JASF | Journal of Accounting and Strategic Finance
Vol.7 No.1 June 2024, pp. 114-132.

ISSN 2614-6649 (online)
http://jasf.upnjatim.ac.id

Maximizing Firm Value: Analyzing Profitability and Leverage with Tax Avoidance Interventions

Endah Susilowati, Aidha Kurnia Wardhani Fadilah, Sofie Yunida Putri*, Sari Andayani, Nanda Wahyu Indah Kirana

Accounting Department, Faculty of Economics and Business, Universitas Pembangunan Nasional Veteran Jawa Timur. Jl. Raya Rungkut Madya St., No 1., Gunung Anyar, Surabaya, Easj Java 60294, Indonesia.

DOI: https://doi.org/10.33005/jasf.v7i1.450

Received*: March 12, 2024.* ***Revised:*** *April 07, 2024.* ***Accepted:*** *June 17, 2024*

Abstract

This study aims to analyze whether there is an effect between Profitability, Leverage, and tax avoidance toward firm value, either directly or indirectly. This research uses quantitative methods with partial least square analysis techniques. The data was obtained through the official website of the Indonesia Stock Exchange. This study found that 58 manufacturing companies were listed on the Indonesia Stock Exchange from 2016–to 2018. The results indicate that profitability and leverage do not affect tax avoidance and profitability. Leverage affects firm value, and tax avoidance does not mediate the effect of Profitability and Leverage toward firm value. Tax avoidance does not mediate the impact of leverage on firm value because the higher the leverage, the greater the funds provided by the creditor, and this makes investors careful about investing in companies with a high leverage ratio. This study implies that maximizing firm value does not necessarily require the company to engage in tax avoidance schemes since increasing profit will signal to the investor that the company has been managed effectively and ultimately maximizes firm value.

Keywords: *Firm value, leverage, manufacturing companies, profitability, tax avoidance.*

How to cite (APA 7th style)

Susilowati, E., Fadilah, A. K. W., Putri, S. Y., Andayani, S., & Kirana, N. W. I. (2024). Maximizing Firm Value: Analyzing Profitability and Leverage with Tax Avoidance Interventions. *JASF – Journal of Accounting and Strategic Finance, 7* (1), 114-132.

*Correspondence: Sofie Yunida Putri, *sofie.yunida.ak@upnjatim.ac.id*.

INTRODUCTION

Nowadays, global market competition is getting more challenging, and every company demands a competitive advantage to maintain business continuity. Companies must face many obstacles to achieve a competitive advantage, including funding. A study by Hendra et al., (2022) shows that only 47 companies in the mining and multinational sectors are listed on the Indonesia Stock Exchange to increase share value, which reflects company value. Issuing shares is one of the most effective ways of obtaining funds (Bai et al., 2022). When a company needs funding, Chandramowleeswaran et al., (2023), state that it can implement two alternatives. The first is to apply for internal funding and the second is to apply for external financing, generally from shares.

According to Sukesti et al., (2021), firm value is an investor assessment of companies often associated with stock prices, so the higher the stock price, the higher the firm value. Conversely, the lower the stock price, the lower the firm's value. If there is an increase in demand for shares, it will increase the share price, which reflects firm value, which, in turn, reveals that the stock determines the company's value (Bon & Hartoko, 2022). So, firm value can also defined as an investor's assessment of the success of a company's management.

In addition to factors such as stock prices, other factors can affect the company's value. One factor affecting the firm value is an issue or allegation against a company dealing with tax avoidance (Rudyanto & Pirzada, 2021). The same study from Alstadsæter et al., (2022), states that tax avoidance is the process of controlling actions to avoid the consequences of undesirable taxation. Tax becomes a problem in determining the company's value because, in Indonesia, the same issue was faced. An example is the case of PT. Adaro Energy Tbk widely reported on various online media in Indonesia about suspicion of tax evasion with a transfer pricing scheme through its subsidiary in Singapore. Besides tax avoidance, an assessment of the annual report issued by the company at the end of the year, one of which contains the profitability and leverage ratio, also affects firm value.

Firm value is an investor's perception of the company; investors tend to think that a good company is a company that can generate profits and manage its debt well (Sudiyatno et al., 2020). Profitability is one of the measurements of the performance of a company. The profitability of a company shows the ability of a company to generate profits for a certain period at a certain level of sales, assets, and share capital (Choiriyah et al., 2021). Leverage is a comparison that shows the amount of debt used for financing by the company in carrying out its operating activities (Bintara, 2020). As previously stated, one way to measure the company's value is to look at the ability to generate profits and maximize the utilization of the company's leverage. The greater the profit generated, the greater the tax paid. The way to minimize the tax payment is to maximize the debt or leverage owned by the company. Therefore, Leverage is used as mediation in this research.

Several studies related to profitability toward tax avoidance have been done by Rahmayani et al., (2023), and Sunarto et al., (2021), which stated that profitability affects tax avoidance. This contradicts the research results by Darsani & Sukartha, (2021), which state that profitability does not affect tax avoidance. Research related to leveraging toward tax avoidance has been done by Siti Sarpingah, (2020) and resulted in leverage affecting tax avoidance, while research by Darsani & Sukartha, (2021) resulted in leverage does not affect tax avoidance.

Vu & Le, (2021) stated that tax avoidance had a significant adverse effect on firm value, whereas according to Hasan et al., (2021), tax avoidance did not affect firm value. Several studies on profitability toward firm value have been done by Jihadi et al., (2021) concluding that profitability affects firm value. This is contrary to the research by Vu & Le, (2021), which resulted in profitability not affecting firm value. Bon & Hartoko, (2022) states that leverage affects firm value, whereas according to Jihadi et al., (2021), leverage did not affect firm value.

Previous research has found that profitability, leverage, and tax avoidance are key variables closely related to firm value. Various previous studies have explored the direct relationship between these variables, as suggested by Linantis, (2021) regarding profitability, and Sopiyana, (2022) highlighting the role of leverage. However, this literature still pays less attention to the strategic role of tax avoidance as a mediating mechanism that can strengthen or weaken the effect of Profitability and Leverage on firm value. So, to address this gap, this literature review integrates agency theory and signalling theory to support the development of the proposed hypotheses. Agency theory provides an analytical framework to understand how strategic decisions such as tax avoidance can be a tool for managers in managing the relationship between Profitability, Leverage, and firm value. Meanwhile, signalling theory underscores funding decisions' importance in signalling investors about the firm's prospects. Thus, this study combines background and literature review to deepen the understanding of this complex mechanism while providing a solid foundation for the proposed empirical tests.

This research's contribution includes two main aspects: first, it provides theoretical implications by strengthening the understanding of the mediating role of tax avoidance in agency theory and signalling. Second, it provides practical implications for companies and regulators in designing funding strategies and tax policies that support the increase in firm value, especially for manufacturing companies. The object chosen in this study is manufacturing companies listed on the Indonesia Stock Exchange from 2016–2018.

The selection of manufacturing companies for this study during the period of 2016-2018 is based on the significant developments and challenges the industry faced in Indonesia during that time. Firstly, the period aligns with Indonesia’s National Medium-Term Development Plan – Rencana Pembangunan Jangka Menengah – (RPJMN) 2015-2019, which emphasized boosting the industrial sector, particularly manufacturing, through policy reforms and investments in infrastructure. Additionally, introducing Indonesia's Industry 4.0 roadmap in 2018 pushed for digital transformation and automation in the manufacturing sector (Indonesia Government, 2018). These shifts marked a crucial period when companies adapted to new regulations and technological advancements.

Moreover, during this period, Indonesia faced global economic pressures, such as fluctuating trade relations, particularly with the U.S. and China. These international dynamics impacted the manufacturing sector's exports, as well as the sector’s overall performanceing on manufacturing companies. The study captures how firms navigated both the internal and external challenges during a critical phase of Indonesia's industrial evolution. In addition, manufacturing companies prefer to practice trading on the Indonesia Stock Exchange (IDX) rather than the nonmanufacturing company (Martono et al., 2020).

Profitability shows the ability of a company to generate profits for a certain period at the level of sales, assets, and specific share capital (Bintara, 2020). When the company's profits increase, the income tax also increases, so the company might avoid tax avoidance to avoid increasing the tax burden. Shareholders who invest capital into the company also want to get dividend rights to increase if company profits increase, so tax avoidance is also possible. Research related to profitability toward tax avoidance has been done by Sunarto et al., (2021) and Widiatmoko & Mulya, (2021), which shows that profitability affects tax avoidance. Other research about the relationship between profitability and tax avoidance shows that profitability is a company's ability to generate profits within a certain period (Oyedokun et al., 2020; Aksan & Gantyowati, 2020). A higher company's profit will have a good impact on the company's performance, but profit is an important point in the imposition of taxes. If the profit value of a company is high, this will impact the amount of tax burden that must be issued by the company (Darsani & Sukartha, 2021). Based on these premises, the hypotheses in this study are:

H_1: Profitability Affects Tax Avoidance

The funding decision policy set by the company can be illustrated through the leverage ratio of the company. The higher the leverage of a company, the higher the company's dependence on financing its assets from loans or debt. Debt for companies has a fixed burden in the form of interest costs, and interest costs included in the burden that can reduce taxable income (deductible expense) so that the use of debt will provide a positive relationship to the activities of tax avoidance by a company. Suciarti et al., (2020) researched leverage, finding that leverage affects tax avoidance. Leverage is a comparison that reflects the amount of debt used for financing by the company in carrying out its operational activities. The greater the company's use of debt, the greater the interest expense the company must issue. However, this can reduce pretax profit, which can further reduce the amount of tax that must be paid by the company (Erkinkhojiev & Shoohrat Amonovich, 2022). Based on the premises, the hypothesis can be arranged as follows:

H_2: Leverage Affects Tax Avoidance

Tax avoidance is a tax savings that arises from utilizing the tax provisions that are done legally to minimize tax obligations by minimizing corporate profits (Rabbi & Almutairi, 2020). Because the higher the profits reported by the company, the higher the tax burden that must be paid. Tax avoidance is also an aggressive tax strategy companies carry to minimize the tax burden, so this activity raises risks for companies, including fines and a bad reputation in the public eye if revealed (Johnson, 2020). Research related to tax avoidance was conducted by Darsani & Sukartha, (2021), who found that tax avoidance significantly negatively affected firm value. Firm value has a joint effect on tax avoidance. That means the amount of company profits generated through asset management and the total amount of assets a company owns will encourage companies to do tax planning with tax avoidance actions. Based on the premises, the following hypotheses can be proposed:

H_3: Tax Avoidance Affects Firm Value

The ratio to measure profitability toward firm value also uses return on equity based on research by (Munandar & Alvian, 2022). The growth of return on equity shows a better prospect for the company, which investors will capture as a positive signal, further facilitating the company's management in attracting capital in the form of shares. If there is an increase in stock demand, the stock price will rise, which reflects firm value (Agustin et al., 2023). Research by Jihadi et al., (2021) and Yudhyani et al. (2022) showed that profitability affects firm value. The greater the assets owned by the company, the more the company can provide a record for carrying out an activity that can expand market share, affecting a company's Profitability. Based on these premises, the hypotheses in this study are:

H_4: Profitability Affects Firm Value

A company is not solvable if the total debt of the company is greater than the total assets owned by the company. The higher leverage ratio shows the more significant amount of funds creditors provide. This will make investors cautious about investing in companies with high leverage ratios because the high leverage ratio indicates the high-risk companies will face, such as bankruptcy. Debt that continues to grow without control will cause a decrease in firm value. Research related to Leverage was conducted by Bon & Hartoko, (2022), which showed that Leverage affects firm value. Based on the premises, the hypothesis can be arranged as follows:

H_5: Leverage Affects Firm Value

Return on equity is a ratio that shows a company's ability to generate net income for return on shareholders' equity. Agency theory also spurs managers to increase corporate profits (Oyedokun et al., 2020; Najaf & Najaf, 2021). When the company's profits increase, the income tax also increases, so the company might avoid tax avoidance to avoid increasing the tax burden. Shareholders who invest capital in companies also want to get dividend rights to increase if company profits increase, so tax avoidance is also possible. However, tax avoidance raises fines and gives the company a bad reputation in the public eye. Based on the premises, the following hypotheses can be proposed:

H_6: Tax Avoidance mediates the effect of Profitability on Firm Value

The funding decision policy set by the company is illustrated through the leverage ratio of the company. The higher the leverage of a company, the higher the company's dependence on financing its assets from loans or debt. Debt has a fixed cost of interest. Interest expense is included in the expense that can reduce taxable income so that the use of debt will provide a positive relationship to a tax avoidance activity by a company, but this activity, if proven to be carried out by the company, can lead to fines and bad reputation in the public eye. Based on the premises, the research hypothesis is:

H_7: Tax Avoidance mediates the effect of Leverage on Firm Value

RESEARCH METHOD

This research uses quantitative methods, and sample selection was based on a purposive sampling technique. Purposive sampling allows the selection of samples following the research objectives, namely manufacturing companies that meet specific criteria. The following Table 1 summarizes the results of screening the population to the final sample.

Table 1. Research Sample Criteria

Criteria	Number of Companies
Number of manufacturing companies	146
Does not publish a complete annual report	-22
Financial statements are not in rupiah	-18
Did not make consecutive profits	-34
Have tax benefits	-14
Sample	58

Source: Indonesia Stock Exchange, Period 2016–2018

Table 2. Operational Definitions of the Variables

Variable	Definitions	Formula	Source
Firm Value (Tobin's Q)	The firm value that reflects how the market values the overall value of a company	$Tobin's\ Q = \frac{(EMV + D)}{(EBV + D)}$	(Agustin et al., 2023)
Profitability (ROE)	The company's ability to generate profits from its resources in a certain period	$ROE = \frac{EAT}{Total\ Equity}$	(Orbaningsih, 2022)
Leverage (DER)	The proportion of a company's funding comes from debt compared to its equity.	$DER = \frac{Total\ Debt}{Equity}$	(Ibrahim, 2020)
Tax Avoidance (CETR)	The company's strategy is to minimize the tax burden that must be paid legally through effective tax planning.	$Cash\ ETR = \frac{Tax\ Expense}{Pretax\ Income}$	(Hasan et al., 2021)

Source: Previous Research

After the screening process based on the Table 1 criteria, 58 manufacturing companies were obtained as the study's final sample. The data used in this study are secondary in the form of annual financial reports of manufacturing companies received from the official IDX website (www.idx.co.id) for the 2016-2018 period.

To ensure consistent and valid measurement in this study, each variable is operationally defined based on theory and previous research. This operational definition includes indicators, measurement formulas, and reference sources to support the accuracy of the analysis. A more detailed explanation of the operational definitions of the variables in this study is presented in Table 2.

The data analysis method in this study was carried out using a quantitative approach with Partial Least Square (PLS) analysis techniques. PLS was chosen because this method is suitable for testing causal relationships between complex latent variables, including measuring direct and indirect relationships. The analysis is carried out through several main stages, namely the evaluation of the measurement model (outer model) to ensure data validity and reliability and the evaluation of the structural model (inner model) to test the relationship between latent variables. Hypotheses were tested by analyzing the path coefficient value and significance level using the t-statistic and p-value generated through the bootstrapping procedure. The entire analysis process was carried out using SmartPLS software to support accuracy and efficiency in data processing.

RESULTS AND DISCUSSION

Results

Before delving into the results of hypothesis testing, it is important first to understand the characteristics of the data used in this study. The descriptive statistics provide an overview of the central tendencies and dispersion of the key variables, which include Profitability, Leverage, tax avoidance, and firm value. By analyzing these statistics, we can gain insight into the general patterns and variability within the sample of manufacturing companies listed on the Indonesia Stock Exchange during the 2016–2018 period. Table 3 presents these descriptive statistics for the main variables in the study.

Table 3. Descriptive Statistics

	N	***Minimum***	***Maximum***	***Mean***	***Std. Deviation***
Profitability	174	0.000	1.359	0.152	0.219
Leverage	174	0.083	4.190	0.824	0.699
Tax Avoidance	174	0.012	0.971	0.275	0.117
Firm Value	174	0.304	23.286	2.128	3.139

Source: Data processed

The descriptive statistics in Table 3 for the key variables—Profitability, Leverage, tax avoidance, and firm value—are based on data from 58 manufacturing companies over three years, resulting in 174 data points. Profitability, measured by return on equity (ROE), has a mean of 0.152, while Leverage (debt-to-equity ratio) ranges from 0.083 to 4.190, with a mean of 0.824. Tax avoidance, represented by the cash effective tax rate (CETR), has a mean of 0.275. Firm value, measured by Tobin's Q, shows significant variation, with a mean of 2.128. The standard deviations indicate a moderate to high variability in these financial variables, reflecting the diverse financial performance and conditions of the companies in the sample. The subjects of this study consisted of 22 manufacturing companies in the primary industrial and chemicals sector, 15 manufacturing companies in miscellaneous industrial sectors, and 21 manufacturing companies in the consumer goods sector. Firm value variables are calculated using Tobin's Q formula, tax avoidance using CETR, and Profitability and Leverage using return on equity and debt to equity ratio.

Before examining the results of hypothesis testing, it is important to assess the overall significance of the model first. This is done through the F-test, which evaluates whether the independent variables collectively have a significant effect on the dependent variable. The F-test helps to determine if the model is a good fit for the data and whether the variables included in the analysis can explain variations in the dependent variable. The following section will discuss the results of the F-test for this study.

Table 4. The F-test and R^2

	Firm Value	Leverage	Profitability	Tax Avoidance	R^2
Profitability	4.606			0.025	
Leverage	0.036			0.006	
Tax Avoidance	0.014				0.026
Firm Value					0.829

Source: Data processed

Table 4 presents the F-test results for the variables involved in this study: Firm Value, Leverage, Profitability, and Tax Avoidance. The F-test evaluates the overall significance of the relationships between the independent variables (Profitability, Leverage, Tax Avoidance) and the dependent variable (Firm Value). The F-test results show that profitability significantly affects Firm Value, with a p-value of 0.025, less than the 0.05 threshold, indicating that profitability significantly influences Firm Value. On the other hand, Leverage has a p-value of 0.006, suggesting that it also significantly impacts Firm Value. In contrast, the effect of tax avoidance on firm value is supported by a p-value of 0.014, which further corroborates its significant role in explaining variations in firm value. These findings demonstrate that all independent variables—Profitability, Leverage, and Tax Avoidance—significantly impact Firm Value, justifying their inclusion in the model.

In this study, hypothesis testing is conducted using p-values, representing the probability of obtaining a given result assuming the null hypothesis is true. For the hypothesis to be considered significant, the p-value must be less than 5% (0.05). This means that if the p-value is greater than 0.05, the hypothesis is deemed to have no significant effect, as it fails to meet the threshold for statistical significance. The results of this hypothesis testing are summarized in Table 5, where each p-value is compared to the 0.05 benchmark to determine the relevance and impact of the independent variables on the dependent variable.

Table 5. Hypothesis Testing

Hypothesis		Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	*P*-Values	Result
H1	Profitability affects tax avoidance	−0.163	−0.167	0.037	4.468	0.000	Accepted
H2	Leverage affects tax avoidance	0.079	0.080	0.069	1.144	0.253	Unaccepted
H3	Tax Avoidance affects Firm Value	0.050	0.052	0.020	2.535	0.012	Accepted
H4	Profitability Effects Firm Value	0.935	0.931	0.039	24.005	0.000	Accepted
H5	Leverage effects Firm Value	−0.082	−0.088	0.039	2.098	0.036	Accepted
H6	Profitability effect indirectly on firm value	−0.008	−0.009	0.005	1.511	0.132	Unaccepted
H7	Leverage effect indirectly on Firm Value	0.004	0.004	0.004	0.917	0.360	Unaccepted

Source: Data processed

Based on the *p*-values in Table 5, we see a value of 0,000 or <0.05 on the effect of profitability on tax avoidance, thus indicating that profitability affects tax avoidance. A value of 0.253 or >0.05 on the effect of Leverage on tax avoidance shows that Leverage does not affect tax avoidance. Moreover, a value of 0.012 or <0.05 on the effect of tax avoidance on firm value indicates that tax avoidance affects firm value. A value of 0.000 or <0.05 on the effect of profitability on firm value indicates that profitability affects firm value.

Based on the *p*-values in the table above, we see a value of 0.036 or <0.05 on the influence of Leverage on firm value, thus indicating that Leverage affects firm value. A value of 0.132 or

>0.05 on tax avoidance mediates the effect of profitability toward firm value showing that tax avoidance does not mediate the effect of profitability toward firm value. Moreover, a value of 0.360 or >0.05 on tax avoidance mediates the effect of Leverage toward firm value, indicating that tax avoidance does not mediate the effect of Leverage toward firm value.

Discussion

Profitability Affects Tax Avoidance

The hypothesis that profitability influences tax avoidance is accepted with a p-value of 0.000, which is less than the significance level of 0.05. This result suggests that when a company's profitability increases, its income tax burden increases, prompting it to engage in tax avoidance strategies to mitigate the additional tax burden. According to agency theory, this behavior can be attributed to the conflict of interest between managers and shareholders. Managers, acting as agents, may pursue tax avoidance to maximize their own utility, such as bonuses tied to after-tax profits, even if it is not in the best interest of shareholders. This aligns with previous research (Lestari et al., 2023), which identified profitability as a critical factor influencing tax avoidance practices.

However, this result contradicts Tanko (2020) study, which found no significant relationship between profitability and tax avoidance. The differing results can be attributed to the nature of the companies studied, as this research focuses on manufacturing companies listed on the Indonesia Stock Exchange. Based on signalling theory, insight into this behavior suggests that companies use tax avoidance as a signal to investors about their financial health and management efficiency. By engaging in tax avoidance, companies may attempt to convey positive signals to the market, indicating strong profitability and effective management, even though it may not always reflect the true economic value of the firm.

Leverage Affects Tax Avoidance

The hypothesis that leverage influences tax avoidance is rejected because the p-value of 0.253 is greater than the 0.05 significance threshold. This suggests that the use of debt or leverage does not significantly affect tax avoidance. The result indicates that, even with higher leverage, companies are not necessarily more inclined to engage in tax avoidance. According to agency theory, this finding can be understood by considering the motivations of managers versus shareholders. While managers (agents) may seek to optimize financial strategies for personal benefits, shareholders (principals) expect decisions that maximize overall firm value. In this context, higher leverage does not automatically lead to tax avoidance because the interests of managers and shareholders may not always align towards aggressive tax strategies. This finding is consistent with Elbannan & Farooq (2020) research, which emphasized that financing decisions, whether made using internal or external funds, do not necessarily lead to tax avoidance behavior.

From the perspective of signalling theory, the lack of a significant relationship between leverage and tax avoidance could be attributed to how companies signal their financial stability and management quality to investors. High leverage might be seen as a risk factor, and companies may avoid additional complexity, such as tax avoidance strategies, to present a cleaner, more stable financial image. Engaging in tax avoidance could potentially send negative signals to investors, suggesting higher risk or aggressive financial practices, which companies may want to avoid, especially if they are already highly leveraged.

Tax Avoidance Affects Firm Value

The hypothesis that tax avoidance influences firm value is accepted, with a p-value of 0.012, less than the 0.05 threshold. This finding indicates that tax avoidance affects the firm's value, with companies engaging in tax avoidance potentially increasing their firm value in the short term. According to agency theory, this behavior can be seen as a result of the conflict between managers (agents) and shareholders (principals). Managers might engage in tax avoidance to show higher profits and improve short-term financial performance, which could lead to bonuses or other personal benefits. However, this action might not align with the long-term interests of shareholders, who could be more concerned with sustainable growth and reputation. Aggressive tax avoidance can expose companies to risks, including potential fines and reputational damage if disclosed. Maximizing firm value may be done by maintaining sustainable company growth.

From the perspective of signalling theory, engaging in tax avoidance might be used by companies to signal to the market that they are efficient in managing their tax liabilities, thus potentially increasing their perceived value in the short term. However, if tax avoidance practices are uncovered, they can send negative signals to investors and the market, indicating higher company risk and potentially misleading investors about the firm's true financial health. This aligns with the findings of Guedrib & Marouani's (2023) research, which noted that while tax avoidance might temporarily maximize firm value, it also increases company risk and can mislead investors.

Profitability Affects Firm Value

Profitability is shown to affect firm value with a p-value of 0.000 significantly. This result indicates that higher profitability enhances a company's prospects, which investors perceive positively. Increased demand for the company's shares due to improved profitability will subsequently increase the company's market value (Alifiani & Suryaningrum, 2020). According to agency theory, this can be seen as a positive outcome of the alignment between managers' actions and shareholders' interests. Managers, acting as agents, are motivated to increase profitability to meet shareholders' expectations, thus enhancing firm value. By focusing on improving profitability, managers demonstrate that they are acting in the best interests of the shareholders, which can reduce potential conflicts between the two parties period (Oyedokun et al., 2020; Aksan & Gantyowati, 2020). Maximizing firm value means that managers focus on improving profitability.

From the perspective of signalling theory, higher profitability serves as a strong signal to the market about the company's performance and prospects. When a company reports higher profitability, it sends a positive signal to investors, indicating that the company is well-managed and financially healthy. This positive signal increases investor confidence, leading to increased demand for the company's shares and, consequently, a rise in market value. This finding is consistent with Jihadi et al. (2021) and Yudhyani et al. (2022), who found that higher profitability correlates with increased firm value, as it effectively communicates the company's strong performance and future growth potential to investors. Therefore, maximizing firm value will attract new investors, since the company relays good signals.

Leverage Affects Firm Value

Leverage is found to have a significant effect on firm value, with a p-value of 0.036. This result suggests that higher leverage can increase the funds available to the company, which may help finance expansions and boost growth. According to agency theory, this behavior can be explained by the relationship between managers (agents) and shareholders (principals). Managers may use leverage to fund new projects and expansions that promise higher returns, aligning their actions with shareholders' interests. However, high leverage also introduces significant risk, as managers might prioritize short-term gains over long-term stability, potentially leading to increased financial distress or bankruptcy risks. Maximizing firm value means that managers must not engage in more leverage without a good strategic plan.

From the signalling theory perspective, using higher leverage can act as a signal to the market. When a company takes on more debt, it may be perceived as confident in its future growth and profitability, thus sending a positive signal to investors. This can increase the firm's value as investors interpret the additional leverage as an indication of strong management and profitable expansion plans. However, if the market perceives the leverage as excessive, it can also signal high risk, potentially leading to a decline in investor confidence. This finding is consistent with Akhtar et al. (2022), who stated that increased leverage can raise firm value, provided the debt is used effectively to expand the company's operations. Effective debt management might send a good signal to the investors, indicating that the company maximize their firm value.

Tax Avoidance mediates the effect of Profitability on Firm Value

The hypothesis that tax avoidance mediates the relationship between profitability and firm value is rejected with a p-value of 0.132, greater than the 0.05 threshold. This result suggests that tax avoidance does not mediate the effect of profitability on firm value. According to agency theory, this implies that the actions of managers (agents) in engaging or not engaging in tax avoidance do not alter the relationship between profitability and firm value. Managers may focus on achieving higher profitability to attract investment and increase firm value, which aligns with the shareholders' (principals') interests. This means that regardless of whether managers engage in tax avoidance, the primary driver for increasing firm value remains the profitability of the company.

From the signalling theory perspective, high profitability is a strong signal to investors about the company's financial health and performance. Investors are more likely to be attracted to companies with high profitability, leading to an increase in firm value (Alifiani & Suryaningrum, 2020). In this context, tax avoidance does not significantly influence firm value because the positive signal of high profitability outweighs any potential negative signals from tax avoidance practices. This aligns with the finding that tax avoidance may not play a significant role in mediating the effect of profitability on firm value. Syura et al. (2020) found that tax avoidance does not fully mediate the relationship between sales growth and firm value. It means that managers do not necessarily need to engage in tax avoidance to maximize their firm value. There are other, perhaps more effective, strategies that managers can use to enhance the value of their company, such as investing in growth opportunities, improving operational efficiency, or strengthening customer relationships, instead of focusing on reducing tax liabilities through potentially risky tax avoidance schemes, By focusing on these strategies, managers can sustainably increase their firm's value without resorting to tax avoidance, which carries risks such as legal repercussions and reputational damage.

Tax Avoidance mediates the effect of Leverage on Firm Value

The hypothesis that tax avoidance mediates the effect of leverage on firm value is also rejected, with a p-value of 0.360, greater than 0.05. This result suggests that tax avoidance does not mediate the relationship between leverage and firm value. According to agency theory, this result implies that the actions of managers (agents) in engaging in tax avoidance do not influence the effect of leverage on firm value. Managers may utilize leverage to finance projects and boost growth, but whether they engage in tax avoidance does not significantly alter this relationship. Instead, the primary factors affecting firm value are efficient debt management and strategic financial planning, which ensure that the leverage used effectively contributes to the company's growth and stability, aligning with shareholders' (principals') interests. Aligning principal and agent will ultimately maximize firm value.

From the signalling theory perspective, leverage sends signals to the market about a company's growth and financial strategies. High leverage might be perceived as a sign of aggressive expansion and confidence in future profitability. However, tax avoidance does not significantly impact these signals, as the market is more focused on how well the company manages its debt and overall financial strategy. This highlights that the market values efficient debt management and strategic planning over tax avoidance practices when assessing a firm's value. Syura et al. (2020) found that tax avoidance does not fully mediate the relationship between financial leverage and firm value. This finding suggests that tax avoidance alone cannot fully explain the positive or negative effects of financial leverage on firm value. Other factors, such as the company’s operational efficiency, market conditions, strategic financial planning, and the overall economic environment, also play crucial roles in determining how leverage influences firm value. Therefore, managers need to consider a broader range of strategies and factors to effectively maximize firm value.

Discussion of Coefficient Determination

The coefficient of determination (R^2) is a statistical measure that explains how well the independent variables in the model can predict or explain the variation in the dependent variable. A higher R^2 value indicates that the independent variables in the model explain a greater proportion of the variation in the dependent variable. This measure is crucial because it provides insight into the model's goodness of fit. In this study, the regression analysis results show that the R^2 value reflects the explanatory power of the independent variables—Profitability, Leverage, and tax avoidance—on the firm value. An R^2 value close to 1 indicates that the model explains most of the variability in firm value, while a value closer to 0 suggests that the model's explanatory power is limited. The coefficient determination results are 0.026 for tax avoidance and 0.829 for firm value (see Table 4). The results of this study suggest that the model has a strong explanatory power, where the independent variables account for a significant portion of the variation in firm value. In contrast, tax avoidance has a weak explanatory power from the independent variables. These results indicate that other external factors may also influence the results.

Based on this study's findings, future research could explore additional variables that may influence the relationships between Profitability, Leverage, tax avoidance, and firm value. Researchers could examine different industries or geographic locations to see whether the results vary across economic contexts. Moreover, it would be valuable to investigate the long-term impact of tax avoidance on firm value, particularly regarding reputational effects and regulatory scrutiny. Future studies could also consider the potential moderating or mediating effects of corporate governance and managerial decision-making on these relationships.

CONCLUSION

This study analyzed the relationships between profitability, leverage, tax avoidance, and firm value within 58 manufacturing companies listed on the Indonesian Stock Exchange. The empirical findings confirm that profitability significantly influences tax avoidance, aligning with the hypothesis that higher profitability leads to a more significant tax burden, motivating companies to engage in tax avoidance strategies. Conversely, leverage was found not to significantly impact tax avoidance, suggesting that companies' debt levels do not necessarily drive their tax planning practices. Furthermore, the study highlights the significant effects of profitability and leverage on firm value, while tax avoidance also plays a direct role in influencing firm value. However, tax avoidance does not mediate the relationships between profitability and firm value or leverage and firm value. It was indicated that firm value is influenced directly by profitability and leverage rather than through tax avoidance as an intermediary variable. Therefore, to maximize firm value, managers must strategize on how to maximize their profit without engaging in tax avoidance to ensure company sustainability.

The findings underscore practical implications for corporate management, emphasizing the need to carefully balance profitability and leverage to enhance firm value, while mitigating risks associated with tax avoidance. For investors, the study suggests prioritizing firms with strong profitability and prudent leverage management to ensure sustainable returns. Policymakers should promote transparency and ethical tax practices by enhancing disclosure requirements to mitigate risks associated with aggressive tax avoidance. The limitations of this study include its focus on manufacturing firms and reliance on secondary data, suggesting that future research should expand to other industries and incorporate variables such as corporate governance to enrich the analysis. Theoretical contributions include supporting agency and signalling theory, reinforcing the direct effects of profitability and leverage on firm value while challenging assumptions about tax avoidance's mediating role. These findings provide a foundation for practical and policy-oriented approaches to managing corporate financial performance and valuation.

Authors' Contribution

All authors contributed equally to analyzing and interpreting the data. *ES* prepared the final manuscript, *AKWF* managed the data collection, and *SYP*, as the corresponding author, revised the article by incorporating reviewer feedback to ensure the manuscript's quality and alignment with submission standards. This collaborative effort highlights all authors' shared responsibilities to produce a high-quality publication.

Author Information

Endah Susilowati (ES) is a senior lecturer at the Faculty of Economics and Business, Universitas Pembangunan Nasional Veteran Jawa Timur, Surabaya, Indonesia. Email: endahs.ak@upnjatim.ac.id. https://scholar.google.com/citations?user=xlEOa9IAAAAJ&hl=en.

Aidha Kurnia Wardhani Fadilah (AKWF) is a student at Faculty of Economics and Business, Universitas Pembangunan Nasional Veteran Jawa Timur, Surabaya, Indonesia. Email: fadilahaidha@gmail.com.

Sofie Yunida Putri (SYP) is a lecturer at Faculty of Economics and Business, Universitas Pembangunan Nasional Veteran Jawa Timur, Surabaya, Indonesia. Email: sofie.yunida.ak@upnjatim.ac.id. https://scholar.google.com/citations?hl=en&user=xhAiN1wAAAAJ.

Sari Andayani (SA) is a senior lecturer at the Faculty of Economics and Business, Universitas Pembangunan Nasional "Veteran" Jawa Timur, Surabaya, Indonesia. Email: sariandayani.ak@upnjatim.ac.id. https://scholar.google.com/citations?hl=en&user=K7UcfDgAAAAJ.

Nanda Wahyu Indah Kirana (NWIK) is a lecturer at the Faculty of Economics and Business, Universitas Pembangunan Nasional "Veteran" Jawa Timur, Surabaya, Indonesia. Email: nanda.wahyu.ak@upnjatim.ac.id. https://scholar.google.com/citations?hl=en&user=Lm-mc74AAAAJ

Funding

This research receives no external funding.

Conflict of Interest

The authors declare no conflict of interest.

Data and Materials Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES

Agustin, D. T., Zahiroh, N., & Muthiah, R. H. (2023). Intellectual Capital, IOS, dan Risk Bussiness terhadap Nilai Perusahaan pada Industri Farmasi di BEI Tahun 2020-2022. *SENTRI: Jurnal Riset Ilmiah, 2*(6), 1990–2000. https://doi.org/10.55681/sentri.v2i6.997.

Akhtar, M., Yusheng, K., Haris, M., UI Ain. Q., & Javaid, H.M. (2022), Impact of financial leverage on sustainable growth, market performance, and profitability, *Economic Change and Restructuring, Volume 55*, 737–774. https://link.springer.com/article/10.1007/s10644-021-09321-z

Aksan, I., & Gantyowati, E. (2020). Disclosure on Sustainability Reports, Foreign Board, Foreign Ownership, Indonesia Sustainability Reporting Awards, and Firm Value. *JASF: Journal of Accounting and Strategic Finance*, *3*(1), 33–51. https://doi.org/10.33005/jasf.v3i1.69

Alifiani, I. I. & Suryaningrum, D. H. (2020), Carbon Emission Disclosure as Mediation of Factors Affecting Firm Value, *Proceedings of the 2nd International Conference of Business, Accounting and Economics, ICBAE 2020, 5 - 6 August 2020, Purwokerto, Indonesia*. http://dx.doi.org/10.4108/eai.5-8-2020.2301146

Alstadsæter, A., Johannesen, N., Le Guern Herry, S., & Zucman, G. (2022). Tax evasion and tax avoidance. *Journal of Public Economics, 206*, 104587. https://doi.org/https://doi.org/10.1016/j.jpubeco.2021.104587.

Bai, X., Han, J., Ma, Y., & Zhang, W. (2022). ESG performance, institutional investors' preference and financing constraints: Empirical evidence from China. *Borsa Istanbul Review, 22*, S157–S168. https://doi.org/10.1016/j.bir.2022.11.013.

Bintara, R. (2020). The Effect of Working Capital, Liquidity and Leverage on Profitability. *Saudi Journal of Economics and Finance, 04*(01), 28–35. https://doi.org/10.36348/sjef.2020.v04i01.005.

Bon, S. F., & Hartoko, S. (2022). The Effect of Dividend Policy, Investment Decision, Leverage, Profitability, and Firm Size on Firm Value. *European Journal of Business and Management Research*, *7*(3), 7–13. https://doi.org/10.24018/ejbmr.2022.7.3.1405.

Chandramowleeswaran, G., Alzubaidi, L. H., Liz, A. S., Khare, N., Khurramov, A., & Baswaraju, S. (2023). Design Of Financing Strategy Model of Financial Management Based on Data Mining Technology. *2023 Second International Conference on Smart Technologies for Smart Nation (SmartTechCon)*, 1179–1183. https://doi.org/10.1109/SmartTechCon57526.2023.10391603.

Choiriyah, C., Fatimah, F., Agustina, S., & Ulfa, U. (2021). The Effect of Return on Assets, Return on Equity, Net Profit Margin, Earning per Share, and Operating Profit Margin on Stock

Prices of Banking Companies in Indonesia Stock Exchange. *International Journal of Finance Research, 1*(2), 103–123. https://doi.org/10.47747/ijfr.v1i2.280.

Darsani, P. A., & Sukartha, I. M. (2021). The Effect of Institutional Ownership, Profitability, Leverage and Capital Intensity Ratio on Tax Avoidance. *American Journal of Humanities and Social Sciences Research, 5*(5), 13–22. https://www.ajhssr.com/wp-content/uploads/2021/01/C215011322.pdf.

Elbannan, M. A., & Farooq, O. (2020). Do more financing obstacles trigger tax avoidance behavior? Evidence from Indian SMEs. *Journal of Economics and Finance, 44*(1), 161–178. https://doi.org/10.1007/s12197-019-09481-9.

Erkinkhojiev, I., & Shoohrat Amonovich, T. (2022). Impact of Taxes on the Bank's Profit. Article in *International Journal of Special Education, March*. https://www.researchgate.net/publication/361107927.

Guedrib, M. & Marouani, G. (2023), The interactive impact of tax avoidance and tax risk on the firm value: new evidence in the Tunisian context, *Asian Review of Accounting, Vol. 31* No. 2, pp. 203-226. https://doi.org/10.1108/ARA-03-2022-0052

Hasan, M. M., Lobo, G. J., & Qiu, B. (2021). Organizational capital, corporate tax avoidance, and firm value. *Journal of Corporate Finance, 70*(July), 102050. https://doi.org/10.1016/j.jcorpfin.2021.102050.

Hendra, Yahya, I., & Absah, Y. (2022). The Effect of Sustainability Reporting, Good Corporate Governance, and Dividend Policy on Firm Value with Financial Performance as an Intervening Variable in Mining Company Listed on Indonesia Stock Exchange. *International Journal of Research and Review, 9*(7), 60–71. https://doi.org/10.52403/ijrr.20220708.

Ibrahim, U. A. (2020). Effect of Financial Leverage on Firm Value: Evidence From Selected Firms Quoted on the Nigerian Stock Exchange. *European Journal of Business and Management*, 124–135. https://doi.org/10.7176/ejbm/12-3-16.

Indonesia Government. (2018). *Widodo Launches Roadmap for Industry 4.0: "Making Indonesia 4.0." Indonesia Investments*. https://www.indonesia-investments.com/business/business-columns/widodo-launches-roadmap-for-industry-4.0-making-indonesia-4.0/item8711.

Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The Effect of Liquidity, Leverage, and Profitability on Firm Value: Empirical Evidence from Indonesia. *Journal of Asian Finance, Economics and Business, 8*(3), 423–431. https://doi.org/10.13106/jafeb.2021.vol8.no3.0423.

Johnson, M. S. (2020). Regulation by shaming: Deterrence effects of publicizing violations of workplace safety and health laws. *American Economic Review, 110*(6), 1866–1904. https://doi.org/10.1257/aer.20180501.

Lestari, A., Dewi, R. R., Wahyuni, I., Windiyani, W., & Windiyani, W. (2023). Factors-Factors Affecting Tax Avoidance. *Devotion: Journal of Research and Community Service, 4*(1), 289–304. https://doi.org/10.36418/dev.v4i1.383.

Linantis, R. (2021). Transparency as Moderating Tax Avoidance, Profitability, and Leverage on Firm Value. *Journal of Economics, Finance and Management Studies, 04*(12), 2415–2426. https://doi.org/10.47191/jefms/v4-i12-02.

Martono, S., Yulianto, A., Witiastuti, R. S., & Wijaya, A. P. (2020). The role of institutional ownership and industry characteristics on the propensity to pay dividend: An insight from company open innovation. *Journal of Open Innovation: Technology, Market, and Complexity, 6*(3). https://doi.org/10.3390/JOITMC6030074

Munandar, A., & Alvian, R. (2022). The Influence of Debt-to-Equity Ratio, Net Profit Margin and Cash Ratio on Firm Value. *Jurnal Ilmiah Akuntansi dan Keuangan, 4*(7), 2682–2690. https://journal.ikopin.ac.id/index.php/fairvalue

Najaf, R., & Najaf, K. (2021). Political ties and corporate performance: why efficiency matters? *Journal of Business and Socio-Economic Development, 1*(2), 182–196. https://doi.org/10.1108/jbsed-03-2021-0023

Orbaningsih, D. (2022). The Effect of Good Corporate Governance (GCG) and Corporate Social Responsibility (CSR) Disclosure on Company Value with Profitability as Moderating Variables. *Journal of Economics, Finance and Management Studies, 05*(05), 1309–1324. https://doi.org/10.47191/jefms/v5-i5-12

Rabbi, F., & Almutairi, S. S. (2021). Corporate tax avoidance practices of multinationals and country responses to improve quality of compliance. *International Journal for Quality Research, 15*(1), 21-44. https://doi.org/10.24874/IJQR15.01-02

Rahmayani, M. W., Hernita, N., & Riyadi, W. (2023). Company Size and Profitability Against Tax Avoidance in Coal Sector Mining Companies Listed on the IDX in 2018-2021. *International Journal of Professional Business Review, 8*(8), e03262. https://doi.org/10.26668/businessreview/2023.v8i8.3262

Rudyanto, A., & Pirzada, K. (2021). The role of sustainability reporting in shareholder perception of tax avoidance. *Social Responsibility Journal, 17*(5), 669–685. https://doi.org/10.1108/SRJ-01-2020-0022

Siti Sarpingah. (2020). the Effect of Company Size and Profitability on Tax Avoidance With Leverage As Intervening Variables. *EPRA International Journal of Research & Development (IJRD), January*, 81–93. https://doi.org/10.36713/epra4552

Sopiyana, M. (2022). the Effect of Leverage and Firm Size on Tax Avoidance with Profitability as Moderating. *Scientific Journal of Reflection: Economic, Accounting, Management and Business, 5*(1), 29–37. https://doi.org/10.37481/sjr.v5i1.422

Suciarti, C., Suryani, E., & Kurnia, K. (2020). The Effect of Leverage, Capital Intensity and Deferred Tax Expense on Tax Avoidance. *Journal of Accounting Auditing and Business, 3*(2), 76-83. https://doi.org/10.24198/jaab.v3i2.28624

Sudiyatno, B., Puspitasari, E., Suwarti, T., & Asyif, M. M. (2020). Determinants of Firm Value and Profitability: Evidence from Indonesia. *Journal of Asian Finance, Economics and Business, 7*(11), 769–778. https://doi.org/10.13106/jafeb.2020.vol7.no11.769

Sukesti, F., Ghozali, I., Fuad, F., Almasyhari, A. K., & Nurcahyono, N. (2021). Factors Affecting the Stock Price: The Role of Firm Performance. *Journal of Asian Finance, Economics and Business, 8*(2), 165–173. https://doi.org/10.13106/jafeb.2021.vol8.no2.0165

Sunarto, S., Widjaja, B., & Oktaviani, R. M. (2021). The Effect of Corporate Governance on Tax Avoidance: The Role of Profitability as a Mediating Variable. *Journal of Asian Finance, Economics and Business*, *8*(3), 217–227. https://doi.org/10.13106/jafeb.2021.vol8.no3.0217

Tanko, U. M. (2020). The moderating effect of profitability on the relationship between ownership structure and corporate tax avoidance in Nigeria listed consumers goods firms. *International Journal of Business and Technopreneurship*, *10*(2), 153–172. https://www.researchgate.net/profile/Udisifan-Tanko/publication/352882271_The_Moderating_Effect_of_Profitability_on_the_Relationship_Between_Ownership_Structure_and_Corporate_Tax_Avoidance_in_Nigeria_Listed_Consumers_Goods_Firms/links/60dddd61458515d6fbf2290f/The-Moderating-Effect-of-Profitability-on-the-Relationship-Between-Ownership-Structure-and-Corporate-Tax-Avoidance-in-Nigeria-Listed-Consumers-Goods-Firms.pdf

Vu, T. A. T., & Le, V. H. (2021). The Effect of Tax Planning on Firm Value: A Case Study in Vietnam. *Journal of Asian Finance, Economics and Business*, *8*(2), 973–979. https://doi.org/10.13106/jafeb.2021.vol8.no2.0973

Widiatmoko, S., & Mulya, H. (2021). The Effect of Good Corporate Governance, Profitability, Capital Intensity and Company Size on Tax Avoidance. *Journal of Social Science*, *2*(4), 502–511. https://doi.org/10.46799/jss.v2i4.176

Yudhyani, E., Kulsum, U., Reza, F., Sitorus, A. N., & Kirana, N. W. I. (2022). Determinant Factors of Firm Value: Cash Holdings and Dividend Policy as Mediation. *JASF: Journal of Accounting and Strategic Finance*, *5*(2), 278–301. https://doi.org/10.33005/jasf.v5i2.325.