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Tax Planning or Profit Shifting? Investigating the Drivers of Transfer Pricing in Indonesia's Pharmaceutical Sector

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ABSTRACT
This study investigates the firm-level determinants of transfer pricing practices within Indonesia's pharmaceutical sector, an industry marked by high intangible asset intensity and regulatory sensitivity. Using panel data from eight publicly listed pharmaceutical companies on the Indonesia Stock Exchange (IDX) for the 2019–2023 period, the research employs a Random Effect Model to assess the impact of tax ratio, firm size, intangible assets, and tunneling incentive on transfer pricing decisions. The findings reveal that the tax ratio is the only variable that has a statistically significant and positive impact on transfer pricing, confirming the theory that higher tax burdens encourage firms to shift profits through intra-group transactions. In contrast, firm size, intangible assets, and tunneling incentives exhibit no significant effects, indicating that structural characteristics alone may not fully explain transfer pricing behavior in emerging markets. This study enriches the discourse on agency theory and positive accounting theory by highlighting how managerial decisions are primarily influenced by fiscal constraints rather than firm complexity or ownership motives. It challenges widely held assumptions that larger firms or those with higher intangible assets are more prone to transfer pricing, especially in contexts with growing regulatory enforcement such as Indonesia. The results underscore the importance of risk-based tax auditing strategies that target firms with high tax exposure, rather than relying solely on observable characteristics like size or asset structure.

1. Introduction

Transfer pricing remains one of the most controversial issues in international taxation, especially amid increasing scrutiny over tax avoidance strategies by multinational enterprises (MNEs). While it serves a legitimate role in internal performance assessment and cost control, transfer pricing has also been exploited as a mechanism for profit shifting to lower-tax jurisdictions (Merle et al., 2019). This dual character of transfer pricing has prompted calls to distinguish between acceptable tax planning and aggressive tax avoidance, particularly in high-risk sectors such as pharmaceuticals (Mardjono et al., 2025).

In emerging markets like Indonesia, the challenge is magnified by institutional vulnerabilities, limited regulatory capacity, and informational asymmetry between tax authorities and corporate

actors. In 2016, the Indonesian enacted by the Ministry of Finance Regulation No. 213 as a follow-up to the circular from the Director General of Taxes No. PER-32/PJ/2011, which refined Regulation No. PER-43/PJ/2010 regarding the implementation of the arm's length principle in dealings between affliliated entities. Such attitudes may lead to violations of tax regulations, including the practice of transfer pricing.

Agency theory suggests that managers may exploit such asymmetries to maximize firm value or personal incentives through opportunistic transfer pricing (Ha & Park, 2024). Positive accounting theory further posits that firms choose accounting strategies—including transfer pricing—that align with contractual obligations and political cost considerations (Milne, 2002; Sujana et al., 2022). Extant literature has identified several firm-specific factors influencing transfer pricing behavior. The tax ratio is widely accepted as a direct incentive for profit shifting (Ali et al., 2022; Irawati et al., 2025). Firm size is often associated with the scale and complexity of operations, which may enable or deter aggressive tax strategies depending on external scrutiny (Felzensztein et al., 2022; Zadeh & Eskandari, 2012). Intangible assets, being difficult to value, present opportunities for earnings manipulation, particularly in knowledge-intensive industries like pharmaceuticals (Ortmann & Pummerer, 2023; Van Criekingen et al., 2022). Moreover, tunneling incentives, where controlling shareholders divert company resources, may also influence transfer pricing decisions, albeit indirectly (Deden Tarmidi et al., 2023; Kim & Kim, 2022).

However, there is limited empirical evidence on how these variables operate within the Indonesian context, especially in the pharmaceutical sector. Previous studies often focus on developed economies or treat MNEs as a homogenous group, overlooking the nuanced motivations and constraints faced by firms in regulatory environments such as Indonesia (Kurniasih et al., 2023; Nor & Mohamed, 2024). This gap is critical, considering Indonesia's efforts to strengthen tax compliance through country-by-country reporting, cooperative compliance frameworks, and anti-base erosion regulations (Eberhartinger & Zieser, 2021; Shehaj & Weichenrieder, 2024).

Theoritical Framework

1. Agency theory

Agency theory is described as a framework used to examine relationships between actors seeking and providing a service. It focuses on the informational asymmetry and opportunism that can exist between these parties. The theory also considers the agency costs needed to mitigate aberrant outcomes that arise from these imbalances and potential opportunistic behaviors (Löhde et al., 2021). It explains how stakeholders can design cost-efficient agreements based on relevant contextual information. In a corporate setting, this relationship is reflected in the interaction between shareholders (principals) and managers (agents). Agency theory aims to align agent behavior with principal interests by shifting from a zero-sum to a positive-sum framework that benefits both parties (Ha & Park, 2024).

2. Positive Accounting Theory

Positive accounting theory described as an empirical science focused on explaining and predicting accounting practice. It is not concerned with prescribing what accounting practices should be. This theory is based on the contracting theory of the firm, where various stakeholders, such as managers, shareholders, and debtholders, enter into contracts that utilize accounting numbers. These contracts, including compensation plans and debt covenants, create incentives for managers to make accounting choices that maximize their own welfare (Milne, 2002). The relevance of Positive Accounting Theory to this research is that it helps understand how managers make decisions regarding transfer pricing to optimize company profits. It also indicates that this theory views transfer pricing as an accounting practice used to set prices in transactions between affiliated companies.

3. Transfer pricing

Mardjono et al.(2025), Transfer pricing refers to a strategy used by multinational companies to determine the prices of transactions between related entities across different countries. It is

commonly described as a method for reallocating profits to jurisdictions with lower tax rates in order to reduce the overall tax liability (Fathinus Syafrizal & Ahmad Farabi, 2023). The determination of transfer pricing refers in relation to the price of goods and services exchanged between controlled entities, such as between a parent company and its subsidiaries or between similar companies. Transfer pricing can be used by multinational corporations to allocate profits and costs internally, resulting in tax savings, which may be challenged by tax authorities (Ha & Park, 2024). The transfer pricing method serves several important purposes in an international context, including maintaining company competitiveness, controlling tax burdens, promoting fair performance evaluation, and motivating employees by shifting company revenue from one country to another.

Hypothesis Development

1. Tax Ratio and Transfer Pricing

Transfer pricing has long been recognized as a strategic tool used by multinational corporations to allocate income and expenses across different tax jurisdictions. The tax ratio, commonly defined as the proportion of tax revenue to gross domestic product, serves as a proxy for a country's tax burden. A higher tax ratio often reflects more aggressive taxation, which can prompt firms to seek methods to minimize their effective tax liability through intra-group transactions (Ali et al., 2022; Irawati et al., 2025).

According to agency theory, managers, acting as agents, may exploit informational asymmetries to pursue tax avoidance strategies that benefit both the firm and, in some cases, themselves. When faced with higher tax obligations, they may resort to transfer pricing mechanisms to reallocate profits to lower-tax jurisdictions (Li & Wu, 2022). Positive accounting theory similarly suggests that managers will adopt accounting practices that maximize firm value by reducing tax costs, particularly when tax burdens are substantial.

Empirical studies support this reasoning. For instance, Deden Tarmidi et al (2023) highlight that tax ratios are a significant determinant of transfer pricing decisions, especially when combined with other firm-level incentives such as tunneling or performance bonuses. As a result, tax ratios are not merely national indicators but firm-relevant constraints influencing cross-border pricing behavior. Based on the theoretical foundations and empirical evidence discussed above, this study proposes the following hypothesis,

H1: Tax ratio has a favorable impact on transfer pricing.

2. Firm Size on Transfer Pricing

Firm size has long been considered a key determinant in the strategic behavior of multinational corporations, particularly in relation to financial and tax planning activities. Larger firms tend to have more complex organizational structures, broader international operations, and greater access to financial and human capital, which may facilitate the implementation of transfer pricing strategies across subsidiaries (Yadav et al., 2022; Zadeh & Eskandari, 2012). From a resource-based perspective, such firms possess superior capabilities to manage intra-firm transactions, legal compliance, and tax-related disclosures.

Moreover, large firms are more likely to engage in sophisticated tax planning due to their ability to absorb the costs associated with transfer pricing documentation and compliance requirements. According to Ali et al. (2022), firm-specific factors, including size and international exposure, significantly affect tax optimization decisions, suggesting that larger multinational entities are better positioned to shift income to lower-tax jurisdictions.

However, the relationship between firm size and transfer pricing is also moderated by external scrutiny and regulatory pressure. Larger firms may be more visible to tax authorities and public watchdogs, potentially deterring aggressive transfer pricing practices due to reputational and legal risks Ahmad et al. (2024). Despite this potential counterbalance, empirical studies continue to demonstrate a positive correlation between firm size and the intensity of transfer pricing activities,

particularly in sectors with complex value chains and high intangible asset intensity. Based on these arguments, this study proposes the following hypothesis,

H2: Firm size has a facorable impact on transfer pricing.

3. Intangible Asset and Transfer Pricing

Intangible assets are inherently difficult to value due to their non-physical nature and the absence of comparable market benchmarks. This ambiguity creates opportunities for multinational enterprises (MNEs) to allocate profits strategically across affiliated entities, often in low-tax jurisdictions, through intra-group transactions involving such assets (Ortmann & Pummerer, 2023; Van Criekingen et al., 2022). The valuation flexibility and low traceability of intangible assets make them a preferred channel for transfer pricing strategies designed to minimize global tax burdens. In the context of pharmaceutical firms, where intangible assets such as R&D outputs and brand equity play a central role, the potential for transfer pricing manipulation is particularly salient. Previous empirical studies highlight that firms with higher proportions of intangible assets exhibit greater transfer pricing intensity, primarily because the arm's length principle becomes difficult to apply effectively (Chen et al., 2024).

Positive accounting theory suggests that managers, motivated by contractual incentives, may leverage discretionary accounting treatments—including those involving intangible assets—to optimize financial outcomes. Furthermore, agency theory reinforces this notion by explaining that the asymmetry of information between regulators and corporate managers facilitates opportunistic behaviors, especially in complex asset classes.

Although global initiatives such as the OECD's Base Erosion and Profit Shifting (BEPS) framework attempt to tighten regulation, the enforcement of fair valuation for intangibles remains a challenge, particularly in developing economies with limited regulatory capacity (Ahmad et al., 2024; Khaltar, 2024). Thus, the presence of significant intangible assets may still serve as a conduit for strategic income shifting. Based on the above discussion, the following hypothesis is formulated:

H3: Intangible assets have a favorable impact on transfer pricing.

4. Tunneling incentive and Transfer Pricing

Tunneling incentive refers to the actions of controlling shareholders who divert company resources for personal gain, often to the detriment of minority shareholders. One of the mechanisms through which such opportunistic behavior can manifest is transfer pricing, especially in firms with complex ownership structures or limited transparency. Prior literature has established that tunneling behavior is frequently associated with intra-group transactions, such as the sale of goods or services to related parties at manipulated prices, in order to shift profits or minimize tax burdens (Kim & Kim, 2022; Sujana et al., 2022). This practice becomes more prevalent when internal governance mechanisms are weak, allowing managers or dominant shareholders to extract private benefits by reallocating earnings within group entities.

Agency theory provides a strong conceptual foundation for understanding this phenomenon. It posits that managers or majority shareholders may exploit informational asymmetries to serve their own interests, particularly when external monitoring is inadequate (Ahmad et al., 2024). In this context, tunneling incentives increase the likelihood of using transfer pricing not for operational efficiency, but as a strategic tool for earnings manipulation and tax arbitrage. Furthermore, empirical studies in emerging markets have shown that firms with higher tunneling incentives are more likely to engage in aggressive tax planning, including transfer pricing arrangements (Deden Tarmidi et al., 2023; Zhang & She, 2024). Based on the theoretical and empirical evidence above, it is hypothesized that:

H4: Tunneling incentive has a favorable impact on transfer pricing.

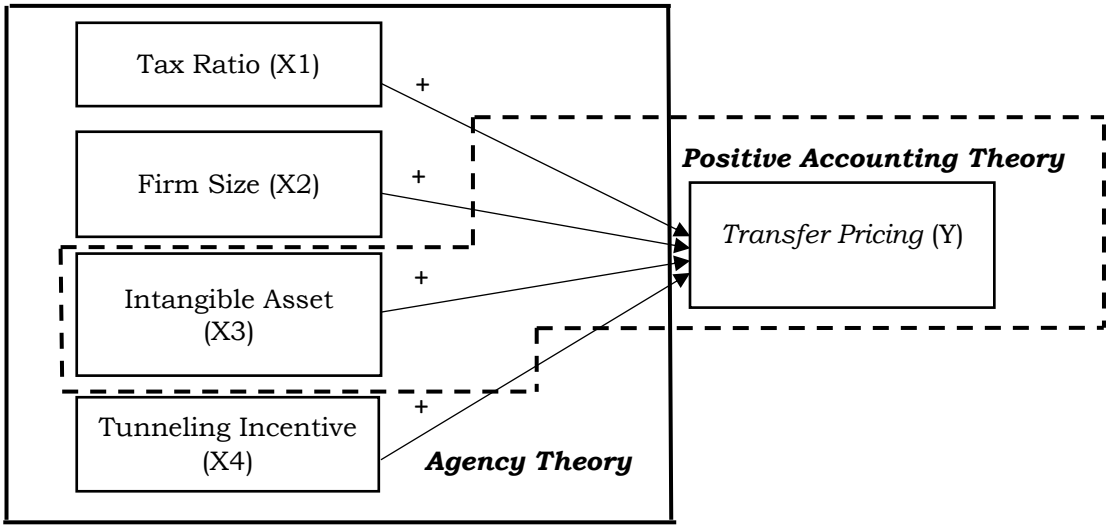

Figure 1. Conceptual Framework

This study contributes to the literature in three ways. First, it provides sector-specific empirical evidence from Indonesia—a high-growth, middle-income country with increasing pharmaceutical investment (Chen et al., 2024). Second, it tests a comprehensive set of determinants underpinned by both agency theory and positive accounting theory. Third, it responds to global concerns over the blurred line between tax planning and tax abuse (Ahmad et al., 2024), offering actionable insights for regulators aiming to curb base erosion without discouraging legitimate corporate strategies.

2. Method

2.1 Population and Sample

This study employs research involving quantifiable data approach. The total sample frame consists of all pharmaceutical manufacturing entities listed on the IDX (Indonesia Stock Exchange) during the 2019-2023 period. The sample was selected using purposive sampling, judgmental sampling guided by defined criteria, including:

- Pharmaceutical manufacturing sector entities listed on the IDX that provided complete financial reports from 2019 to 2023 period; and
- Companies that were not delisted during the research period. The list of companies included in the pharmaceutical subsector is as follow:

Table 1. **List of Pharmaceutical Subsector Companies Used as Research Samples for the Period 2019-2023**

No	Code	Name issuer	IPO date
1	DVLA	Darya Varia Laboratoria Tbk	11 Nov 1994
2	KLBF	Kalbe Farma Tbk	30 Jul 1991
3	MERK	Merck Indonesia Tbk	23 Jul 1981
4	PYFA	Pyridam Farma Tbk	16 Okt 2001
5	SIDO	Industri Jamu dan Farmasi Sido	18 Des 2013
6	TSPC	Tempo Scan Pasific Tbk	17 Jun 1994
7	SCPI	Organon Pharma Indonesia Tbk.	08 Jun 1990
8	PEHA	Phapros Tbk.	26 Des 2018

Source: Idx.co.id, 2024.

The gathered data is annual in nature. Secondary data was obtained through documentation by accessing the official portal of the Indonesia Stock Exchange and the official platforms of all pharmaceutical manufacturing firms traded on the Indonesia Stock Exchange (IDX) during the 2019-2023.

2.2 Research Variables

The dependent variable in this research is transfer pricing. transfer pricing refers to the pricing determined for the provision of products, services, or other intangible asset between us affiliated companies, according to the arm's length standard. In accordance with the minister of Finance Regulation of the Republic of Indonesia No. 22/PMK.03/2020, transfer pricing is futher described as a mechanism for quantifying the value of transactions between entities with special relationships.

The variable being analyzed in this study is:

- According to the legislation of the Republic of Indonesia No. 7 of 2021, tax is a mandated obligation imposed on every citizen and business entity by the government, based on legal provisions, without direct compensation, and intended for public welfare and national needs. Taxation serves not only as a means of revenue collection but also as a foundational mechanism through which citizens and business entities engage with the state, shaping accountability and state-building processes in developing countries. MacCarthy (2021) state that the effective tax rate (ETR) is calculated by dividing total corporate tax expense, less deferred tax expense, by earnings before corporate tax. This measure reflects the actual tax burden on a company's pre-tax earnings
- Firm size is a parameter used to categorize the scale of a company, whether large or small (Ali et al., 2022; Felzensztein et al., 2022). the significant scale of a company is often associated with improved access to external finance, which in turn reduces growth constraints commonly faced by smaller enterprises (Beck & Demirguc-Kunt, 2006). It might be assessed through various factors such as total assets, production capacity, market value, and others. A company is considered large if it holds significant assets. In this study, total assets are used as a measure of firm size, as they are considered a more balanced indicator than sales.
- The proxy used for intangible assets is the logarithm of the total intangible assets. According to Chen et al (2024) the study measures intangible assets using the natural logarithm of the total intangible assets recorded at year-end. This logarithmic transformation is applied to represent the scale of intangible assets as a proxy in the analysis.
- Tunneling incentive refers to actions in which majority shareholders transfer company resources and earnings for their personal gain, with the associated costs shouldered by minority shareholders (Ahmad et al., 2024). Tunneling is the diversion of corporate resources for the benefit of controlling shareholders.

2.3 Data Analysis Methods

This research was tasted employing panel data. To determine the suitable panel data model, the chow test, hausman test, and langrange multiplier test were employed. The data analysis methods included descriptive statistics, testing of classical regression assumptions, regression analys, and testing of hypotheses. The purpose of this analysis is to examine the correlation bamong the independent variables tax ratio, firm size, intangible assets, and tunneling incentives and the dependent variable transfer pricing.

The regression equation utilized is a follow:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

3. Results

3.1 Panel Data Regression Analysis

a. Chow Test

Table 2. Chow test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.530549	(7,28)	0.8039

Source: Data processed in 2024 using Eviews 13

As shown in the output, the Prob. Cross-section figure indicates 0.8039, which is more than 0.05, indicating that H_0 is approved. Therefore, the model employed is the Common Effect Model.

b. Hausman Test

Table 3. Hausman test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.737087	4	0.7840

Source: Data processed in 2024 using Eviews 13

According to the output, the Prob. value is 2.481, which is greater than 0.05 therefore, H_0 is disproved. Thus, the suitable model for explain the panel data is the Random Effect Model.

c. Lagrange Multiplier Test (Lm)

Table 4. Lagrange multiplier test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	0.958241	1.523492	2.481733

Source: Data processed 2024 using Eviews 13

According to the output, the value of the test statisticis 2.481 with a p-value of greater than 0.05, indicating that H_0 is rejected. Thus, the Random Effect Model represent the appropriate model for the panel data. Based on the regression model testing that has been conducted, the best model among the three evaluated this study employs the Random Effect Model.

According to the output, the following descriptive data statistics were obtained:

- The dependent variable (Y) in pharmaceutical sector companies indicates a highest value of 1.66620, a lowest value of 0.9560, and an avarge of 1.3377, with a standard deviation of 0.1379.
- The independent variable (X1) recorded a maximum value of 0.3810, a lowest value of 0.0240, an avarage of 0.2381, and the standard deviation is 0.072.
- The independent variable (X2) recorded a maximum value of 30.9360, a lowest value of 25.9740, an average of 28.5364, and a standard deviation of 1.1234.
- The independent variable (X3) recorded a maximum value of 28.2070, a lowest value of 18.7670, an avarage of 24.5506, and a standard deviation of 2.3246.
- The independent variable (X4) recorded a maximum value of 1.0000, a lowest value of 0.2800, an avarage of 0.6345, and standard deviation is 0.2923.

Table 5. Descriptive statistical analysis

	Y	X1	X2	X3	X4
Mean	1.337700	0.238150	28.53640	24.55063	0.634525
Median	1.329000	0.234000	28.29950	25.23800	0.650500
Maximum	1.662000	0.381000	30.93600	28.20700	1.000000
Minimum	0.956000	0.024000	25.97400	18.76700	0.280000
Std. Dev.	0.137883	0.072684	1.123426	2.324666	0.292313
Skewness	-0.239129	-0.616267	0.360747	-0.804483	0.005022
Kurtosis	4.518269	4.880522	3.353511	2.999600	1.350365
Jarque-Bera	4.223119	8.425836	1.075873	4.314617	4.535659
Probability	0.121049	0.014803	0.583952	0.115636	0.103537
Sum	53.50800	9.526000	1141.456	982.0250	25.38100
Sum Sq. Dev.	0.741458	0.206037	49.22135	210.7588	3.332418
Observations	40	40	40	40	40

Source: Data processed in 2024 using Eviews 13

3.2 Regression Equation Analysis

$$Y= 0.676 + 1.672X_1+ 0.0107X_2 - 0.0026X_3+ 0.034X_4$$

A detailed interpretation of the regression equation above is as follows:

- The obtained constant value is 0.676, indicating that for every avarage increase of one unit, the dependent variable increases by 0.676 on avarage, and vice versa.
- The coefficient for the tax ratio in the regression model is positive, amounting to 1.672. This implies that if the tax ratio variable increases, the transfer pricing variable also increases by 1.672, and vice versa.
- The coefficient for the firm size in the regression model is positive, amounting to 0.010. This means that if the firm size variable rises, the transfer pricing variable rises by 0.010 as well, and the same applies in reverse.
- The regression coefficient of the intangible asset variable is negative, amounting to 0.0026. This can be interpreted as indicating that a decrease in the intangible asset variable leads to a decline in the transfer pricing variable by 0.0026, and conversely.
- The regression coefficient of the tunneling incentive variable is positive, amounting to 0.034. this suggests that if the tunneling incentive variable experiences an increase, the transfer pricing variable also increases by 0.034, and vice versa.

3.3 Determination Coefficient

Table 6. Determination coefficient

R-squared	0.807189
Adjusted R-squared	0.785153

Source: Data processed in 2024 using Eviews 13

According to the output results, the Adjusted R-squared value is 0.785, this shows that the independent variables account for 78.5% of the variation in the dependent variable, while the remaining 21.5% is explained by other factors not considered in this study.

3.4 F Statistical Test

Table 7. F statistical test

F-statistic	36.63121
Prob (F-statistic)	0.000000

Source: Data processed in 2024 using Eviews 13

According to the output results, the F-statistic value is 36.631 with an F-statistical probability value of 0.0000 (<0.05), this suggests that the independent variables (X) have a significant simultaneous effect on the dependent variable (Y).

3.5 T Statistical Test

Table 8. T statistical test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.676184	0.342830	1.972361	0.0565
Tax Ratio	1.672847	0.158000	10.58761	0.0000
Firm Size	0.010734	0.016497	0.650625	0.5195
Intangible Aset	-0.002638	0.007921	-0.333031	0.7411
Tunneling Incentive	0.034026	0.038991	0.872654	0.3888

Source: Data processed in 2024 using Eviews 13

According to the output:

- The tax ratio variable shows a t-statistic of 10.587 and a significance level of 0.0000 (<0.05), demonstrating a significant impact on transfer pricing.
- The firm size variable shows a t-statistic of 0.650 and a significance level of 0.5195 (>0.05), suggesting no meaningful impact on transfer pricing.

- The intangible asset variable shows a t-statistic of -0.333 and a significance level of 0.7411 (>0.05), suggesting no meaningful impact on transfer pricing.
- The tunneling incentive variable shows a t-statistic of 0.872 and a significance level of 0.3888 (>0.05), suggesting no meaningful impact on transfer pricing.

4. Discussion

4.1 The Impact of Firm Size on Transfer Pricing

The results of the hypothesis test show that variable X1 (tax ratio) significantly affects Y (transfer pricing). This is supported by a t-statistic of 10.587 and a significance level (Prob.) of 0.0000 (<0.05), indicating that the tax ratio in pharmaceutical firms listed on the Indonesia Stock Exchange (IDX) between 2019 to 2023 significantly affects transfer pricing.

Agency theory explains that each party involved has its own interests, potentially leading to agency conflicts due to differing objectives. In the context of taxation, the conflicting interests between tax authorities and corporations may lead to tax non-compliance or managerial strategies such as transfer pricing. Conflicting interests in heterogeneous populations often hinder cooperation in taxation scenarios, intensifying inequality and complicating effective redistribution strategies (Brent et al., 2019). Corporate tax avoidance refers to the legal behavior of a company to reduce its tax burden by utilizing tax laws and regulations. The most important goal of corporate tax planning is to reduce corporate tax burden and increase after-tax profits (Li & Wu, 2022). While Donohoe et al. (2024) Corporate tax planning involves strategic actions, often facilitated by external tax advisors, to reduce tax liabilities while balancing risk and shareholder expectations. The results obtained from this research demonstrate that transfer pricing is utilized as a tool in corporate tax planning. These results align with prior research which similarly confirm that the tax ratio affects transfer pricing.

4.2 The Impact of Firm Size on Transfer Pricing

According to the results of the hypothesis test, variable X2 (Firm Size) does not significantly impact Y (transfer pricing), as reflected by a t-statistic of 0.650 and a significance level (Prob.) of 0.5195 (>0.05). This indicates that firm size in pharmaceutical companies on the Indonesia Stock Exchange (IDX) from 2019 to 2023 has no significant impact on transfer pricing practices. Put simply, larger companies are less inclined to use transfer pricing.

Agency theory, which emphasizes the possible conflict of interest between principals and agents, suggests that larger firms being under greater external scrutiny tend to have better governance and are less likely to engage in aggressive tax strategies. This aligns with positive accounting theory, especially the political cost hypothesis, which argues that large firms could choose accounting methods that minimize reported profits to steer clear of political focus (Ahmad et al., 2024). As such, managers in large firms may limit tax avoidance practices (Djolafo, 2022), like transfer pricing to maintain corporate credibility and investor confidence. These results align with previous research which similarly found no significant connection between firm size and transfer pricing.

4.3 The Impact of Intangible Assets on Transfer Pricing

The hypothesis test results indicate that variable X3 (intangible assets) has an insignificant effect on Y (transfer pricing), as demonstrated by a t-statistic of -0.333 and probability value of 0.7411 (>0.05). This suggests that intangible assets in the pharmaceutical firms listed on the Indonesia Stock Exchange between 2019–2023 do not significantly impact transfer pricing.

One contributing factor is the OECD's initiative through BEPS Action 13 (Base Erosion and Profit Shifting), which mandates contemporary transfer pricing documentation. Indonesia implemented this via Ministry of Finance Regulation No. 231/PMK.03/2016. As per Positive Accounting Theory, which assumes that companies have discretion in choosing suitable accounting practices, the findings suggest that management may opt not to use transfer pricing to reduce tax liabilities. Managerial decisions serve not only operational goals but also act as signals to the market, influencing external perceptions. This result is consistent with earlier research by which also concluded that intangible assets do not influence transfer pricing.

4.4 The Impact of Tunneling Incentive on Transfer Pricing

The results of the hypothesis test indicate that variable X4 (tunneling incentive) does not significantly impact Y (transfer pricing), as shown by the t-statistic of 0.872 and a significance value (Prob.) of 0.3888 (>0.05). Therefore, it can be concluded that tunneling incentives in pharmaceutical companies on the Indonesia Stock Exchange over the period of 2019-2023 do not exert a significant influence on transfer pricing, although theoretically, tunneling incentives are assumed to motivate controlling shareholders to exploit transfer pricing as a means of diverting corporate assets for personal gain (Shahwan, 2024). Dominant foreign ownership allows the parent entity to exercise positive control over strategic decisions, enhancing firm performance through improved governance and reduced agency problems (Nguyen & Nguyen, 2020). Although foreign shareholders often hold dominant ownership and could influence strategic decisions, including transfer pricing practices, their limited access to detailed internal and managerial information reduces their involvement in such decisions. As a result, the proportion of foreign ownership does not directly correlate with the practice of transfer pricing strategies.

According to agency theory, individuals tend to act in their self-interest, potentially leading to agency conflicts when principals and agents have diverging goals. However, the findings of this study indicate that tunneling incentives are not used by managers to manipulate transfer prices for personal benefit. While agents are authorized to manage corporate assets, this authority is not necessarily exploited to conduct transfer pricing solely for reducing tax obligations. The results align with previous research which suggest that transfer pricing is not necessarily driven by tunneling motives aimed at personal gain.

5. Conclusion

This study investigates the determinants of transfer pricing practices among pharmaceutical companies listed on the Indonesia Stock Exchange during the period 2019–2023, employing a panel data regression approach with the Random Effect Model as the most suitable. The findings reveal that the tax ratio (X1) has a statistically significant influence on transfer pricing, whereas firm size (X2), intangible assets (X3), and tunneling incentive (X4) do not exhibit a significant effect. These results highlight the critical role of corporate tax planning in shaping transfer pricing strategies, particularly in industries sensitive to regulatory and fiscal pressures. Theoretically, this research contributes to the advancement of agency theory and positive accounting theory by emphasizing the primacy of tax incentives over structural firm characteristics in transfer pricing decisions. Unlike prior assumptions that larger firms or firms with greater intangible assets are more inclined to engage in transfer pricing, this study finds that tax burden remains the dominant driver, reinforcing the view that managerial discretion is primarily exercised to reduce corporate tax liabilities. From a practical standpoint, the findings underscore the need for enhanced tax regulatory oversight focused on firm-specific tax strategies rather than relying solely on firm size or ownership structure as risk indicators. Tax authorities are advised to adopt a risk-based approach in monitoring intercompany transactions, especially in sectors with complex cost structures and international linkages. For future research, it is recommended to examine the mediating roles of corporate governance quality or R&D intensity to better understand the mechanisms linking firm characteristics and transfer pricing behavior. Cross-country comparative studies or mixed-method approaches may also offer broader insights into the global dynamics of profit allocation and tax avoidance behavior in multinational enterprises.

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