to keep their economy from deteriorating (Ajeigbeetal., 2023).

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While tax is a major source of revenue to the government, it is a cost component chargeable to the firms' profit, thereby reducing distributable profit to shareholders and growth of the business. The low amount of tax revenue is often associated with tax avoidance activities of taxpayers (Pratama, 2017). Recent studies such as Aristiyaningrum and Falikhatun (2024) and Duhoon, and Singh (2023), highlight Multinational enterprises (MNEs) tax havens and profit-shifting activities and their economic consequences especially in Luxembourg. The firms involved include: Google, Amazon, Apple, Ikea, Gap, Microsoft and Starbucks, resulting in huge financial loss to the EU ranging between US\$54.5 billion and US\$76.4 billion yearly (Okanga 2020).

The practice is also common among East African and sub-Saharan African countries and the world at large resulting to economically significant tax revenue losses of hundreds of billions of dollars (Garcia-Bernardo, 2021). In Nigeria, owing to lack of public awareness, insufficient budget for tax authority, shortage of experienced tax officials, tax law loopholes, and bad governance with a high level of corruption which is a motivating factor for tax avoidance, the country has always been trapped into unending fiscal crisis of debt servicing due to skyrocketed expenditure figures amidst poor achievement of revenue targets (Udisifan, 2020; Al-hadi *et al.*, 2020). The low performance may be associated with tax avoidance by taxpayers, especially corporate bodies operating in the manufacturing sector.

Several measures such as tax legislatures and reforms have been adopted to mitigate tax avoidance practices among taxpayer in Nigeria. Despite regulatory efforts to curb practice, concerns remain about their effectiveness. This is underscored by the landmark case involving Prime Plastichem Nigeria Ltd., where the Tax Appeal Tribunal ruled in favor of the Federal Inland Revenue Service (FIRS), resulting in an additional tax liability of over ₦1.7 billion for the firm due to transfer pricing issues. The case signals both the presence of tax avoidance practices and the growing enforcement capacity of tax authorities in Nigeria (Olika, 2023).

Also, the disputed case of over ₦10.9 billion additional income tax assessment presented before the Tax Appeal Tribunal between Dangote Industries Ltd and the Federal Inland Revenue Service is a clear case of manufacturing firms leveraging legal loopholes to engage in tax avoidance (PricewaterhouseCoopers, 2022). The owners of such firms may actually have been in support of such practice based on prior findings.

Ownership structure in form of managerial, institutional, foreign, family and government among others has been identified as contributors to tax avoidance (Duhoon & Singh 2023). Shareholders influence the board and management of companies to engage in tax avoidance so as to save cost. DesJardine *et al.* (2023) found that shareholders often occupy a privileged position in terms of placing formal demands on companies' directors and executives, unlike many non-shareholder stakeholders, such as the community, customers, the natural environment, employees and the government. Owners often exert influence through direct engagement with management, voting on resolutions, and strategic divestment to push their preferences.

While prior studies such as Kovermann and Wendt (2019), Supantri and Rahmiati, (2020), Alkurdi and Mardini (2020), and Bauweraerts *et al.* (2020) have examined this relationship, their findings remain inconsistent. To address these discrepancies, the researcher in this study introduces profitability as a moderating variable, aiming to clarify the ownership-tax avoidance dynamic. The introduction of profitability (the ability of the firm to generate profit) as a moderator is justified by the fact that one of the most important reasons

for investment in shares is to gain financially by way of profit, and profit is the determinant for taxation. When profit increases, corporate tax liability increases in the same direction, thus reducing available profit for the shareholders and other stakeholders' interest in the firm.

Prior studies such as Yusuf et al. (2021) provide evidence that profitability can moderate the impact of ownership structure on tax avoidance. Thus, the suitability of profitability measured by return on asset (ROA) as a moderator of the impact of ownership structure on tax avoidance of listed manufacturing firms in Nigeria in this study is justified.

This study investigates the impact of ownership structure on tax avoidance among listed manufacturing firms in Nigeria, with a particular focus on the moderating role of profitability. Ownership structures such as managerial, institutional and foreign are assessed for their influence on corporate tax behavior. Given inconsistent findings in prior literature, this study introduces profitability as a moderating variable to clarify the relationship, while firm size is controlled for to isolate effects more accurately. The research covers 11-year period (2013–2023) and focuses on the manufacturing sector, a critical driver of Nigeria's real economic growth.

The null hypothesis posits that profitability does not significantly moderate the relationship between ownership structure and tax avoidance. In accordance with the study's objectives and research questions, the following null hypotheses are proposed:

H₀₁: Institutional ownership does not significantly affect tax avoidance among listed manufacturing firms in Nigeria.

H₀₂: Managerial ownership does not significantly affect tax avoidance among listed manufacturing firms in Nigeria.

H₀₃: Foreign ownership does not significantly affect tax avoidance among listed manufacturing firms in Nigeria.

H₀₄: Profitability does not significantly affect tax avoidance among listed manufacturing firms in Nigeria.

H₀₅: The interaction between institutional ownership and profitability does not significantly affect tax avoidance among listed manufacturing firms in Nigeria.

H₀₆: The interaction between managerial ownership and profitability does not significantly affect tax avoidance among listed manufacturing firms in Nigeria.

H₀₇: The interaction between foreign ownership and profitability does not significantly affect tax avoidance among listed manufacturing firms in Nigeria.

The findings aim to provide valuable insights for firm managers, owners, policymakers, and tax authorities by enhancing their understanding of how ownership configurations and profitability jointly influence tax avoidance behavior.

2. Literature Review

Conceptual Review

This section presents a conceptual review of the study's key variables: tax avoidance (dependent variable), ownership structure (independent variable), and profitability (moderating variable).

Tax avoidance as defined by Hanlon and Heitzman (2010) and Scholes et al. (2015) emphasize that it involves legally minimizing tax liabilities through strategic planning. Hanlon and Heitzman describe it broadly as any lawful practice to reduce explicit taxes, while Scholes et al. focus on structuring financial transactions to optimize tax burdens and enhance firm value. Muhammad et al. (2020) define tax aggressiveness as strategies

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exploiting legal loopholes to reduce tax obligations, which include shifting income to low-tax jurisdictions (substantive tax planning), choosing formal structures that minimize tax while retaining economic substance, and navigating anti-avoidance rules such as those on transfer pricing, thin capitalization, and treaty shopping. The researcher for the purpose of this study adopts the definition by Hanlon and Heitzman

Scholars view ownership structure differently, but agree that the identity of a firm's owners significantly influences its goals and managerial control (Ying, 2015). Ying, from a Chinese perspective view ownership structure to include state ownership, ownership concentration, and institutional ownership. Similarly, Omesì and Appah (2021) describe it as comprising block shareholding, managerial shareholding, and institutional shareholding. In summary, ownership structure refers to the various categories of shareholders who hold control over a firm's operations. The researcher for the purpose of this study view ownership structure as the shareholdings of the managers, institutions and foreigners.

Profit is a fundamental objective for all profit-oriented entities. As noted by Nasution (2020), without profit, a company cannot fulfill other critical objectives such as ensuring its continuity (going concern) and fulfilling corporate social responsibilities. Nasution further asserts that profit, being the primary aim of any business, is typically achieved through the sale of goods or services. This suggests that a higher volume of successful sales or service delivery often leads to increased profitability. Kimsen (2019) views profitability measured by Return on Assets (ROA) as a key indicator of management's ability to generate profits from the company's assets. A higher ROA signifies better asset utilization and greater profits, which in turn increases the company's tax liability. This study adopts ROA as a measure of profitability, calculated as net income before tax divided by total assets, aligning with prior research like Salman (2018).

Empirical Review

Institutional Ownership and Tax Avoidance

Several studies have examined the role of institutional ownership in influencing tax avoidance, though findings remain mixed across different contexts and methodologies. Nabilah and Umairah (2022) investigated the impact of good corporate governance on tax avoidance among manufacturing firms in Indonesia from 2019 to 2020. Institutional ownership, defined as the percentage of shares held by investment institutions such as banks, insurance companies, pension funds, and religious organizations, was one of the independent variables. Tax avoidance was proxied by the effective tax rate, and the study employed multiple linear regressions. Results indicated a significant positive relationship, suggesting that greater institutional ownership is associated with increased tax avoidance.

Similarly, Sholikhah and Nurdin (2022) examined the trade, service, and investment sectors in Indonesia over the period 2014 to 2020, also finding that institutional ownership—defined as shareholdings of 5% or more had a positive and significant effect on tax avoidance, measured by the cash effective tax rate. This supports the notion that institutional investors may, in some contexts, push for aggressive tax strategies to maximize shareholder value. Dewi (2019) arrived at comparable conclusions in a study of the Indonesian banking sector from 2012 to 2016, further reinforcing the pattern of institutional ownership being positively linked to tax avoidance in the Indonesian context.

Conversely, Olanisabe et al. (2023) examined the Nigerian setting, focusing on the mediating role of profitability in the relationship between institutional ownership and tax avoidance among 121 listed firms from 2010 to 2021. The study used both the cash effective

tax rate and Henry Sansing's measure as proxies for tax avoidance, and structural equation modeling (SEM) for data analysis. Findings showed that institutional ownership had an insignificant effect on tax avoidance when measured using the cash effective tax rate, suggesting a different behavioral pattern in Nigeria's institutional environment possibly due to differences in regulatory enforcement, investor activism, or firm governance quality.

These contrasting results further justify the need for the current study, which aims to reassess the relationship between institutional ownership and tax avoidance in Nigeria, while introducing profitability as a moderating variable and controlling for firm size. This approach may help clarify the inconsistencies found in prior literature and offer context-specific insights.

Managerial Ownership and Tax Avoidance

Yuniarsih (2018) examined the influence of accounting conservatism and corporate governance mechanisms on tax avoidance among 41 listed firms on the Indonesian Stock Exchange over the 2014–2016 period. In the study, managerial ownership was measured as the percentage of shares held by company management, while tax avoidance was proxied by the cash effective tax rate relative to pre-tax income. Using descriptive and regression analysis, the study found that managerial ownership had a significant positive effect on the effective tax rate, implying a negative relationship with tax avoidance. In essence, higher managerial ownership was associated with lower tendencies toward tax avoidance, suggesting alignment of interests between managers and shareholders.

Contrary to this, Sholikhah and Nurdin (2022) explored the effect of good corporate governance on tax avoidance across 28 purposively sampled firms in the trade, service, and investment sectors of the Indonesian Stock Exchange. Using multiple linear regressions, they reported a significant positive relationship between managerial ownership and tax avoidance, indicating that higher managerial ownership increased the propensity for tax avoidance. These findings align with those of Ashari et al. (2020) and are consistent with agency theory, which posits that managers with greater control may exploit information asymmetry for personal or corporate gain. However, the small sample size (28 firms out of 206) and the use of purposive sampling raise concerns about the study's representativeness and the generalizability of its findings. This inconsistency in empirical results combined with methodological limitations further supports the need for the present study, which introduces profitability as a moderating variable and employs a broader sample across 11 years of data from Nigerian manufacturing firms to produce more robust, generalizable insights.

Foreign Ownership and Tax Avoidance

Foreign ownership is typically defined as the proportion of a company's shares held by foreign investors relative to its total ordinary shares (Tijjani & Peter, 2020). In their study of the effect of ownership structure on tax planning among non-financial companies listed in Nigeria from 2008 to 2017, Tijjani and Peter focused on three ownership types: managerial, institutional, and foreign ownership. Using data from annual reports and measuring tax planning as the ratio of total tax expense to profit before tax (GTR), they employed fixed effects regression analysis to test their hypotheses. The study found that foreign ownership had a negative but statistically insignificant effect on the effective tax rate, suggesting a tendency toward greater tax avoidance, though not at a level deemed significant. This finding contributes to the ongoing debate surrounding the role of foreign ownership in corporate tax behavior and further highlights the need for a more nuanced understanding especially when considering moderating factors such as profitability.

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While prior studies have explored similar relationships, findings remain inconsistent. For example, Devi and Muhyarsyah (2021) found no significant relationship between foreign ownership and tax avoidance in their study of 32 Indonesian firms from 2017 to 2019. However, their reliance on purposive sampling raises concerns about the scientific rigor and generalizability of their results. Thus, highlighting the need for more methodologically robust investigations like the one undertaken in this study.

While foreign ownership is widely viewed as a catalyst for economic growth in developing countries, it can also raise concerns about aggressive tax avoidance strategies, especially in jurisdictions with weak governance structures. According to Appiah-Kubi et al. (2020), deficiencies in transparency, accountability, and investor protection often discourage foreign investment. Nigeria is frequently cited as an example of such institutional challenges. This motivates a closer examination of foreign ownership's effect on tax avoidance within the Nigerian context.

Moderating Role of Profitability on the impact of Ownership Structure on Tax Avoidance

The influence of institutional ownership on tax avoidance remains a subject of scholarly debate, particularly when examined alongside profitability as a moderating variable.

Oktaviyani and Munandar (2017) examined real estate and property firms in Indonesia from 2011 to 2015 using moderated regression analysis. They found that institutional ownership had no direct effect on tax avoidance. However, profitability significantly and negatively moderated this relationship, implying that in more profitable firms, institutional owners may push for strategies that enhance tax avoidance, possibly due to their focus on short-term financial performance.

In a related study, Iwenty and Surjandari (2022) investigated manufacturing firms listed in Indonesia between 2016 and 2019. Their findings revealed a negative and significant effect of institutional ownership on tax avoidance—meaning institutional investors encouraged more tax avoidance. Interestingly, profitability played a positive moderating role, suggesting that as firms become more profitable, the influence of institutional ownership on tax avoidance diminishes, potentially due to greater public scrutiny or reputational concerns.

In contrast, Sanchez and Mulyani (2020) studied 156 manufacturing firms in Indonesia between 2017 and 2019. They reported a positive and significant relationship between institutional ownership and tax avoidance, implying that institutional investors may discourage aggressive tax strategies. However, their results showed no moderating effect of profitability, indicating that profitability did not influence the institutional ownership–tax avoidance link in that context.

Putri et al. (2022) also explored this relationship in the energy sector of Indonesia (2017–2021), where institutional ownership was found to have a negative and significant effect on tax avoidance again suggesting that higher institutional shareholding encouraged tax avoidance. Similar to Sanchez and Mulyani (2020), profitability failed to moderate the relationship.

On the other hand, Udisifan (2020) focused on Nigerian consumer goods firms and found that institutional ownership, managerial ownership, and foreign ownership were all positively associated with tax avoidance when interacted with profitability (measured by return on assets). However, these moderating effects were statistically insignificant, suggesting that while profitability may influence tax strategies, its role as a moderator is weak or context-dependent in the Nigerian market.

Taken together, these mixed findings demonstrate that the relationship between institutional ownership and tax avoidance is complex and context-specific, and that profitability's role as a moderator varies significantly across countries and sectors. This further validates the current study's objective to examine how profitability moderates the influence of different ownership structures-including institutional ownership on tax avoidance in Nigerian manufacturing firms, a sector critical to the country's real economy.

Theoretical Framework

This study is grounded in Agency Theory Jensen and Meckling (1976) and Legitimacy Theory to examine how ownership structure affects tax avoidance, with profitability as a moderating factor. Agency Theory suggests that tax avoidance can result from conflicts between managers and shareholders. Ownership structures like managerial ownership align interests and reduce agency problems, potentially lowering tax expenses. However, foreign and institutional ownership may either reduce tax avoidance by improving oversight or increase it by facilitating access to complex tax strategies.

Legitimacy theory suggests that organizations seek to operate within the bounds and norms of their societal environment in order to maintain legitimacy, reputation, and continued access to resources (Suchman, 1995). This framework is especially relevant in the context of foreign and institutional ownership, where public perception and social accountability are crucial. Foreign ownership is posited to reduce tax avoidance because foreign investors may pressure firms to comply with host-country tax norms in order to build legitimacy and avoid reputational risk (Salihu et al., 2015; Shi et al., 2020). These firms may engage in more responsible tax behavior to be perceived as good corporate citizens.

Institutional ownership may also play a role in reducing tax avoidance through increased transparency, credibility, and social accountability. Institutional investors often bring with them broader networks, experience from other firms, and a desire to protect reputational capital (Zhou et al., 2016; Pfeffer & Salancik, 1978). According to legitimacy theory, this fosters alignment with socially constructed values and expectations, thereby discouraging aggressive tax practices (Chen & Roberts, 2010; Sarhan et al., 2019; Willkomm, 2023).

The theories offer contrasting predictions: agency theory may support tax avoidance as a cost-saving tool, while legitimacy theory emphasizes social responsibility and tax compliance. This dual perspective provides a strong basis for investigating the moderating role of profitability in the ownership structure-tax avoidance relationship in Nigerian manufacturing firms.

3. Research Methodology

The post-positivist research paradigm using the quasi-experimental design is adopted for the purpose of this study as it involves cause-effect analysis which is believed to be suitable and adequate for testing the expected influence of the independent variables on the dependent variable of the study.

The study targeted all 56 manufacturing firms listed on the Nigerian Exchange Group as of December 31, 2023, but after excluding firms with incomplete data, loss year observations, and those delisted during the study period, a final sample of 37 firms with 342 firm-year observations was selected. The study used secondary quantitative data from 2013 to 2023 on tax avoidance, ownership structure, return on assets variables and firm size, and employed panel regression analysis in STATA to test its hypotheses.

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To empirically test the study's hypotheses, two panel regression models were specified. Model 1 examines the direct effects of foreign ownership (FOW), managerial ownership (MOW), and institutional ownership (IOW) on tax avoidance, using Book-to-Tax Difference (BTD) as a proxy. Model 2 extends the analysis by incorporating profitability measured by return on assets (ROA) as a moderating variable, alongside firm size (FSZ) as a control variable. Interaction terms (e.g., FOW*ROA) were introduced to evaluate moderation effects.

Model 1 tested hypotheses H0₁–H0₃, while Model 2 tested H0₄–H0₇. The models are specified as:

Model 1: $BTD_{it} = \alpha_0 + \alpha_1 FOW_{it} + \alpha_2 MOW_{it} + \alpha_3 IOW_{it} + \alpha_4 FSZ_{it} + e_{it}$

Model 2: $BTD_{it} = \alpha_0 + \alpha_1 FOW_{it} + \alpha_2 MOW_{it} + \alpha_3 IOW_{it} + \alpha_4 ROA_{it} + \alpha_5 (FOWROA)_{it} + \alpha_6 (MOWROA)_{it} + \alpha_7 (IOW*ROA)_{it} + \alpha_8 FSZ_{it} + e_{it}$

The hypotheses developed for the study has been tested using panel regression techniques of data analysis. This technique is proven to be suitable according Ying (2015) for its efficiency in improving econometric estimates. The STATA software has been utilized as the tool of data analysis in this study as it is considered one of the best statistical packages used to handle data characterized by multiple firms and times (Gathogo & Ragui, 2014).

4. Results and Discussions

Correlation Matrix

The correlation matrix shows values displaying the Pearson correlation coefficient between all pairs of variables. Table1 presents the results of the correlation coefficient showing the strength and direction between pairs of variables used in the study.

Table 1

Correlation Matrix of the variables in the Study

	BTD	IOW	MOW	FOW	ROA	FSZ
BTD	1.000					
IOW	.2237	1.000				
MOW	-.3676	-.5158	1.000			
FOW	.4213	.4589	-.4309	1.000		
ROA	.1604	.0751	-0.077	-0.038	1.000	
FSZ	.6374	.3469	-.4173	.3557	-0.0823	1.000

Source: Result Output from STATA, 2025

Table 1 shows the coefficients of the variables ranging between -1 and +1 with the diagonal values of 1.0000 implying perfect positive correlation of both the dependent (BTD) and independent and moderating variables (IOW, MOW, FOW, ROA and FSZ) with themselves. The results further show that there is generally weak to moderate positive and negative correlation between all the independent and moderating variables (IOW, MOW, FOW and ROA) of the study and the dependent variable (BTD) and among themselves except the

correlation between managerial ownership (MOW) and institutional ownership (IOW) which is strong and negative.

The correlation is generally bordering the weak to moderate because all the values fall between .01 to .29 and .30 to .49 respectively. While it is strong between MOW and IOW, because the value falls between .50 and .80 and is negative. The results show that there is generally moderate positive and negative correlation between the control variable (FSZ) and the independent and moderating variables (IOW, MOW FW & ROA) of the study while the correlation between FSZ and BTD is strong and positive.

The correlation is generally moderate between the control variable and the independent variables because all the values fall between .30 to .49 while it is strong between the control variable and the dependent variable, because the value falls from .50 to .80 and is positive. The table shows that none of the correlations exceeded the threshold of 0.80 as proposed by Gujarati (2004). Thus, the multicollinearity test has been conducted to further confirm the absence of multicollinearity among the variables of the study.

Pre-Estimation Diagnostic Test Results

The joint skewness and kurtosis test for normality of residuals were conducted and the test results showed a joint probability of χ^2 of 0.0000 which is significant at 1%. This implies that the residuals are not normality distributed. However, considering the panel nature of the study and the number of observations, we proceed with the regression analysis despite the non-normality of the data in respect of most of the variables of the study as supported by Greene (2010). This is because even if the data of the variables are not normally distributed, the ordinary least square estimators (coefficient) may be normally distributed so that we can continue to apply the F, t and χ^2 statistics to carry out the normal inferential analysis.

Multicollinearity test is conducted to check the presence of high correlation between the explanatory variables that could distort the regression result. The multicollinearity test result in respect of model 1 showed that all the VIF values are less than 10 and the tolerance values are not less than 0.1. In addition, the mean VIF is 1.41. Furthermore, the VIF test results in respect of model 2 showed the mean VIF of 1.93 and the tolerance values are also not less than 0.1. Thus, the VIF results of both model 1 and 2 implies that there is no evidence of multicollinearity among the explanatory variables.

Heteroscedasticity Test

Heteroscedasticity test was carried out to check the homoscedasticity assumption of the regression models. The presence of heteroscedasticity violates the homoscedasticity assumption and may lead to a wrong inference. The result of Breusch- pagan / Cook-Weisbaerg test of the study for the two models indicates the χ^2 of 5.89 with a significant p-value of 0.0152 for model 1 and the χ^2 of 23.01 with a significant p-value of 0.000 for model 2, suggesting the presence of heteroscedasticity.

Hausman and Fixed Effect Robust Regression Test Results

The hausman specification test was carried out to determine the most efficient model between the fixed and random effect. The Hausman test result for the two models revealed that the value of χ^2 is 13.39 with a significant $\text{prob} > \chi^2$ of 0.0095 for model 1 (before moderation) and 26.00 and 0.0010 for the χ^2 and p-value of model 2 respectively. The significant value as reported by the probability of χ^2 indicates that the individual effects are fixed and not random in both models hence random effect model is rejected in favour of fixed effect model which is better specified. Further considering the fact that the heteroscedasticity test results of both model 1 and 2 were significant, which suggest the presence

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heteroscedasticity, the fixed effect robust regression models were considered for interpretation.

Regression Results and Hypotheses Testing

Table 2

Fixed Effects Robust Regression Results

Variables	Model 1			Model 2		
	Coefficient	T-value	P-value	Coefficient	T-value	P-value
IOW	.1178756	2.22	0.033	.0814537	2.84	0.007
MOW	.0167113	0.14	0.887	-.2386427	-2.88	0.007
FOW	-.1532303	-3.83	0.000	-.1351256	-4.71	0.000
ROA				0.5503758	2.16	0.037
IOWROA				.1740253	9.53	0.000
MOWROA				3.504134	7.59	0.000
FOWROA				.8095425	5.50	0.000
FSZ	.3172236	8.39	0.000	.2031117	23.27	0.000
CONSTANT	2.179929	43.44	0.000	-.3546292	-1.67	0.104
R ²	42%	Adj. R ²	41%	58%	Adj. R ²	
Prob. F	0.0000			0.0000		
R ² Within	32%			66%		
Between	32%			48%		
Overall	26%			48%		
Prob. F	0.0000			0.0000		

Source: Result Output of Fixed Effects Robust Regression from STATA, 2025

Table 2 shows that the result of the R² of model 1 was 42% while Model 2 has R² of 58%. This indicates that the variables selected in this study are able to explain the variations in tax avoidance of the listed manufacturing firms in Nigeria up to 42% and 58% for model 1 and 2 respectively, while the remaining 58% and 42% are explained by other factors that are not included in the models. The higher R² of model 2 is an indication that the inclusion of the moderating variable return on assets was responsible for the improvement in the explanatory power of the variables by 16%.

The overall P value of the two models was both 0.000 which is significant at 1%. This indicates that the model is fit. Similarly, from table 2, the R² within of the robust fixed effect regression results of model 2 (moderation model) was 66% which showed an improvement

over model 1 with 32% by 34%. This implies that profitability as measured by ROA moderates the impact of ownership structure on tax avoidance of listed manufacturing firms in Nigeria.

Institutional Ownership and Tax Avoidance

The results of model 1 as shown in Table 2 indicates that institutional shareholding has a coefficient of 0.1178756 with a t-value of 2.22 and a p-value of 0.033. This means that for every 1% increase in institutional ownership, BTD increases by 0.1178756 thus implying an increase in tax avoidance practice of the sampled listed firms at 5% level of significance.

Consequently, the study rejects the null hypothesis of the study which states that institutional ownership has no significant impact on the tax avoidance of listed manufacturing firms in Nigeria. Therefore, the study found that there is a significant impact of institutional ownership on tax avoidance of listed manufacturing firms in Nigeria. This is in line with the legitimacy theory which emphasizes the support of institutional shareholders for tax avoidance practice.

The results of model 2 as shown in Table 2 indicates that institutional shareholding has a coefficient of 0.0814537 with a t-value of 2.84 and a p-value of 0.007. This means that for every 1% increase in institutional ownership, BTD increases by 0.0814537 thus implying an increase in tax avoidance practice of the sampled listed firms at 5% level of significance.

Based on the results obtained therefore, the study rejects the null hypothesis of the study which states that institutional ownership has no significant impact on the tax avoidance of listed manufacturing firms in Nigeria. Thus, the study found that there is a significant impact of institutional ownership on tax avoidance of listed manufacturing firms in Nigeria. This is in line with the legitimacy theory which emphasizes the support of institutional shareholders for tax avoidance practice.

The study found from both model 1 and model 2 that there is a significant impact of institutional ownership on tax avoidance of listed manufacturing firms in Nigeria. This implies that an increase of institutional shareholders among listed manufacturing firms in Nigeria contributes to the practice of tax avoidance. This is in line with the findings of Willkomm, (2023) although it contradicts the findings of Olanisabe *et al.* (2023).

The finding in this study is expected because institutional shareholders are considered as major contributors the access of external resources useful for application towards achieving tax avoidance motives. These resources are often gotten from their wide expertise knowledge and substantial familiarity with the different tax legislations which are needed to identify and exploit tax loopholes (Bhalla *et al.*, 2022). Institutional shareholders expertise knowledge guarantees optimize usage of best practices, processes and systems that will direct companies to available opportunities for exploitation in favour of shareholders through tax minimization. This is in line with the resource-based theory although it contradicts the legitimacy theory.

Managerial Ownership and Tax Avoidance

The results of model 1 as shown in Table 2 indicates that managerial ownership has a coefficient of 0.0167113 with a t-value of 0.14 and a p-value of 0.887. This means that as managerial ownership increases by 1%, the Book-to-Tax Difference (BTD) increases by 0.0167113, although statistically non-significant given the p value of 0.887. Thus, the researcher fails to reject the null hypothesis of the study which states that managerial ownership has no significant impact on tax avoidance of listed manufacturing firms in Nigeria since the study found that managerial ownership has no significant impact of tax avoidance of listed manufacturing firms in Nigeria.

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The increase in management shareholding has the tendency to increase tax avoidance in line with the agency theory which emphasizes better alignment of the managers' interest with that of the shareholders in maximizing firms' value through tax savings. However, the results obtained shows a non-significant outcome in line with the managerial hegemony theory which emphasizes the fact that manager's interest may not align with that of the shareholders due to their opportunistic behaviours in satisfying self-interest motivations.

The results of model 2 as shown in Table 2 indicates that managerial ownership has a coefficient of -0.2386427 with a t-value of -2.88 and a p-value of 0.007. This means that as managerial ownership increases by 1%, the BTD decreases by 0.2386427, thus implying a decrease in tax avoidance practice among the sampled firms at 5% level of significance. Thus, the study rejects the null hypothesis of the study which states that managerial ownership has no significant impact on tax avoidance of listed manufacturing firms in Nigeria since it found that managerial ownership has a significant impact on tax avoidance of listed manufacturing firms in Nigeria. The increase in management shareholding has the tendency to decreasing tax avoidance

The study found from model 2 that managerial ownership has a significant negative impact on tax avoidance of listed manufacturing firms in Nigeria even though the model 1 showed an insignificant relationship. This means that an increase in the shareholdings of managers and board members of the firm translate to lower involvement in tax avoidance practices among the sampled firms. This is in line with the findings of Yuniarsih (2018), although it contradicts the results found by Sholikhah and Nurdin (2022).

The negative impact of managerial shareholdings on tax avoidance may be connected with the managers' disposition to the risk factors directly or indirectly suffered by managers/firms associated with tax avoidance. These risk factors may include risks such as audit fees to be paid to tax consultants, time spent completing tax audit forms, litigation and reputation fines as identified in the literature (Umar *et al.*, 2021). Further, this category of shareholders may be opportunistic by taking advantageous use of insider information for their self-interest motivations rather than optimizing tax burden for the benefits of external shareholders as observed in the study of Elmagrhi *et al.* (2016).

Foreign Ownership and Tax Avoidance

The results of model 1 as shown in table 2 indicates that foreign ownership has a coefficient of -0.1532303 with a t-value of -3.83 and a p-value of 0.000. This means that as the foreign ownership of the sampled firms' increases by 1%, BTD decrease by 0.1532303 and it is statistically significant at 1%. This implies that the more foreigners acquire shares in the sample firms, the lesser the level of tax avoidance.

The study rejects the null hypothesis of the study which states that foreign ownership has no significant impact on tax avoidance of listed manufacturing firms in Nigeria. Therefore, the study found that there is a significant impact of foreign ownership on tax avoidance of listed manufacturing firms in Nigeria. The result obtained is in line with the agency theory and legitimacy theory which emphasizes reduction in tax avoidance practices as foreign ownership increases due to such shareholders appeals for greater tax compliance among management towards the firms' good reputation.

The results of model 2 as shown in table 2 indicates that foreign ownership has a coefficient of -.1351256 with a t-value of -4.71 and a p-value of 0.000. This means that as the foreign ownership of the sampled firms' increases by 1%, BTD decrease by 0.1351256 and it is statistically significant at 1%. This implies that the more foreigners acquire shares in the sample firms, the lesser the level of tax avoidance.

The study rejects the null hypotheses of the study which states that foreign ownership has no significant impact on tax avoidance of listed manufacturing firms in Nigeria. Therefore, the study found that there is a significant impact of foreign ownership on tax avoidance of listed manufacturing firms in Nigeria. The result obtained is in line with the agency theory and legitimacy theory which emphasizes reduction in tax avoidance practices as foreign ownership increases due to such shareholders appeals for greater tax compliance among management towards the firms' good reputation.

The study found from both model 1 and model 2 that the impact of foreign ownership on tax avoidance is negative and significant. This means that the increase in foreign nationals in shareholdings of manufacturing firms in Nigeria reduces their tendencies towards tax avoidance practices. This finding contradicts the results found by Udisifan (2020), and Devi and Muhyarsyah (2021). The results found in this study is often peculiar with the behavior of foreign shareholders who often suffers information asymmetry which consequently influences their desire for strict managerial behavior monitoring thereby leads to decrease in tax avoidance as observed by (Yoo & Koh, 2014).

Also, some authors are of the view that the presence of foreign shareholders in firms may improve effective governance establishments, thereby ensuring accountability, transparency and protection of investors (Bokpin *et al.*, 2017). This often times lead to reduction in tax avoidance behavior since such behaviours thrives more in circumstances of weak governance and institutions. This view is supported by the agency theory which considers greater foreign ownership as a contributor to lower tax avoidance due to intense monitoring of the firms' behaviour by such foreign nationals.

Further, the finding in this study is in line with the legitimacy theory which support increase in foreign shareholdings reduction of tax avoidance activities among firms due to the perception of this category of shareholders towards the firm societal acceptability and legitimacy. The society perceives a legitimate firm as those whose activities are socially responsible to its well-being and consequently foreign nationals tries to avoid getting the firm into questionable situations by the society.

Profitability and Tax Avoidance

The results of the robust fixed effects regression of model 2 in table 2 shows that the coefficient of return on assets (ROA) which is the moderating variable is 0.5503758, t-value of -2.16 with a P-value of 0.037. Thus, the impact is positive and significant at 5% which implies that for every 1% increase in return on assets of the sampled firms, BTD increases by 0.5503758 suggesting more tax avoidance practice by the sampled firms.

Based on the results obtained, the study rejects the hypothesis which states that profitability has no significant impact on tax avoidance of listed manufacturing firms in Nigeria. Thus, the study found that profitability has a significant positive impact on tax avoidance of listed manufacturing firms in Nigeria. This result is in line with the studies of Putri and Halmawait (2023) while the findings contradict the results obtained by Tijjani and Zachariah (2020) who found profitability to have either an inverse or no relationship with tax avoidance.

Based on the results, the study found that profitability being the moderating variable has a significant positive impact on tax avoidance of listed manufacturing firms in Nigeria. This indicates that firm with more rate of return on assets (profitability) have more disposition to engage in tax avoidance behavior. This means that an increase in the rate of return on assets which is a measure of profitability increases the tax avoidance practices in

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the sampled firms. This is in line with the findings of Firmansyah and Bayuaji (2019) but contradicts the results found by Iwenty and Surjandari (2022).

Impact of Institutional Ownership Moderated by Profitability on Tax Avoidance

The results of the fixed effects robust regression in model 2 in table 2 shows that the coefficient of institutional ownership moderated by return on assets is 0.1740253, t-value of 9.53 with a P-value of 0.000. Thus, the impact is positive and significant at 1% which implies that for every one percent increase in institutional shareholding when moderated with return on assets, BTD increases by 0.1740253.

This means that an increase in institutional shareholding when there is profitability increases the tax avoidance practice among the sampled manufacturing firms in Nigeria. Thus, the study rejects the null hypotheses which states that institutional ownership moderated by return on assets has no significant impact on tax avoidance of listed manufacturing firms in Nigeria. Therefore, the study found that profitability has significant moderating role on the impact of institutional ownership on tax avoidance of listed manufacturing firms in Nigeria

The study found that profitability plays a moderating role on the impact of institutional shareholders on the tax avoidance behaviours of listed manufacturing firms in Nigeria. This implies given the rate of return on assets, the more institutions hold shares in the sampled firms, the more such firms engage in tax avoidance behaviours. This is due to the fact that institutional investors may possess more expertise knowledge in finance and accounting thereby placing them in a better position to acquire more information than other categories of investors. This often guarantees the opportunity to utilized such useful resources to influence the management towards engaging in tax avoidance practices. This is in line with the agency theory, which opined that the management and investors may have different motivations among which is to satisfy personal interests.

As a result of increased profit, the firms' managers and investors may strive to increase their wealth which is often achieved through tax avoidance practices. The results obtained is in accordance with the findings of Oktaviyani and Munandar (2017), while it contradicts the results obtained by Putri *et al.* (2022) who found that profitability had no moderating effect on the effect of institutional ownership on tax avoidance and Iwenty and Surjandari (2022) who found profitability to have a reducing moderating role on institutional ownership on tax avoidance.

Impact of Managerial Ownership Moderated by Profitability on Tax Avoidance

The results of model 2 in table 2, shows that managerial ownership moderated with return on assets has a coefficient of 3.504134, t-value of 7.59 with a P-value of 0.000. Thus, the impact is positive and significant at 1% which indicates that for every one percent increase in managerial ownership moderated by return on asset, BTD increases by 3.504134. This means that an increase in managerial ownership moderated by return on assets increases the tax avoidance practice among the sampled manufacturing firms in Nigeria.

Consequently, the study rejects the null hypotheses of the study which states that profitability has no significant moderating role on the impact of managerial ownership on tax avoidance of listed manufacturing firms in Nigeria. Therefore, the study found that profitability has significant moderating role on the impact of managerial ownership on tax avoidance of listed manufacturing firms in Nigeria.

The study found that the moderating role of Profitability on the impact of managerial ownership on tax avoidance is positive and significant. This implies that profitability plays a

moderating role on the impact of managerial ownership on tax avoidance of listed manufacturing firms in Nigeria. Thus, tax avoidance practice increases with managerial ownership in the presence of profitability. This means that the firms' tax avoidance appeals increase aimed at increasing profit for investment and distribution to shareholders. This is often caused by various problems of agency relationship where the management intensifies efforts toward reducing tax burden in order to meet up with an investment opportunity which promises high cash flow as supported by Armstrong *et al.* (2015).

Furthermore, the managers may engage in tax avoidance practices with a view to realize profit but setting aside the needs of the shareholders and satisfy their perquisite consumptions (Aristiyaningrum & Falikhatun, 2024). This finding is in line with the agency theory although it contradicts the findings of Udisifan (2020) who found that that profitability failed to moderate the relationship between managerial ownership and tax avoidance

Impact of Foreign Ownership Moderated by Profitability on Tax Avoidance

Furthermore, from the results displayed under model 2 in table 2, shows that foreign ownership interacted with return on assets has a coefficient of 0.8095425, t-value of 5.50 with a P-value of 0.000 is positive and significant at 1%. This indicates that for every one percent increase in foreign ownership moderated by return on asset, BTD increases by 0.8095425.

This implies that an increase in foreign ownership interacted by return on assets increases the tax avoidance practice among the sampled manufacturing firms in Nigeria. Thus, the study rejects the null hypotheses of the study which states that profitability has no significant moderating role on the impact of foreign ownership on tax avoidance of listed manufacturing firms in Nigeria. Therefore, the study found that profitability has significant moderating role on the impact of foreign ownership on tax avoidance of listed manufacturing firms in Nigeria

Also, the study found that profitability plays a significant moderating role on the impact of foreign ownership on tax avoidance of listed manufacturing firms in Nigeria by increasing it. This implies that as the rate of returns on assets increases in the presence of foreign ownership, the practice of tax avoidance becomes more among the sampled firms.

The finding in this study is consistent with the findings of Shi *et al.* (2020). This is in line with the agency theory which argues that firms with significant foreign ownership possess more innate tendencies for tax avoidance thus providing support for higher tax avoidance practice among such firms. The behaviour of this category of shareholder may be explained from the perception that foreign owners leverage on resources and favourable tax policies in developing economies to engage in tax avoidance activities.

Firm Size and Tax Avoidance

The results of model 1 as shown in table 2 indicate that firm size (FSZ) has a coefficient of 0.3172236 with a t-value of 8.39 and a p-value of 0.000 which is significant at 1%. This means that for every 1% increase in firm size, BTD increases by 0.3172236, thus implying an increase in tax avoidance practice of the sampled listed firms at 1% level of significance. Thus, signifying increase in tax avoidance practice among the sampled firms. This is in line with the findings of Irianto *et al.* (2017) who argued that firm size has a positive influence on tax avoidance.

Firms having larger sizes tends to be more aggressive in their tax policy than small firms. The results of model 2 in table 2 showed firm size (FSZ) has a coefficient of 0.2031117 with a t-value of 23.27 and a p-value of 0.000 which is significant at 1%. This

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implies that FSZ has a positive and significant impact on BTD. Thus, signifying increase in tax avoidance practice among the sampled firms.

5. Conclusion and Recommendations

The study provided evidence on the utility of seven independent variables (institutional ownership, managerial ownership, foreign ownership, return on asset, return on asset moderated with institutional ownership, return on asset moderated with managerial ownership and return on asset moderated with foreign ownership) and one control variables (firm size) in explaining and predicting the extent of tax avoidance of listed manufacturing firms in Nigeria.

The presence of both institutional and managerial shareholders increases the level of tax avoidance among the listed manufacturing firms in Nigeria thereby increasing distributable profits and transferring company's wealth to the shareholders rather than the government. While foreign shareowners decrease the practice of tax avoidance among listed manufacturing firms in Nigeria. This is not unconnected with the tax compliance disposition of foreign nationals who own shares in these firms.

Also, with regard to the moderator, the study documented evidence that return on assets increases the tax avoidance activities of listed manufacturing firms in Nigeria. Its moderating role on institutional, managerial and foreign shareholders influence on tax avoidance practice in the listed manufacturing firms is positively significant as it increases the level of tax avoidance practice.

The control variable, firm size provides evidence of increasing the level of tax avoidance of listed manufacturing firms in Nigeria. Thus, the inclusion of the moderating variable; profitability has improved the explanatory power of the independent variables and there is evidence to show that it plays a moderating role on the impact of ownership structure on tax avoidance of listed manufacturing firms in Nigeria.

Based on the study's findings, the researcher recommends as follows:

- i. **Promote Managerial Ownership:** Policymakers and firms should encourage managerial shareholding, as it aligns management interests with those of shareholders and reduces book-tax differences, enhancing transparency.
- ii. **Enhance Monitoring of Foreign and Institutional Investors:** Although their influence was statistically insignificant, foreign and institutional investors should be more involved in firm oversight to ensure ethical financial practices.
- iii. **Encourage Ownership Diversity:** Firms should adopt a balanced ownership mix to reduce information asymmetry and promote better tax reporting behavior.
- iv. **Strengthen Corporate Governance Policies:** Regulatory bodies like the SEC and FIRS should strengthen governance frameworks to ensure responsible ownership structures that minimize tax avoidance and earnings manipulation.
- v. **Conduct Regular Audits:** Tax authorities should perform regular audits and scrutinize firms with high book-tax differences, using ownership structure as a risk indicator.
- vi. **Revise APA Guidelines:** Tax authorities should update the 2024 Advance Pricing Agreement (APA) guidelines to better reflect Nigeria's unique economic context

References

- Ajeigbe, K. B., Ganda, F., & Enowkenwa, R. O. (2023). Impact of sustainable tax revenue and expenditure on the achievement of sustainable development goals in some selected African countries. *Environment, Development and Sustainability*, 1-25
- Al-Hadi, A., Taylor, G., Richardson, G., & Eulaiwi, B. (2021). Money laundering control systems, external auditor specialization and tax haven use: An empirical analysis of US multinational financial corporations. *International Journal of Auditing*, 25(2), 582-601.
- Alkurdi, A., & Mardini, G. H. (2020). The impact of ownership structure and the board of directors' composition on tax avoidance strategies: empirical evidence from Jordan. *Journal of Financial Reporting and Accounting*, 18(4), 795-812.
- Appiah-Kubi, S. N. K., Malec, K., Kutin, S. B., Maitah, M., Chiseni, M. C., Phiri, J., & Maitah, K. (2020). Foreign ownership in Sub-Saharan Africa: Do governance structures matter? *Sustainability*, 12(18), 7698.
- Aristiyaningrum, U. L., & Falikhatun, (2024). Corporate tax avoidance: A structured literature review and areas for future research. *International Journal of Economics, Business and Management Research*, 8(7), 109-134
- Armstrong, C.S., Blouin, J.L., Jagolinzer, A.D. & Larcker, D.F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, 60(1),1-17.
- Bauweraerts, J., Vandernoot, J., & Buchet, A. (2020). Family firm heterogeneity and tax aggressiveness: A mixed gamble approach. *Canadian Journal of Administrative Sciences*, 37(2), 149–163. <https://doi.org/10.1002/cjas.1528>.
- Bhalla, N., Sharma, R. K., & Kaur, I. (2022). Effect of tax knowledge and technological shift in tax system on business performance: A PLS-SEM analysis. *Sustainability (Switzerland)*, 14(16), 1–18.
- Bokpin, G. A., Mensah, L., & Asamoah, M. E. (2017). Legal source, institutional quality and FDI flows in Africa. *International Journal of Law and Management*, 59(5), 687-698.
- Chen, J. C., & Roberts, R. W. (2010). Toward a more coherent understanding of the organization–society relationship: A theoretical consideration for social and environmental accounting research. *Journal of business ethics*, 97, 651-665.
- Dakhli, A. (2022). The impact of ownership structure on corporate tax avoidance with corporate social responsibility as mediating variable. *Journal of Financial Crime*, 29(3), 836-852.
- DesJardine, M. R., Zhang, M., & Shi, W. (2023). How shareholders impact stakeholder interests: A review and map for future research. *Journal of Management*, 49(1), 400-429.
- Devi A. & Muhyarsyah (2021). The effect of transfer pricing, foreign ownership on tax avoidance with corporate social responsibility (CSR) as a moderated variable. *International Journal of Business, Economics and Law*, 24(2), 2289-1552
- Dewi, N. M. (2019). Pengaruh Kepemilikan Institusional, Dewan Komisaris Independen dan Komite Audit Terhadap Penghindaran Pajak (Tax Avoidance) Pada Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia Periode 2012-

MODERATING ROLE OF PROFITABILITY ON THE IMPACT OF OWNERSHIP STRUCTURE ON TAX AVOIDANCE OF LISTED MANUFACTURING FIRMS IN NIGERIA

2016. MAKSIMUM: *Media Akuntansi Universitas Muhammadiyah Semarang*, 9(1), 40-51.
- Duhoon, A., & Singh, M. (2023). Corporate tax avoidance: a systematic literature review and future research directions. *LBS Journal of Management & Research*,
- Elmagrhi, M. H., Ntim, C. G., & Wang, Y. (2016). Antecedents of voluntary corporate governance disclosure: A post-2007/08 financial crisis evidence from the influential UK Combined Code. *Corporate Governance*, 16(3), 507-538.
- Firmansyah, A., & Bayuaji, R. (2019). Financial constraints, investment opportunity set, financial reporting aggressiveness, tax aggressiveness: Evidence from Indonesia manufacturing companies. *Academy of Accounting and Financial Studies Journal*, 23(5), 1-18.
- Garcia-Bernardo, J., Janský, P., & Tørsløv, T. (2021). Multinational corporations and tax havens: evidence from country-by-country reporting. *International Tax and Public Finance*, 28, 1519-1561.
- Gathogo, G., & Ragui, M. (2014). Capital structure of Kenyan firms: what determines it? *Journal of Finance and Accounting*. 5(5). 118–125.
- Ha, K. O. (2021). Corporate tax avoidance: Evidence from Vietnamese non financial listed firms: A thesis submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy at Lincoln University (Doctoral dissertation, Lincoln University).
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2–3), 127–178. <https://ourworldindata.org/taxation>
- Irianto, B.S., Sudibyo, Y.A. & Wafirli, A. (2017). “The influence of profitability, leverage, firm size and capital intensity towards tax avoidance”, *International Journal of Accounting and Taxation*, 5(2), 33-41.
- Iwenty, K. I., & Surjandari, D. A. (2022). The effect of sales growth, responsibility, and institutional ownership on tax avoidance with profitability as moderating variables. *Journal of Economics, Finance and Accounting Studies*, 4(1), 423-436.
- Kalbuana, N., Solihin, S., Yohana, Y. & Yanti, D.R. (2020), “The influence of capital intensity, firm size, and leverage on tax avoidance on companies registered in Jakarta Islamic index (Jii) period 2015-2019”, *International Journal of Economics, Business and Accounting Research (IJEBAAR)*, 4(3).
- Kimsen, K., Kismanah, I., & Masitoh, S. (2019). Profitability, leverage, size of company towards tax avoidance. *JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi)*, 4(1), 29-36.
- Kovermann, J., & Wendt, M. (2019). Tax avoidance in family firms: Evidence from large private firms. *Journal of Contemporary Accounting and Economics*, 15(2), 145–157.
- Muhammad Y., Wiwik, U., Khomsiyah., & Susi, D. M (2020). Study of quality of corporate governance and corporate social responsibility as a predictor of aggressiveness tax on issuers in Indonesia stock exchange. *International Journal of Business, Economics and Law*, 23(1), 430-440
- Nabilah, M., & Umaimah, U. (2022). The effect of good corporate governance on tax avoidance. *Indonesian Vocational Research Journal*, 1(2), 60-70.
- Nasution, A. A. (2020). Effect of inventory turnover on the level of profitability. *IOP*

- Conf. Series: Materials Science and Engineering*, 012137 725.
- Okanga, O. O. (2020). Intangibles and transfer pricing regulation in Nigeria: An exposition. *Available at SSRN 3571153*.
- Oktaviyani, R., & Munandar, A. (2017). Effect of solvency, sales growth, and institutional ownership on tax avoidance with profitability as moderating variables in Indonesian property and real estate companies. *Binus Business Review*, 8(3), 183-188.
- Olanisebe, M.B., Ahmad, H. S., & Muhammad, M.L. (2023). Institutional ownership and tax avoidance of listed companies in Nigeria: The mediating effect of profitability. *Fuoye Journal of Accounting and Management* 6(1), 84-110.
- Olika, D. (2023). Transfer pricing documentation methods in Nigeria: A critique of the prime plastichem case against international best practices. *African Journal of International and Comparative Law*, 31.
- Omes, I., & Appah, E. B. I. M. O. B. O. W. E. I. (2021). Corporate governance and tax avoidance of listed consumer and industrial goods companies in Nigeria. *IOSR Journal of Economics and Finance*, 12(2), 17-31
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York, Harper and Row
- Pratama, A. (2017). Company characteristics, corporate governance and aggressive tax avoidance practice: A study of Indonesian companies. *Review of Integrative Business and Economics Research*, 6(4), 70.
- PriceWaterhouseCoopers (2022). TAT rules on the applicability of excess dividends tax on certain tax-exempt income, VAT on reimbursements, and taxpayers' right to fair hearing. *Tax Alert*
- Putri, S. N., Hariyanto, E., Kusbandiyah, A., & Pandansari, T. (2022). The effect of capital intensity, leverage, and institutional ownership on tax avoidance with profitability as a moderation variable. *SAR (Soedirman Accounting Review): Journal of Accounting and Business*, 7(2), 86-97.
- Putri, W. A., & Halmawait, H. (2023). The effect of profitability, leverage, and corporate governance on tax avoidance of mining companies listed on the Indonesia Stock Exchange. *Journal of Exploratory Accounting*, 5(1), 176-192.
- Salihu, I. A., Annuar, H. A., & Obid, S. N. S. (2015). Foreign investors' interests and corporate tax avoidance: Evidence from an emerging economy. *Journal of Contemporary Accounting & Economics*, 11(2), 138-147.
- Salman, K. R. (2018). The tax aggressiveness behavior in the companies complying with the sharia. *Journal of Applied Economic Sciences*, 13(62), 2493–2501
- Sanchez, G. R., & Mulyani, S. D. (2020). Pengaruh leverage dan kepemilikan insitusional terhadap tax avoidance dengan profitabilitas sebagai variabel moderasi. *Dalam KOCENIN Serial Konferensi*, 10(1).
- Sarhan, A. A., & Ntim, C. (2018). Firm- and country-level antecedents of corporate governance compliance and disclosure in MENA countries. *Managerial Auditing Journal*, 33(6/7), 558-585
- Shi, A. A., Concepcion, F. R., Laguinday, C. M. R., Ong Hian Huy, T. A. T., & Unite, A. A. (2020). An analysis of the effects of foreign ownership on the level of tax avoidance across Philippine publicly listed firms. *DLSU Business and Economics Review*, 30(1), 1-14.

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- Sholikhah, M. A. A., & Nurdin, F. (2022). The effect of good corporate governance on tax avoidance: Empirical study on trade, service and investment company listed on the Indonesia stock exchange period of 2014–2020. *Jurnal Pajak Indonesia (Indonesian Tax Review)*, 6(2), 203-213.
- Supantri, R. D., & Rahmiati, A. (2020). Controlling shareholders' tendency toward tax avoidance in family firms and independent commissioners. *International Journal of Innovation, Creativity and Change*, 13(4), 664–679.
- Tijjani, B. & Peter, Z. (2020). Ownership structure and tax planning of listed firms: Evidence from Nigeria. *Journal of Accounting and Taxation*, 12(3), 99-107
- Udisifan, T. M. (2020). The moderating effect of profitability on the relationship between ownership structure and corporate tax avoidance in Nigeria listed consumers goods firms. *Journal of Material Sciences & Manufacturing Research*, 1(1), 1-16.
- Umar, M. P., Paramita, R. W. D., & Taufiq, M. (2021). The effect of leverage, sales growth and profitability on tax avoidance. *Jurnal Ilmiah Ilmu Akuntansi, Keuangan Dan Pajak*, 5(1), 24-29.
- Wier, L. (2020). Corporate tax havens and their impact on development. *Tax for Growth*. 1-16
- Willkomm, S. (2023). *Essays on corporate tax avoidance, sustainability, and tax transparency* (Doctoral dissertation, Universität zu Köln).
- Ying, T. (2015) *Corporate governance and tax strategies in Chinese listed firms*. PhD thesis, University of Nottingham
- Yoo, T., & Koh, Y. (2014). Agent or structure for principal–principal conflicts? Audit firms versus foreign ownership in the Asian context. *Asian Business & Management*, 13, 309-332.
- Yopie, S., & Elivia, E. (2022). The effect of corporate social responsibility, family ownership on tax avoidance: The effect of audit quality moderation. *Indonesian Journal of Economics, Social, and Humanities*, 4(1), 29-40.
- Yuniarsih, N. (2018). The effect of accounting conservatism and corporate governance mechanism on tax avoidance. *Academic Research International*, 9(3), 68-76.
- Zhou, J., Lan, W., & Tang, Y. (2016). The value of institutional shareholders. *Management Decision*, 54(1), 44-65.