

Tax Planning and Stock Valuation: Evidence from Quoted Industrial Goods Manufacturing Firms from Nigeria

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DOI: <https://doi.org/10.5281/zenodo.18200827>

Article History	Abstract
Original Research Article	<p><i>This study analyzed the tax strategies and stock prices of publicly traded Nigerian companies that produce industrial goods from 2015 to 2024. Companies that produce industrial goods and are publicly traded were the sources of the cross-sectional data. A model was developed to determine the relationship between stock value and several tax factors, including effective tax rate, debt tax planning, income tax planning, and non-debt tax planning. At the 5% level of significance, the fixed effects model was utilized as the estimating technique in panel data methodology. Various models were examined, including those with fixed effects, random effects, and pooling estimates. The best fit was determined using the Hausman test. According to the results of the fixed effect estimation, tax planning accounted for 32.3% of the variance in stock value among the listed industrial goods manufacturing companies. The constant beta coefficient is negative at 46.39003 and has a p-value of 0.0321. This means that, with all other variables held constant, the stock value of the quoted industrial goods manufacturing firms will vary positively by up to 46.3 units, and this variation is statistically significant. Moreover, income effect tax planning has a positive coefficient of 0.145266 and a p-value of 0.2586, suggesting that it does not significantly affect the stock value of the stated industrial products manufacturing enterprises. Debt tax planning does not significantly affect the stock value of the quoted industrial products manufacturing enterprises, as indicated by the positive coefficient value of 2.295073 and p-value of 0.0940. Not only does non-debt tax planning have a negative coefficient of -0.000346 and a p-value of 0.9990, but the effective tax rate also has a negative coefficient of -0.984548 and a p-value of 0.0002, suggesting that it has a significant negative effect on the stock value of the quoted industrial goods manufacturing firms. Tax planning affects a company's stock value for the time period studied, according to the study. It suggests that managers should plan their income taxes, but they should double-check that their plans are lawful and that they saved money for the firm so that they wouldn't have to pay too much or too little in taxes, which would improve their financial performance.</i></p> <p>Keywords: Tax Planning, Stock Valuation, Industrial Goods, Manufacturing Firms, Nigeria</p>
Received: 20-12-2025	
Accepted: 05-01-2026	
Published: 09-01-2026	
<p>Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p>Citation: Triumph Hachituru Ph.D, Onuabi Evans Jared Ph.D. (2026). Tax Planning and Stock Valuation: Evidence From Quoted Industrial Goods Manufacturing Firms from Nigeria. UKR Journal of Economics, Business and Management (UKRJEBM), Volume 2(1), 48-63.</p>	

INTRODUCTION

A company's worth can be ascertained through a process known as valuation. There are scientific and artistic components to the complex process. There are essentially three schools of thought when it comes to valuing stocks: fundamental, technical, and modern portfolio theory (MPT). Valuing stocks is a great help for a lot of reasons. First, correct information can be provided by a good valuation, allowing investors to make informed decisions about which stocks to buy and which ones to sell. Second,

any time a business owner is thinking about selling, merging, acquiring, forming a joint venture, or forming a strategic alliance, they should have a thorough appraisal done. Third, valuations are frequently requested by the government or judicial authorities in connection with legal problems, including conflicts involving company partnerships and the creation and administration of employee stock ownership plans. Last but not least, a properly stated valuation can aid in determining what is

required to raise the company's worth, bring in additional funding, or estimate possible IPO proceeds. Because of these factors, stock valuation is crucial (Omesi & Appah, 2021). The underlying worth of a stock is defined by its operational and financial performance, both now and in the future, according to this theory. In addition to growth, earnings, dividends, cash flows, profit margins, risk, and interest rates, there are other variables that contribute to value. In order to determine the true worth of a stock, fundamental analysts look at economic, industry, and company statistics as a whole.

Many people have different ideas about what value is (Omesi & Appah, 2021). Value, according to Adegbie, Akintoye, and Isiaka (2019), can be understood by considering its fair market value, investment value, intrinsic value, and fair value. According to Adegbie, Akintoye, and Isiaka (2019), investors are willing to pay a premium for a larger chance of financial gain, which in turn drives up the share price. According to Chukwudi, Okonkwo, and Asika (2020), firm value is the amount that wealthy investors pay to acquire a company. They went on to say that firm value is also the value that the public attributes to a company in terms of its ability to stay in business. Thus, a company's worth is directly proportional to its total assets. Liabilities and the market value of shares make it up. Stock prices, returns on investment, earnings per share (EPS), price earnings ratio (PER), Tobin's Q, and price to book value (PBV) are the metrics that investors use to assess a company's worth, according to Hidayat et al. (2019). In addition, Adegbie, Akintoye, and Isiaka (2019) noted that market-based indicators typically use Tobin's Q, but accounting-based indicators including return on equity, price earnings ratio, price to book value, and return on assets can be used to estimate firm value. Divided by total assets, it is the sum of the following: total assets + market value of ordinary shares minus book value of ordinary shares minus deferred tax (Omesi & Appah, 2021). Tobin's Q is a measure of firm worth that reveals how well management has handled the firm's assets. According to Adegbie, Akintoye, and Isiaka (2019) and Hidayat et al. (2019), its value reflects the state of the firm's investment opportunities or its growth potential. This provides rationale for management's pursuit of value maximization, which may include tax optimization measures that lead to tax savings for corporations.

In most cases, businesses would rather pay as little tax as possible or even get a refund for the amount they owe. Reason being: in order to maximize shareholder wealth, profit-oriented corporations must minimize tax burden/cost and increase profit after taxes. Consequently, with this end in mind, a lot of businesses use tax-saving strategies that will help them perform better. Government decrees, acts, or

case laws impose an obligatory charge on the revenue of individuals and organizations, regardless of the exact quantity of services supplied to the payer, in the form of a tax. Efforts by businesses to lower their tax obligations are commonly referred to as tax aggression, corporate tax saving, or tax planning (Kiabel & Akenbor, 2014). If you want to save money on your taxes without breaking any laws, you should try tax saving strategies (Suandy, 2011). There is a spectrum of business tax saving tactics, from those that are entirely lawful and low-risk to those that involve tax evasion or tax sheltering, according to Hanlon and Heitzman (2010).

Having less money available for distribution is a logical consequence of paying taxes. Therefore, taxpayers want to make sure that taxes cut into their profit or income as little as possible. When people legally reduce the amount of tax they pay by using certain strategies, this is called tax savings behavior. Business managers should prioritize tax savings as an investment decision in order to increase shareholder value, according to Armstrong, Blouin, Jagolinger, and Larcker (2013). It is unclear if tax savings dictate firm sizes or if firm sizes inform about tax saving behavior, but it is reasonable to assume that variables affecting firms' overall investment strategy and position would impact their size. Tax savings approach could be driven by a number of other causative elements, even though the direction of causality is ambiguous. In order to put business decision makers in the best position to increase value for investors, it would be helpful if they had a grasp of these aspects.

Omesi and Appah (2021) state that there are two ways to look at the connection between tax preparation and the value of a company. According to Wahab and Holland (2012), tax planning is of interest to shareholders since it boosts after-tax profitability. It is possible for managers to engage in opportunistic tax planning, according to the second perspective. According to Wahab and Holland (2012), managers may be tempted to underreport their firm's taxable income in order to minimize their corporate income tax bill, which can have a negative impact on the firm's value. Tax planning and firm value have been found to be positively and negatively correlated in previous empirical research. Some studies found a positive correlation between tax planning and firm value (Kirkpatrick & Radicic, 2020; Oeta, Kiai & Muchiri, 2019; Izevbehai and Odion, 2018; Oeta, Kiai & Muchiri, 2019; Chukwudi, Okonkwo & Asika, 2020; Nafti, Kateb & Masghouni, 2020), while others found a negative correlation (Oeta, Kiai & Muchiri, 2019; Razali, Ghazali, Lunyai and Hwang, 2018; Oeta, Kiai & Muchiri, 2019). Even while the theory and data are solid, some results don't hold water when it comes to the impact of various tax

strategies and stock valuation techniques. For that reason, this research looked at how different tax strategies affected the stock value of publicly traded Nigerian companies that made industrial goods.

LITERATURE REVIEW

Tax Savings

Uchendu, Ironkwe, and Nwaiwu (2016) state that tax planning encompasses strategies aimed at minimizing a company's corporate tax liability and minimizing the impact on the business's cash flow by determining the most advantageous time to settle the tax liability without penalty (Chukwudi, Okonkwo & Asika, 2020). Corporate tax planning strategies that are up to snuff according to Nwaobia, Kwarbai, and Ogundajo (2016) can reduce effective tax rates to levels below the statutory tax rate. They went on to say that tax planning strategies boost businesses' after-tax profits because they increase their cash flow. According to Chukwudi, Okonkwo, and Asika (2020), tax planning is when businesses follow the rules of the applicable tax regulations in order to reduce their tax bill as much as possible by maximizing their effective tax rate. According to Soufiene, Khoula, and Mohamed (2016), one goal of tax planning is to maximize after-tax profits for corporations while minimizing their tax liability. Tax planning can be either proactive or reactive, according to Izevbekhai and Odion (2018). In an instance of active tax planning, a person engages in financial transactions with the goal of reducing their tax burden. In contrast, the goal of passive financial planning is not to minimize tax obligations when reporting financial data. Tax planning employs all available tax incentives, such as exemptions, deductions, rebates, and reliefs, with the express purpose of lowering a company's tax burden (Ilaboya, Izevbekhai, and Ohiokha, 2016). According to Chen, Chen, Cheng, and Shevin (2010), tax planning is a crucial tool for corporate managers to reduce profits for shareholders and organizations by minimizing tax liabilities. The effective tax rate is a metric that can be used to evaluate tax planning strategies, according to Izevbekhai and Odion (2018) and Chukwudi, Okonkwo and Asika (2020). According to Izevbekhai and Odion (2018), a company's capacity to engage in efficient tax planning is determined by its effective tax rate and the amount of money it may save in taxes.

Tax planning refers to the process of utilizing relevant incentive provisions for business tax payers in accordance with enabling legislation like the Income Tax Act, Personal Income Tax Act, Value Added Tax Act, and other statutes. Tax statutes permit deductions, rebates, investment allowances, roll-over loss relief tax exemptions, and pioneer status incentives, among other tax concessions, upon which companies can construct their tax plans.

Whether a taxpayer takes an active or passive approach to tax planning is dependent on their objectives while carrying out a transaction. When a transaction is done with the intention of reducing taxes, active tax planning tactics are relevant, as Yimbila (2017) confirmed. The term "passive tax planning" describes a situation in which a transaction is executed without a conscious effort to reduce the tax liability.

Tax planning, according to Dada and Adetola (2017), can lead to a decline in firm value if managers take advantage of the potential to undervalue reported accounting profit and the incentive to understate taxable revenue in order to lessen the burden of corporate income taxes. In Nigeria, avoiding paying taxes is considered more of a civil than a criminal infraction. When a company arranges its operations in a way that minimizes the amount of tax it must pay in accordance with the rules, it is engaging in tax avoidance (Kiabel & Nwikpasi, 2001). Therefore, it is possible to legally avoid paying taxes, but it requires careful tax preparation. A company's management must engage in tax planning if they wish to minimize the tax burden on the business. Management is compelled to maximize and employ the available resources through tax planning, which is why it is vital.

The following are some of the many reasons why tax savings is important: it helps taxpayers in a legitimate way, it lets businesses invest in companies that offer good tax savings, it lets businesses keep an eye on valid laws, and it helps states achieve their investment and economic development goals (Alabi, 2001). Tax shelter, effective tax rate, capital intensity, effective tax rate, effective tax rate for cash, marginal tax rate, current effective tax rate, accounting effective tax rate, book-tax gap, tangibility, and lease option are some of the tax planning strategies that corporations use. Tax planning techniques can center on a variety of themes, including the shape, size, and nature of the organization, its capital mix, the choice of accounting period, the structure of the market, investment policy, and dividend policy (Alabi, 2001; Kiabel & Nwikpasi, 2001; Sharayri & Momani, 2009).

Income Effective Tax Saving Strategy

Another popular measure of tax aggression is the income effective tax, which is also called the book tax differential. The gap between reported and taxable income is used to calculate this. A common method for estimating taxable income is to use the statutory rate to total up current tax expense. According to Wilson (2009), there was some indication that BTDs were linked to tax shelters, but other research found that BTDs were a reliable indicator of active tax planning. This presupposes that managers would rather employ tax methods that lower their income tax bill.

According to the majority of studies, companies' decisions on tax and financial accounting are rather autonomous.

It would seem that BTDs should reveal anything regarding the tax avoidance practices of corporations if this is the case. Conceptually, BTDs do not always indicate tax avoidance, particularly when they are caused by earnings management, which is the over-reporting of book income. Accurately documenting the tax-related element of a BTD is a huge issue for tax research because legitimate tax results are more harder to derive than, say, earnings quality features (Hanlon & Heitzman 2010). The use of BTDs as a proxy for tax aggressiveness may be further complicated by the availability of firm-specific features that are not related to aggressive tax or book reporting (Wilson, 2009). Although it is wise to exercise care, there is a lot of research suggesting that big positive BTDs could be a good indicator of tax avoidance.

Large discrepancies between taxable and book income may be interpreted by tax authorities as an indication of possible tax aggression, given that both types of revenue are ultimately derived from the same economic operations. There are two major drawbacks to the effective tax rate based metrics. For starters, the book effective tax rate doesn't take into consideration the tax aggressiveness linked to temporary book-tax discrepancies. This is because gains in deferred tax expense more than make up for decreases in current tax cost, which is why total tax expense includes both. Secondly, if a company accounts for contingencies related to unknown tax benefits that result from aggressive tax postures, then both the book effective tax rate and the actual book effective tax rate can be understating the firm's tax aggressiveness (De Waegenaere, Richard & Jacco, 2011).

Non-Debt Tax Saving Strategy

Depreciation, investment tax credits, and deferred tax losses were discovered by De Angelo and Masulis (1980) to be deductible from taxes, similar to loan interest. In addition, it has the potential to lower capital expenditures by reducing cash outflows and reducing financing requirements for businesses. Therefore, a non-debt tax shield is one that is neither a loan nor a debt but nevertheless has a tax credit component. A different impact on debt is caused by the non-debt tax shield. As a tax incentive, it has been utilized by the majority of governments and can compensate for the issue of a debt tax shield. Debt being pushed out by different substitutes or non-debt tax shields is an alternate explanation for the underleverage puzzle. Investment tax credits and loss carryforwards are two instances of such non-debt tax protections. Businesses may favor alternative tax shelters over debt for many reasons, and they often lack transparency in their efforts to permanently delay or evade taxes. The statement that they

are less expensive was confirmed by Kolay, Schallheim, and Wells (2013). In this respect, the corporation incurs no additional costs due to the abundance of non-debt tax shelters, in contrast to the expensive interest payments associated with debt.

Secondly, they do not impose debt covenants that would limit the company and cause excessive transaction fees. Thirdly, accounting earnings management is aided by non-debt tax shields, which take advantage of accounting rule features that permit the corporation to lower taxes without impacting the income statement. Finally, with the rise of thin capitalization regulations, there are alternative debt tax shields that offer a higher return on investment per naira.

Debt Tax Saving Strategy

When a company's capital structure shows more debt than equity, it is engaging in debt tax shielding (Farrar & Mawani, 2008). Put simply, the funding pattern leans more heavily towards debt than equity. Nonetheless, the amount of profit that the corporation reports as taxable income is affected in some way by this pattern of corporate financing. A number of nations' business tax policies permit interest payable or paid deductions prior to profit computation. If a company has a lot of debt, it will pay more interest, which implies less money coming in as profit. As a result, the thin capitalization rule establishes a ratio of debt to equity. According to Fraser and Mawani (2008) and Egger, Keuschnigg, Merlo, and Wamser (2014), there is a ceiling on the amount of internal debt that can be claimed as a tax deduction for a specific level of equity, as proposed by Graham and Tucker (2006). The International Monetary Fund states that thin capitalization requirements typically function by reducing the amount of debt that may be used to deduct interest expenditures when computing taxable profit (IMF, 2014). A high amount of interest is paid by a corporation with an intentionally debt-focused structure. The taxable income of the business can be reduced because interest expenses are usually deductible according to tax regulations. Therefore, a business can lower its tax liability by employing this tactic.

Consequently, businesses that rely on debt financing rather than equity investment could benefit from tax breaks on interest payments rather than dividends. Because interest is not taxable until the borrowing business actually makes a profit, this is the case. This increases the allure of debt financing for connected businesses looking to move income in order to avoid taxes. Firms weigh the benefits and drawbacks of taking on different amounts of debt in order to determine the ideal level of debt for their business, taking into account the impact of debt expenses (Frank & Goyal, 2008). One major perk of taking out a loan is that you may deduct the interest you pay, which means you'll pay less in taxes.

Stock Valuation

The existing financial system is built upon the foundation of stock valuation. It allows companies that are well-managed to charge more for their products or services. Conversely, it guarantees that the valuations of enterprises with poor fundamentals would fall. Therefore, the modern economic system is able to distribute finite capital resources among different market participants efficiently thanks to the science and art of stock valuation. The stock price is always being adjusted by the markets as they try to factor in the financial implications of new information. Since different people have different ways of estimating the effect, different people might come up with different stock prices. This means that investors may place a different value on a firm than what its market value indicates. This discrepancy is known as "intrinsic value." If they correctly identify this difference, investors can make a tidy profit. According to Nordin et al. (2019), all the necessary information is easily accessible in the market for valuing stocks, on contrast to the complex and diverse process of direct property assessment. The Stock Exchanges provide a platform for stock values, analysts, and investors to evaluate pertinent data. Thorough fundamental study is what ultimately decides a stock's worth. Fundamental analysis is a method of analyzing the intrinsic worth of a company's stock by looking at past accounting and financial data. Nti et al. (2020) notes that this data is accessible in the company's website, public announcements, and published annual report.

Theoretical Framework

This study on tax planning and firm value is based on Hoffman tax planning theory, just like Omesi and Appah (2021). Akintoye, Adegbe, & IHEME-ONYEKA (2020) cite Hoffman (1961) as the source of this theory's development. According to Fagbemi, Olaniyi, and Ogundipe (2019), this tax planning theory is useful when lowering a company's tax liability doesn't hurt its bottom line. Hoffman cited the complexity and loopholes in tax laws as a result of hidden intentions; Ogundajo and Onakoya (2016) and Akintoye, Adegbe, and IHEME-ONYEKA (2020) both agreed that corporations can save money on taxes by implementing well-planned tax strategies that adhere to the letter of the law. Tax planning is complicated, tax planning offers several benefits, tax planning is not used properly, and many people are unaware of the advantages of tax planning, according to Abdul-Wahab and Holland (2012), Abdul-Wahab (2016), and Akintoye, Adegbe, & IHEME-ONYEKA (2020). Hoffman (1961) also provided four principles of tax planning. Based on Akintoye, Adegbe, & IHEME-ONYEKA (2020) and Abdul-Wahab (2016), tax planning can only be maintained for a limited time if tax planning techniques do not involve dynamic tax management tactics, according to

Hoffman's (1961) thesis. Consequently, this theory supports the idea that entities should use tax preparation tactics as long as they are legal. This idea is pertinent to the research at hand because corporations that make the most of legal loopholes to lower their tax liability and increase their after-tax profit typically keep their leverage at an optimal level, allowing them to benefit from a tax shield on deductible interest.

Empirical Review

The impact of corporate performance on tax planning of consumer goods companies listed on the Nigeria Exchange Group (NGX) was investigated by Kwaghfan et al. (2025). The study's variables are net profit margin, return on equity, and return on assets. The dependent variable, tax planning, was assessed using the effective tax rate. This research made use of secondary data culled from the annual reports of eighteen publicly traded consumer goods businesses. Using 108 observations spanning the years 2017–2022, the study used multiple regression as its technique of analysis. According to the research, tax planning is positively and significantly affected by ROA and ROE. Listed consumer goods companies' tax preparation had a favorable but little impact on their net profit margin. Companies should hire tax professionals and use healthier tax planning tactics to boost their financial performance, according to the report. The impact of tax planning on return on equity (ROE) was investigated by Muideen, Ismaila, and Mohammed (2024) for 32 out of 58 listed MCN. With return on equity (ROE) as the dependent variable, the study examines tax planning through the use of effective tax rate (ETR), book-tax difference (BTD), and tax-to-total assets (TAS). The stated MCN's financial statements were used to compile panel data from 2013–2022, and the researchers used multiple regression models to draw conclusions based on the correlational and panel study methodologies. In order to fix the cross-sectional dependence among the data, the diagnostic test recommended using panel corrected standard errors (PCSE). Listed MCNs' ROE is significantly impacted positively by BTD and TAS, and negatively by ETR, according to the PCSE regression model. The study's reliance on ratio analysis and historical data is its main weakness. Because of the potential for manipulation and the impact of non-financial elements on narratives, this may not be able to provide reliable future predictions. The government ought to investigate the problems caused by industrial enterprises' multiple taxes. This would greatly enhance return on equity by lowering the ETR. According to the results, listed MCNs' ROE is significantly affected by effective tax planning. Listed MCN management should focus on qualifying capital expenditure, use debt to finance asset acquisition for interest expense relief, and properly time asset acquisition and disposal to improve the effective

tax rate. This would reduce the tax and the tax to total asset ratio.

The tax tactics, value-based performance, and tax avoidance of Nigerian manufacturing enterprises were studied by Igbinovia (2024). As metrics for tax evasion and tax planning, the research used thin capitalization, tax savings, book tax difference, and capital intensity. An indicator of both the firm's internal dynamics, like return on profit, and its performance relative to its market base, Tobin's Q is used as a proxy in this study. From 2014 to 2021, twenty-eight (28) manufacturing enterprises had their audited annual reports used to derive secondary data. Panel estimation results reveal that, for listed Nigerian manufacturing firms, thin capitalization has a positive and statistically significant effect on Tobin's Q measure of performance; for these same firms, book tax difference has a positive and inverse effect on return on asset and Tobin's Q measure of performance, respectively, and both effects are statistically significant at 5%; and for these firms, capital intensity has an inverse and statistically significant effect on Tobin's Q measure of performance. While thin capitalization does not appear to fit to expectation, the coefficient signs of tax savings, book tax difference, and capital intensity conform to a priori and theoretical expectations, according to the study's conclusions. In order to avoid the risk of bankruptcy while preparing taxes, it suggests that managers keep an eye on the capital structure's debt-to-equity ratio. The effect of tax strategies on the bottom lines of publicly traded Nigerian manufacturers of industrial goods was studied by Adamu and Joab (2023). The research made use of panel data and an ex-post factor design. In this study, twelve (12) firms dealing in industrial goods were included in the population. These firms were listed on the Nigerian Exchange Group (NGX) from 2012 onwards, and a sample size of six (6) firms was chosen using a backward filtration process. The sample was then used for the period ending on December 31, 2022. The chosen companies' annual reports and audited accounts served as the secondary sources from which the study's data was culled. We used STATA 14 to examine data that spanned a full decade. The research team in this study analyzed the data using descriptive statistics and OLS regression. The results show that listed industrial goods firms in Nigeria have a negative and insignificant relationship between capitalization and financial performance, and a positive and insignificant relationship between research and development expenditure and financial performance. Based on this, the study suggests that businesses can boost their bottom line by investing in a variety of high-yield assets that offer tax breaks, diversifying their product lines, and participating in CSR initiatives.

Listed Nigerian deposit money banks' financial performance was studied by Eche et al. (2023) in relation to corporate tax planning. Debt tax shield and income effective tax are proxies for corporate tax planning, and Tobin's Q is a proxy for financial performance. From 2010 to 2019 was the primary focus of the research. The mentioned deposit money banks in Nigeria's individual financial reports were used to compile the panel data. Twelve (12) of Nigeria's listed deposit money banks were used in the sample. To estimate the important association between corporate tax planning and Tobin Q, the study used an ordinary least square regression model. According to the findings, debt tax shield significantly affects Tobin Q, whereas income effective tax has no discernible impact. Reducing the income tax rate from 24% to 20% is one of the tax measures suggested by the report. Banks can lower their tax bill by taking out loans instead of using equity since interest is a tax write-off that lowers their chargeable earnings. When Vu and Le (2021) looked at non-financial enterprises listed in Vietnam and how tax planning affected their firm value, they found that state ownership tempered the effect. The study employed the effective tax rate as a metric for tax planning, the percentage of state equity holdings as a measure for state ownership, and Tobin's Q as a metric for business value. Statistical papers and audited financial statements from 513 companies were used to compile the data for the study, which ran from 2015 to 2019. Tax planning reduces the value of a company, according to a generalized least square regression study.

From 2015 to 2019, Omesi and Appah (2021) studied the impact of corporate tax saving strategies on the firm value of consumer products companies listed in Nigeria. Using Taro Yamen's technique to estimate the sample size, the study used an ex post facto and correlational research strategy on twenty-six companies. The study's data was analyzed using the pooled ordinary least square method, which was based on the publicly available yearly financial statements of the companies that were part of the sample. Effective tax rate, tax savings, capital intensity, and corporate firm value were found to be negatively and insignificantly related. A company's worth is unaffected by tax preparation, according to the research. This includes both the effective tax rate and tax savings. Companies should use suitable tax planning measures to reduce their tax payments and increase their overall corporate value, according to the study. In their study, Bhagiawan and Mukhlisin (2020) looked at how corporate governance factors such board size, gender diversity, audit quality, independence, and audit committee size moderated the effect of tax planning on firm value. Using 266 pieces of observational data, the study examined industrial enterprises trading on the Indonesian Stock Exchange (IDX) between 2016 and 2018. Tax planning increased the

worth of the company, according to the regression study. The correlation between tax strategy and company value was reduced by other regression analysis outcomes, such as a gender-diverse board of directors and a small audit committee. Tax planning in connection to firm value was not affected by board size, board independence, or audit quality, though.

Utilizing an ex post facto research strategy, Akintoye, Adegbe, and IHEME-ONYEKA (2020) examined the tax planning tactics and profitability of listed Nigerian manufacturing enterprises from 2008 to 2017. Based on Taro Yamini's model, the study's sample size was determined to be forty-six (46), with fifty-two (52) firms making up the population. Data for the study came from the sample companies' annual reports, which are considered secondary sources. A combination of descriptive and inferential statistics were used to examine the data retrieved from the publicly available financial statements. There was no statistically significant correlation between tax planning and ROA for listed Nigerian manufacturing enterprises, according to the multiple regression analysis. Financial performance of listed manufacturing enterprises in Nigeria might be positively or negatively impacted by tax planning tactics, according to their analysis.

In their 2020 study, Timothy, Izilin, and Ndifereke looked at the relationship between firm valuation, board compensation, and corporate tax planning in Nigeria from 2008 to 2015. An ex post facto research design was used in the study. For the time period under consideration, 71 out of the total number of enterprises listed on the Nigerian Stock Exchange (NSE) that were not involved in finance or the oil and gas industry made up the sample. The study's data came from publicly available financial records of companies who participated in the sample. The effective tax rate and return on assets are the dependent variables, while business size and leverage are the control factors. Descriptive and inferential statistics, including regression and correlation analysis, were used to examine the secondary data. Their findings imply that listed non-financial enterprises in Nigeria have a positive and statistically significant relationship between tax preparation practices and firm value.

Listed consumer products businesses on the Nigerian Stock Exchange from 2009 to 2018 were the subject of an investigation into tax planning and firm value by Chukwudi, Okonkwo, and Asika (2020). Their study used an ex post facto research strategy, and twenty-one enterprises made up the sample size, with the population consisting of all consumer goods sector. The study's data came from publicly available financial statements and accounts of the companies that were part of the sample. Descriptive and inferential statistics were used to analyze

the acquired data. Panel multiple regression served as the guiding model for the inferential statistics. According to the data, book tax difference has a positive and substantial effect on firm value, whereas effective tax rate, a proxy for tax planning, has a negative and significant effect.

Research on the tax strategies and bottom lines of Nairobi Stock Exchange companies listed between 2010 and 2017 was conducted by Oeta, Kiai, and Muchiri (2019). They used an exploratory research design and positivist research methods in their investigation. This study used descriptive and inferential statistics from multiple regression analysis to sift through data extracted from the publicly available annual reports of the companies that made up the sample. Listed Kenyan manufacturing companies' tax preparation strategies did not correlate with their financial performance, according to the study's results. There was no correlation between tax planning and the financial performance of Kenyan traded companies, according to the study.

From 2006 to 2016, Fagbemi, Olaniyi, and Ogundipe (2019) studied the financial performance and corporate tax planning of Nigerian deposit money institutions. All banks registered on the Nigeria Stock Exchange during the time period under consideration made up the population, and the study used an ex post facto research methodology. The study's data was culled from the examined banks' publicly available annual reports and analyzed with descriptive, diagnostic, and inferential statistics. An ordinary least squares pooling model served as the basis for the inferential statistics. According to the results, the financial performance of banks is considerably and adversely affected by the effective tax rate. Additionally, the study found that capitalization significantly affects financial performance in a positive way, although capital intensity and leasing option showed little influence. Depending on the tax planning technique employed, they determined that corporate tax planning affects the financial performance of banks.

For the years 2014–2016, Silvy (2019) looked at manufacturing companies listed on the Indonesian Stock Exchange and how they planned their corporate taxes and the worth of their businesses. Research methods such as ex post facto and correlation were used in the study. Using purposive sampling, a total of 43 manufacturing enterprises were selected from the study population. Data was sourced from the sampled firms' annual reports and accounts, which are considered secondary sources. Descriptive and inferential statistics from multiple regression analysis were used to examine the secondary data. Firm value is negatively affected by tax planning, specifically cash effective tax, according to the regression finding.

Tax planning and firm value in Malaysia from 2014 to 2016 were investigated by Razali, Ghazali, Lunyai, and Hwang (2018). Research methods such as ex post facto and correlation were employed in the study. Financial statements of 387

companies were used as a source for the secondary data. A number of control variables were included, including business size, leverage, asset tangibility, age, dividend, and the dependent variable, firm value. The independent variables included the effective tax rate and book tax disparities. The data was analyzed using descriptive and inferential statistics. Multiple regression analysis demonstrated a positive and statistically significant relationship between effective tax rate and firm value, and a negative and statistically significant correlation between book tax difference and firm value. There was an inverse relationship between the independent variables and the control variables of business age, dividend, asset tangibility, and leverage. The researchers found that an appropriate effective tax rate affects company value.

From 2010 to 2016, Izevbekhai and Odion (2018) examined the tax strategies and company valuations of naira-listed firms. A research design known as ex post facto was employed in the study. Their study included a total of 89 firms as a sample, with all companies listed on the Nigerian Stock Exchange making up the population. Information was culled from the publicly available financial records of the companies that made up the sample. The TobinQ score served as the dependent variable, with the Effective Tax Rate, Tax Savings, and a number of control variables serving as the independent variables. We used descriptive, diagnostic, and inferential statistics to examine the company data. The panel regression model served as the basis for the inferential statistics. According to panel regression analysis, tax savings shown a positive and negative association with business value, however effective tax rate was found to have a negative association. Firm value was positively associated with firm size, the control variable, and negatively associated with leverage and capital intensity.

Corporate tax planning and company value of non-financial enterprises listed on the Nigerian Stock Exchange for the period 2004 to 2014 were researched by Salawo, Ogundipe, and Yeye (2017). With a total population of 151 and a stratified sampling technique used to choose 50 organizations, the study used an ex post facto and correlational research design. Econometric models including stationarity tests, panel cointegration tests, vector autoregression, and granger causality were used to analyze the data obtained from the sampled companies' published financial statements, which were considered secondary sources of data for the study. Tobin Q was the dependent variable while tax preparation was the independent variable. The results demonstrated a strong non-directional causal relationship between ETR and FirmValue in tax planning.

Between 2010 and 2014, Nwaobia, Kwarbai, and Ogundajo (2016) examined the listed consumer products industrial sector in Nigeria to determine tax planning and business value. With a population of eighty listed consumer goods firms and a sample size of ten (10) firms, their study utilized an ex post facto research design. The 10 sample companies' publicly available financial statements and accounts for the time period

under consideration provided the data used in their analysis. Statistical methods for both descriptive and inferential analysis were used to examine the collected secondary data. The panel regression model served as the basis for the inferential statistics. Firm value is positively and significantly correlated with effective tax rate, dividend, and firm age, according to the analysis. The study also found that financial leverage, business size, and tangibility all had a negative effect on firm value.

In their 2015 study, Lestari and Wardhani looked at the tax strategies and company values of Indonesian listed non-banking and financial companies from 2010 to 2011. They used a correlational and ex post facto research strategy in their investigation. All listed non-banking and financial firms made up the population, and 221 firms were selected using purposive sampling. Data for the study came from a random selection of companies' financial filings. Firm value served as the study's dependent variable, tax planning as the independent variable, and board diversity as the moderator variable. Multiple regression models were used for both descriptive and inferential analysis of the data gathered from the annual report. Based on the data, it appears that tax preparation does increase the worth of a company. Additionally, tax planning and company value are both positively affected by a diverse board.

METHODOLOGY

The research design used in this study is quasi-experimental. The research includes all companies listed on the Nigerian stock exchange that produce industrial goods. According to the Nigerian Exchange Group Fact-book from 2024, there are a total of fifteen companies listed on the exchange that manufacture industrial goods. The data used in this study from secondary sources. Companies' annual reports and financial statements covering the years 2015–2024 were used as data sources for this study. The data that is currently available dictated this time frame.

Model Specification

From theories, principles and empirical findings, the models below are specified in this study.

$$SV = f(IETP, DTP, ETR, NDTP) \quad (1)$$

It is empirically stated as

$$SV = \beta_0 + \beta_1 IETP + \beta_2 DTP + \beta_3 ETR + \beta_4 NDTP + \mu \quad (2)$$

Where:

- SV = Stock valuation
- IETP = Income effective tax planning
- DTP = Debt tax planning
- ETR = Effective tax rate
- NDTP = Non Debt tax planning

$$\beta_0 = \text{Intercept Term}$$

$$\beta_1 - \beta_5 = \text{Coefficients}$$

$$\mu = \text{Error term}$$

Pooled Effect

The research utilizes the panel data methodology for analysis, incorporating pooling effects, fixed effects, random effects, and the Hausman Test.

Pooled Effect Model

$$SV = \beta_0 + \beta_1 IETP + \beta_2 DTP + \beta_3 ETR + \beta_4 NDTP + \mu \quad (3)$$

Fixed Effects

Using a constant intercept for all of the various cross-sectional structures, the fixed effects zero in on the differences in the allowance between ownership structure and profitability of listed food and beverage manufacturing enterprises. The dummy variable for bank i , D_i , can be represented as follows if we assume that dummy variables for banks are either 1 or 0.

$$D_i = \begin{cases} 1, & j = i \\ 0, & \text{otherwise} \end{cases} \quad D_2 = \begin{cases} 1, & j = 2 \\ 0, & \text{otherwise} \end{cases} \quad \dots \quad D_N = \begin{cases} 1, & j = N \\ 0, & \text{otherwise} \end{cases} \quad \dots \quad (4)$$

The regression of total samples can be expressed as

$$Y_{it} = \sum_{t=1}^N \beta_{ot} D_t + \beta_i D_s + \beta_2 D_{ma} + \beta_3 S_1 + \beta_{it} D_4 S_2 + \varepsilon_{it} \quad (5)$$

The dummy variables are expressed as follows: if $j = i$, then $D_j = 1$; otherwise $D_j = 0$.²

To go deeper into the fraud effect, Adebayo (2012) examined the influence of ownership structure on the profitability of publicly traded food and beverage manufacturing companies. The analysis delineates the impact of ownership structure on the profitability of publicly listed food and beverage manufacturing enterprises.

$$SV_{it} = \sum_{t=1}^N \beta_0 + \beta_1 IETP + \beta_2 DTP + \beta_3 ETR + \beta_4 NDTP + \mu \quad (6)$$

Estimation efficiency is enhanced by eliminating the increased covariance produced by individual-firms differences, thanks to the fixed effects that account for both cross-sectional and time-series data.

Random Effects

Random effects look at how the study sample as a whole is related to each other. This is why the samples are chosen at random instead of using the total population. The whole sample regression, which is a function of the random effect, can be written as:

Hausman Test

The most popular way to evaluate fixed and random effects is with the Hausman test (YairMundlak 1978). The fixed-effects model is more appropriate than the random-effects one in cases where the variables have a high degree of statistical correlation since it provides more consistent and efficient results. In contrast, the random-effects approach is more appropriate if the variables do not exhibit any statistical correlation; fixed-effects estimation, on the other hand, is consistent but wasteful.

μ = Error term

β = Beta

We utilize Mc Fadden R^2 to try to gauge how well the models fit the data. In addition to the R^2 statistic, other tools for dealing with multi-collinearity issues include the correlation matrix, tolerance value, and variance inflation factor. Our program of choice for all these investigations is E-VIEW 9.0. The best numerical output predictions are made by well-structured regression models, which are versatile, powerful, and easy to use. Also, thanks to their help, we can look at how multiple variables affect a result simultaneously.

Prior Expectation of the Result

We anticipate a positive and direct relationship between the dependent variables and the explanatory variables. Companies listed on the stock market should see an uptick in their financial performance for every one unit increase in the aforementioned variables.

Method of Data Analysis

The study employed the Ordinary Least Square (OLS) estimation approach, which is a form of multiple regression, which is an equation with one dependent variable and more than one independent variable. The OLS makes use of two sets of statistical tools: the T-statistic for evaluating the importance of individual variables and the F-

test for assessing the overall significance of the regression. The modified R-squared statistic was utilized to assess the percentage variation of the dependent and independent variables, and the Durbin-Watson test was utilized to determine whether there was autocorrelation among and between the explanatory factors.

Fixed Effects Model vs. Random Effects Model

According to Brooks (2014), fixed effects models permit cross-sectional but not time-dependent differences in the regression model's intercept, but hold all slope estimates constant, regardless of cross-sectional or time-dependent variations. According to Brooks (2014), time-fixed effects

models allow the intercepts to change over time while keeping them constant across entities at any given moment in time. This is because it is expected that the average value of $y(i,t)$ changes with time but not in a cross-sectional fashion. The fixed effects model has its advantages, but it also has certain disadvantages. The degrees of freedom would decrease by introducing several dummy variables, according to Gujurati (2004). The likelihood of multicollinearity might also be heightened by issues involving numerous variables. Two types of dummies, cross-sectional and time-fixed, would be used in a model including both types of effects (Brooks, 2014).

ANALYSIS AND DISCUSSION OF FINDINGS

Table 1: Descriptive Statistic

	SV	IETP	DTP	ETR	NDTP
Mean	55.87678	25.76107	11.04121	19.01946	26.71262
Median	54.09000	25.24000	10.79000	18.33000	26.20000
Maximum	88.92000	51.88000	12.81000	25.90000	37.05000
Minimum	30.44000	9.490000	9.230000	13.65000	19.72000
Std. Dev.	9.356787	12.44555	1.377455	3.890396	5.350649
Skewness	0.302885	0.629969	-0.139103	0.399093	0.716721
Kurtosis	4.120093	2.108929	1.403702	2.181612	2.416729
Jarque-Bera	10.06722	14.78485	16.30039	8.113415	14.86873
Probability	0.006515	0.000616	0.000289	0.017306	0.000591
Sum	8325.640	3838.400	1645.140	2833.900	3980.180
Sum Sq. Dev.	12957.32	22923.97	280.8124	2240.007	4237.158
Observations	149	149	149	149	149

Source: Extract from E-view, 12.0

Detailed information on the dependent and explanatory variables can be found in table 1. The stock value ranges from 30.44000 to 88.92000, with a mean of 55.87678 and a standard deviation of 9.356787, as shown in the table. There is little to no dispersion of the data around the mean, since the standard deviation is smaller than the mean value (9.356787), which means that the data differ from the mean value on both sides

by 9.3. With a mean of 25.76107 and a standard deviation of 12.44555, income effective tax planning ranges from a low of 9.490000 to a maximum of 51.88000. With a standard deviation of 12.44555, we can see that the data are off by 12.4 on both sides of the mean, which means that the data are not very dispersed around the mean.

Table 2: Covariance Analysis: Ordinary

Correlation	SV	IETP	DTP	ETR	NDTP
t-Statistic					
Probability					
SV	1.000000				
IETP	-0.207904	1.000000			
	-2.577018	----			
	0.0110	----			
DTP	0.379126	-0.019412	1.000000		
	4.967513	-0.235404	----		
	0.0000	0.8142	----		
ETR	-0.072715	0.094462	0.420772	1.000000	
	-0.883969	1.150439	5.623654	----	
	0.3782	0.2518	0.0000	----	
NDTP	-0.153355	0.016120	-0.512868	-0.013252	1.000000
	-1.881587	0.195469	-7.243372	-0.160688	----
	0.0619	0.8453	0.0000	0.8726	----

Source: Extract from E-view, 12.0

Next, we'll examine the descriptive analysis, normalcy, homogeneity, and multicollinearity of the study data. Then, we'll use the most popular analysis method, simple linear regression, to look for correlations and examine the relationships and linearity between the independent and dependent variables. All of the factors, with the exception of debt tax planning and stock valuation, were found to have a negative correlation with the dependent variable in table 2.

Table 3: Correlated Random Effects - Hausman Test

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		35.193819	6	0.0000
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
D(SV(-1))	0.360200	0.266158	0.000488	0.0000
IETP	0.145266	-0.168088	0.012579	0.0052
DTP	2.295073	2.516421	0.064487	0.3834
ETR	-0.984548	-0.809046	0.001783	0.0000
NDTP	-0.000346	0.073155	0.001599	0.0661
ECM(-1)	-0.411399	-0.164107	0.002571	0.0000

Source: Extract from E-view, 12.0

The three panel regression models—a fixed effects model, a random effects model, and an alternative—were evaluated using the Hausman specification test. Based on the data in the table, the study used a fixed effect model since the Hausman test's probability coefficient was less than 0.05. In addition, when comparing fixed and random effect models for debt tax planning and non-debt tax planning, the results of the cross-section random effect tests reveal that the former is significantly different from the latter.

Table 4: Pooled Effect Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IETP	-0.055606	0.055187	-1.007599	0.3156
DTP	1.892023	0.649640	2.912418	0.0042
ETR	-0.414765	0.204411	-2.029071	0.0445
NDTP	0.506406	0.147044	3.443910	0.0008
C	-23.93338	9.414953	-2.542061	0.0122
ECM (-1)	-0.982442	0.085457	-11.49638	0.0000
R-squared	0.532091	Mean dependent var		0.894812
Adjusted R-squared	0.513670	S.D. dependent var		11.36158
S.E. of regression	7.923267	Akaike info criterion		7.021548
Sum squared resid	7972.827	Schwarz criterion		7.151940
Log likelihood	-460.9329	Hannan-Quinn criter.		7.074534
F-statistic	28.88408	Durbin-Watson stat		1.838866
Prob(F-statistic)	0.000000			

Source: Extract from E-view, 12.0

Results from pooled effect estimation show an adjusted R-squared (R²) value of 0.513670, or 51.3%, suggesting that the independent variables, including effective tax planning for income, debt, effective tax rate, and non-debt, explain 51.3% of the variance in the stock value of the listed companies. Yet, the independent factors can collectively affect the stock value of the listed companies to a significant degree (F-statistic = 28.88408; p-value = 0.000000). According to the Durbin-Watson, the variables do not exhibit serial correlation. However, when all other independent variables are kept constant, the beta coefficient of constant is negative (-23.93338) and the p-value is 0.0122, which means that the stock value of the quoted industrial goods manufacturing firms will experience a negative variation of up to 23.9 units, which

is statistically significant. In addition, the listed industrial goods manufacturing firms' stock values are unaffected by income effect tax planning, as the coefficient value is -0.055606 and the p-value is 0.3156. With a p-value of 0.0042 and a coefficient value of 1.892023, debt tax planning is strongly and positively associated with the stock value of the quoted industrial products manufacturing enterprises. Non-debt tax planning has a positive coefficient of 0.506406 and a p-value of 0.0008, suggesting that it significantly influences the stock value of the quoted industrial goods manufacturing firms. In contrast, the effective tax rate has a negative coefficient of -0.414765 and a p-value of 0.0445, suggesting that it has a negative influence on stock value.

Table 4: Fixed Effect Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SV(-1))	0.360200	0.092341	3.900750	0.0002
IETP	0.145266	0.127835	1.136352	0.2586
DTP	2.295073	1.357138	1.691113	0.0940
ETR	-0.984548	0.249508	-3.945956	0.0002
NDTP	-0.000346	0.275412	-0.001255	0.9990
C	46.39003	24.57839	1.887431	0.0321
ECM(-1)	-0.411399	0.129193	-3.184385	0.0020
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.439063	Mean dependent var		56.82059
Adjusted R-squared	0.323406	S.D. dependent var		10.18902
S.E. of regression	8.381009	Akaike info criterion		7.249772
Sum squared resid	6813.407	Schwarz criterion		7.742860
Log likelihood	-406.7366	Hannan-Quinn criter.		7.449980
F-statistic	3.796254	Durbin-Watson stat		2.032881
Prob(F-statistic)	0.000005			

Source: Extract from E-view, 12.0

According to the results of the fixed effect estimation, the independent variables including income effective tax planning, debt tax planning, effective tax rate, and non-debt tax planning explain 32.3% of the variation in the stock value of the quoted firms. The adjusted R-squared (R²) value is 0.323406, which is 32.3%. On the other hand, the independent factors can have a substantial combined effect on the stock value of the quoted enterprises (F-statistic = 3.796254, p = 0.000005). According to the Durbin-Watson, the variables do not exhibit serial correlation. There will be a significant positive variation of up to 46.3 units in the stock value of the quoted industrial goods manufacturing firms when all the independent variables are held constant, according to the beta coefficient of constant, which is negative with a value of 46.39003 and a p-value of 0.0321. Moreover, income effect tax planning has a positive coefficient of 0.145266 and a p-value of 0.2586, suggesting that it does not significantly affect the stock value of the stated industrial products manufacturing enterprises. Debt tax planning does not significantly affect the stock value of the quoted industrial products manufacturing enterprises, as indicated by the positive coefficient value of 2.295073 and p-value of 0.0940. Not only does non-debt tax planning have a negative coefficient of -0.000346 and a p-value of

0.9990, but the effective tax rate also has a negative coefficient of -0.984548 and a p-value of 0.0002, suggesting that it has a significant negative effect on the stock value of the quoted industrial goods manufacturing firms. While this finding conflicts with Vu and Le's (2021) conclusion that tax planning reduces corporate value, it does support the conclusions of Ebubechukwu and Obada (2021). Confirming the findings of Usman, Okaiwele and Asuquo (2020) that tax planning, board compensations, and firm value were positively correlated, Omesi and Appah (2021) found that effective tax rate, tax savings, capital intensity, and corporate firm value were all negatively and insignificantly related. However, board compensations did not moderate the relationship between tax planning and firm value. Tax planning increased the worth of a company, according to Bhagiawan and Mukhlisin (2020). According to Oyeshile and Adegbe (2020), listed food and beverage firms in Nigeria did not see a positive effect on their financial performance from the corporate tax planning variables of effective tax rate, capital intensity, and thin capitalization. Umeh, Okegbe, and Ezejiofor (2020) found that book tax difference (BTD) had a positive effect on firm value, but it wasn't statistically significant.

Table 4: Random Effect Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D (SV (-1))	0.266158	0.089657	2.968610	0.0037
IETP	-0.168088	0.061339	-2.740318	0.0072
DTP	2.516421	1.333168	1.887550	0.0617
ETR	-0.809046	0.245910	-3.290009	0.0013
NDTP	0.073155	0.272493	0.268464	0.7888
C	46.46045	23.89403	1.944438	0.0444

ECM (-1)	-0.164107	0.118826	-1.381072	0.1700
	Effects Specification			
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			8.381009	1.0000
	Weighted Statistics			
R-squared	0.280443	Mean dependent var		56.82059
Adjusted R-squared	0.241548	S.D. dependent var		10.18902
S.E. of regression	8.873531	Sum squared resid		8740.091
F-statistic	7.210253	Durbin-Watson stat		2.038619
Prob(F-statistic)	0.000002			
	Unweighted Statistics			
R-squared	0.280443	Mean dependent var		56.82059
Sum squared resid	8740.091	Durbin-Watson stat		2.038619

Source: Extract from E-view, 12.0

Based on the results of the random effect estimation, we can see that the independent variables including effective tax planning for income, debt, effective tax rate, and non-debt account for 24.1% of the variation in the stock value of the quoted firms. The adjusted R-squared (R2) value is 0.241548, which is 24.1%. The F-statistic is 7.210253 and the p-value is 0.000007, which means that the independent variables can have a considerable impact on the stock value of the quoted corporations when they are combined. According to the Durbin-Watson, the variables do not exhibit serial correlation. With all other factors being equal, the beta coefficient of constant is negative at 46.46045 and the p-value is 0.0444, suggesting that the stock value of the quoted industrial goods manufacturing firms will experience a positive variation of up to 46.4 units, which is statistically significant. Furthermore, income effect tax planning has a negative coefficient of -0.168088 and a p-value of 0.0072, suggesting that it significantly influences the stock value of the stated industrial products manufacturing enterprises. Debt tax planning has a positive

coefficient of 2.516421 and a p-value of 0.0617, suggesting that it does not significantly affect the stock value of the quoted industrial products manufacturing enterprises. In terms of the quoted industrial goods manufacturing firms' stock value, the effective tax rate has a negative coefficient of -0.809046 and a p-value of 0.0013, suggesting that it has a significant influence. On the other hand, non-debt tax planning has a positive coefficient of 0.073155 and a p-value of 0.7888, suggesting that it has a significant influence. The favorable impact of the variable is consistent with previous research by Odunayo and John (2019) which found that tax savings had a direct correlation with financial performance and tax avoidance had an inverse correlation with financial performance. It also contradicts the findings of Joseph, Ben-Caleb, Adedoyin and Uche (2020) which found that interest on tax savings behavior and depreciation savings behavior had a negative significant relationship with firm size, while effective tax rate had a negative but insignificant correlation with firm size.

Table 6: Cross Section FE

FIRMS	Effect
1 African Paints Nigeria Plc	-5.524315
2 Ashaks Cem Plc	-4.326631
3 Austin Laz and Company Plc	-0.573041
4 Avon Crown Caps and Containers	0.669271
5 Berger Paints Plc	-0.717550
6 Beta Glass Company Plc	-0.030129
7 Cap Plc	1.177256
8 Cement Company of Northern Nigeria Plc	4.668855
9 Cutix Plc	6.660493
10 Dangote Cement Plc	0.758711
11 First Aluminum Nigeria Plc	0.684794
12 Lafarage Africa Plc	-3.397408
13 Meyer plc	-4.401057
14 Paints and Coatings Manufacturing Plc	-0.543811
15 Port Land Paints and Products Nig. Plc.	5.438401

Source: Extract from E-view, 12.0

Based on the results of the cross-sectional fixed effect analysis, it was found that the quoted firms' real investment was positively affected by Avon Crown Caps and Containers, Cap Plc, Cement Company of Northern Nigeria Plc, Cutix Plc, Dangote Cement Plc, and Port Land Paints and Products Nig. Plc, while the rest of the sample size was negatively affected.

Conclusion and Recommendations

This study analyzed the tax strategies and stock prices of publicly traded Nigerian companies that produce industrial goods from 2015 to 2024. For the years 2015–2019, the study found that the effective tax rate and debt tax planning had a negative but statistically negligible influence on the firm value of listed consumer products companies in Nigeria. According to the results of the fixed effect estimation, tax planning accounted for 32.3% of the variance in stock value among the listed industrial goods manufacturing companies. The constant beta coefficient is negative at 46.39003 and has a p-value of 0.0321. This means that, with all other variables held constant, the stock value of the quoted industrial goods manufacturing firms will vary positively by up to 46.3 units, and this variation is statistically significant. Moreover, income effect tax planning has a positive coefficient of 0.145266 and a p-value of 0.2586, suggesting that it does not significantly affect the stock value of the stated industrial products manufacturing enterprises. Debt tax planning does not significantly affect the stock value of the quoted industrial products manufacturing enterprises, as indicated by the positive coefficient value of 2.295073 and p-value of 0.0940. Not only does non-debt tax planning have a negative coefficient of -0.000346 and a p-value of 0.9990, but the effective tax rate also has a negative coefficient of -0.984548 and a p-value of 0.0002, suggesting that it has a significant negative effect on the stock value of the quoted industrial goods manufacturing firms. Tax planning affects a company's stock value for the time period studied, according to the study.

Recommendations

- i. Managers should plan their income taxes, but they should double-check that their plans are lawful and that they save money for the firm so that they don't have to pay too much or too little in taxes, which improves their bottom line. Why? Because interest paid on debt is an acceptable expense that reduces the chargeable profit for corporate tax, and leverage has a beneficial effect on company value.
- ii. To reap the benefits of tax deductions and keep their tax rates low, Nigerian companies should

maximize their leverage ratio. Companies in Nigeria should keep growing their businesses. The firm's value will increase as a result.

- iii. The ongoing tax reforms in Nigeria should involve adjusting the corporate tax rate, as the effective tax rate and tax savings indicated a negative correlation with business value.
- iv. In order to improve their overall performance, firms should implement stronger non-debt tax planning strategies. Oil and gas companies, in particular, should hire tax consultants to handle all of their tax calculations and payments.

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