

The Effect of Income Shifting, Return on Asset on Transfer Pricing (Empirical Study of Energy Companies Listed on the IDX in 2019-2022)

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Article Info

Article history:

Received 10/02/2025

Revised 18/02/2025

Accepted 28/02/2025

Keyword:

Income Shifting, Return on
Asset, Transfer Pricing

ABSTRACT

This study aims to determine the effect of income shifting, return on assets on transfer pricing (empirical study of energy companies listed on the BEI in 2019-2022). The population selected in this study were all Energy Companies listed on the IDX (2019-2022) totaling 75 companies. In determining the sample used in this study, the authors determined the technique based on purposive sampling technique. The data analysis method used in this research is multiple regression with the help of the Eviews program. Based on the test results and discussion that has been described, it can be concluded that Income Shifting affects Transfer Pricing in energy sector companies listed for the period 2019 - 2022. Return on Asset affects Transfer Pricing in energy sector companies listed for the period 2019 - 2022. the results of testing the coefficient of determination obtained an Adjusted R-Square value of 0.164969 or 16.49%. This means that the variables of Income Shifting, and Return on Asset together have an influence on Transfer Pricing by 16.49%. While the remaining 83.51% is influenced by other variables outside the research model that are not used in this study.



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INTRODUCTION

In the global business world, multinational companies often operate in various countries with different tax policies and regulations. This encourages companies to adopt financial strategies that can optimize profits and minimize tax burden. One strategy that is often used is transfer pricing, which is pricing in transactions between companies within a business group. According to Purwaningsih et al. (2021) transfer pricing is basically a neutral concept, namely prices charged between divisions or segments within the same organization for the exchange of products or services. However, if the exchange involves multinational companies, between divisions, or between segments that cross different countries' tax jurisdictions, then multinational companies are motivated to act non-neutrally towards the exchange price. This motivation arises because there are economic benefits, namely savings in overall tax costs.

According to Suandy (2011: 74), many studies show that more than 80% of multinational companies see transfer pricing as a major international tax issue, and more than half of the companies say that this issue is an important issue. transfer pricing can result in reduced potential state revenue from the tax sector of a country because companies tend to shift their tax obligations from countries that have high tax rates (high tax countries) to countries that apply low tax rates (low tax countries). Director General of Taxes, Ken Dwijugastead, revealed that there are 2000 multinational companies operating in Indonesia that have not paid corporate income tax in the last 10 years due to losses. According to the Directorate General of Taxes' calculation, the country has the potential to lose 1,300 trillion Rupiah as a result of transfer pricing practices. Even more emphasized according to internal information of the Directorate General of Taxes that the loss is mostly due to the payment of Interest,

Royalties and Intragroup Service, so that the Directorate General of Taxes believes that by stopping these payments the country does not need to increase debt anymore (Haeruman, 2014).

According to Siahaya & Lingga (2024) transfer pricing is a strategy commonly used by multinational companies in determining transaction prices between entities in a business group. This strategy is often associated with tax avoidance practices, especially through income shifting mechanisms, namely the transfer of profits from countries with high tax rates to countries with lower tax rates. Income shifting is one of the main factors that encourage companies to conduct transfer pricing to optimize the tax burden to be paid. According to Frandyanto & Riandoko (2017) income shifting is often done by utilizing transfer prices and also lower tax rates so that it tends to be done by multinational companies. The practice of tax avoidance is carried out to minimize the corporate tax burden with a scheme that refers to an area with a high corporate tax rate to a lower corporate rate area through an income shifting mechanism. This is supported by research conducted by Lo et al. (2010) explained the influence of tunneling incentive for income shifting on transfer pricing decision. Different results were shown by Purwaningsih et al. (2021) who found that tunneling incentive for income shifting has no effect on transfer pricing decisions.

In addition, Return on Asset (ROA) is also a factor that potentially affects the transfer pricing policy. ROA reflects the effectiveness of the company in managing assets to generate profits. Companies with high ROA tend to have good financial performance and are more likely to conduct transfer pricing strategy to optimize their tax structure. According to Prasetio & Mashuri (2020), a company's profit is influenced by its profitability level. The higher the profitability of a company, the greater the potential for profit shifting that occurs. In other words, companies that have a high level of profit are more likely to practice transfer pricing to shift income to entities located in jurisdictions with lower tax rates. This is done with the aim of minimizing tax burden and maximizing after-tax profit. This result supports research conducted by Anisyah (2018), Cahyadi & Noviani (2018) found that profitability affects transfer pricing decisions. Different results are shown by Prasetio & Mashuri (2020) who found that profitability measured by return on total assets (ROA) has no effect on transfer pricing. Similar results are also shown by Ramadhan & Kustiani (2017) which state that profitability has no effect on transfer pricing decisions.

Based on the description of the phenomenon and some previous research results related to the factors that influence transfer pricing, it has proven that there are still inconsistent or different results between one researcher and another. This creates a research gap or gap research. Based on this, the researcher is interested in conducting research with the title: "The Effect of Income Shifting, Return on Assets on Transfer Pricing (Empirical Study of Energy Companies Listed on the IDX in 2019-2022)".

LITERATURE REVIEW

Agency Theory

Agency theory is a relationship based on contracts that occur between members in the company. Agency relationship is a contract in which one or more people (principals) order other people (agents) to perform a service on behalf of principals and authorize agents to make the best decisions for principals (Jensen & Meckling, 1976). In the context of taxation, the principal can be interpreted as the government whose role is to supervise and ensure that the tax revenue that is the agent's obligation can be fulfilled properly. The agent, in this case the company, is responsible for managing business operations with the aim of maximizing profits. In addition, this theory can also be applied in the relationship between investors as principals and management as agents. Investors entrust the management of the company to managers, who act as agents. However, because managers have greater access to information, they tend to prioritize personal interests over the interests of the principal (Ramadhany & Amin, 2023).

Transfer Pricing

Transfer pricing is the price calculated for goods sent to other companies that have a special relationship and meet the principle of fair market price (Pohan, 2019: 196). In the transaction of goods, the tax authorities want to ensure that the company that has a special relationship uses fair prices. If the company does not use fair prices, then state revenue from the tax sector will decrease. According to Mineri & Pramitha (2021) transfer pricing is part of a business and tax activity that aims to ascertain

whether the price applied in transactions between companies that have a special relationship has been based on the arm's length price principle.

Income Shifting

Income Shifting is a strategy used by multinational companies to shift income to countries or jurisdictions with lower taxes in order to minimize the overall tax burden (Hartinah & Fitria, 2024). According to Prasetyo & Mashuri (2020), tax motivation is one of the reasons manufacturing companies conduct transfer pricing by conducting transactions with affiliated companies that exist outside national borders. Companies can do transfer pricing in their tax planning to minimize taxes paid. According to Frandyanto & Riandoko (2017), income shifting is often done by utilizing transfer prices and also lower tax rates so that it tends to be done by multinational companies. This is supported by research conducted by Lo et al. (2010) explained the effect of tunneling incentive for income shifting on transfer pricing decisions. Based on this description, the hypotheses in this study are:

H1: Income Shifting affects Transfer Pricing

Return on Asset

Return on Asset (ROA) is a profitability ratio that measures the extent to which the company is able to generate profits for ordinary shareholders. This ratio shows the net profit generated by the company from the capital that has been used by shareholders (Pangestu et al., 2020). According to Prasetyo & Mashuri (2020), the higher the company generates profits, the greater the tax burden that must be paid by the company, this can make management choose to carry out transfer pricing practices in order to reduce the tax burden that the company will pay and increase the wealth of principals in foreign countries. So the higher the company is able to generate profits, the greater the possibility of transfer pricing practices. This is supported by the research of Olimsar et al. (2024) which found that probability has a positive and significant influence on transfer pricing. Similar results are shown by Cahyadi & Noviani (2018) who found that profitability affects transfer pricing decisions. Based on this description, the hypothesis in this study is:

H2: Return on Asset affects Transfer Pricing

From the description above, the framework used in this study can be described as follows:

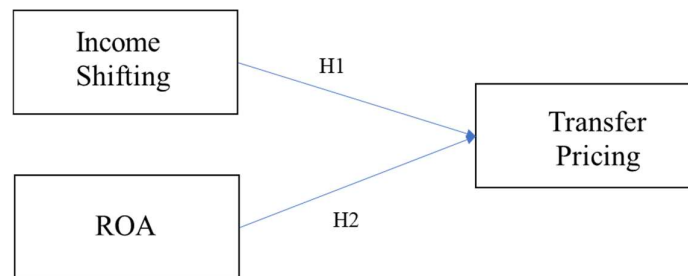


Figure 1. Framework of Thought

RESEARCH METHODS

This research was conducted with the aim of explaining quantitatively the tendency of population attitudes by examining samples from the population. This research consists of five independent variables, one dependent variable. In this study, the independent variables are income shifting and return on assets, while the dependent variable in this study is transfer pricing. The measurement of each variable is presented in the following table.

Table 1. Variable Measurement

No	Variables	Indicator	Measurement Scale
1	Transfer Pricing (Y)	$Transfer\ Pricing = \frac{Related\ receivables}{Total\ Piutang}$	Ratio
2	Income Shifting	$BTDit = \alpha_0 + \alpha_1 TAXit + \alpha_2 FIASit + \alpha_3 SALES + \alpha_4 OINit + \varepsilon$	Ratio

No	Variables	Indicator	Measurement Scale
(X1)			
3	Amidu, et al (2019) Return on Asset (X2)	$ROA = \frac{\text{Profit After Tax}}{\text{Total Asset}}$	Ratio
	Olivia & Dwimulyani (2019)		

The population selected in this study were all Energy Companies listed on the IDX (2019-2022) totaling 75 companies. In determining the sample used in this study, the authors determined the technique based on purposive sampling technique with criteria:

Table 2. Research Sample Criteria

Kriteria Sampel	Number of Companies
Energy sector companies listed on the IDX from 2019 to 2022	75
Energy sector companies that do not consistently publish financial reports for the period December 31, 2018 - 2022	(11)
Companies that experienced losses during the 2019-2022 tax year period	(41)
Number of research samples	23
Number of research observations 2019-2022 (4 years)	92

Source: Data processed by researchers (2025)

The research data is included in the type of secondary data in the form of financial reports and annual reports during the period 2019-2022. Data is obtained from the website of each company. The data analysis method used in this research is multiple regression with the help of the Eviews program. However, before the analysis is carried out, a classic assumption test will be carried out, namely the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

RESULTS AND DISCUSSION

Normality Test

The data will have a normal distribution if the probability value (p-value) is greater than the 5% significant level. The results of the normality test in this study can be seen in the following figure:

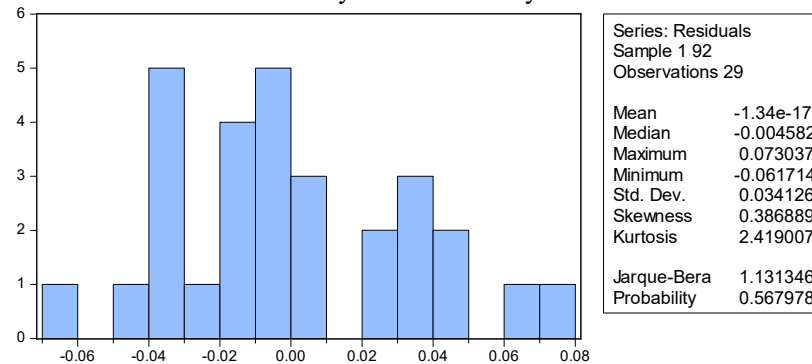


Figure 1. Normality Test Results

Source: Data Processing Results with Eviews 8

Based on the figure above, it shows that the Jarque-Bera value is 1.131346 with a probability value of 0.567978 which is greater than the significant level of 0.05, so it can be concluded that the data in this study is normally distributed.

Multicollinearity Test

The results of multicollinearity testing in this study can be seen in the following table.

Table 3. Multicollinearity Test Results

Variables	VIF
Income Shifting	1.334701
Roa	1.334701

Source: Data Processing Results with Eviews 8

Based on the multicollinearity test results in the table above, it shows that the VIF value of the Income Shifting variable, and Return on Asset (ROA) is smaller than 10. Thus it can be concluded that all variables are free from multicollinearity problems because the VIF value < 10 .

Heteroscedasticity Test

The submission of heteroscedasticity is done with the white test. if the significant number is 0.05. At the 95% confidence level, heteroscedasticity occurs. The results of heteroscedasticity testing in this study can be seen in the following table:

Table 4. Heteroscedasticity Test Results

F-statistic	0.564272	Prob. F(5,23)	0.7263
Obs*R-squared	3.168675	Prob. Chi-Square(5)	0.6740
Scaled explained SS	1.807103	Prob. Chi-Square(5)	0.8751

Source: Data Processing Results with Eviews 8

Based on the heteroscedasticity test, it shows that Prob. Obs*R-Squared of $0.6740 > 0.05$. These results provide a conclusion that the variables do not experience heteroscedasticity problems because the Prob value. Obs*R-Squared value is > 0.05 .

Autocorrelation Test

According to Santoso (2015) the basis for decision making with the Durbin Watson test is if the Durbin-Watson number is below -2, it means there is positive autocorrelation. Then if the Durbin-Watson number is between -2 to +2, it means there is no autocorrelation. And if the Durbin-Watson number is above +2, it means there is negative autocorrelation. The results of the autocorrelation test can be presented in the following table:

Table 5. Autocorrelation Test Results

Durbin-Watson stat	0.600122
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Source: Data Processing Results with Eviews 8

The results of the autocorrelation test in the table above obtained a Durbin-Watson value of 0.600122 which is between -2 to + 2. So it is concluded that the data in the model in the research variables does not occur autocorrelation.

Multiple Regression Test

Regression analysis is a statistical technique useful for examining and modeling the relationship between variables. Multiple regression is often used to overcome regression analysis problems that result in the relationship of two or more independent variables. The results of multiple regression analysis are as follows:

Table 6. Regression Test Results

Variable	Coefficient	t-Statistic	Prob.
C	0.033883	3.699981	0.0010
Income Shifting	-3.39E-09	-2.122463	0.0435
Roa	0.098074	2.568783	0.0163

Source: Data Processing Results with Eviews 8

Based on the results of the regression output that has been carried out in the study, the regression equation model can be made as follows:

$$Y = 0.033883 - 0.3.39E-09X1 + 0.098074X2$$

Hypothesis Test

Determination Analysis (R^2)

Determination analysis is used to determine the percentage contribution of the influence of the independent variables together on the dependent variable. The results of testing the coefficient of determination in this study can be seen in the following table.

Table 8. Determination Analysis Results

Variable Relationship	Adjusted R-Squared
Incom Shifting, Return on Asset together on Transfer Pricing	0.164969

Source: Data Processing Results with Eviews 8

Based on the test results of the coefficient of determination, the Adjusted R-Square value is 0.164969 or 16.49%. This means that the variables of Income Shifting, and Return on Asset together give an influence on Transfer Pricing by 16.49%. While the remaining 83.51% is influenced by other variables outside the research model that are not used in this study.

F Statistical Test

The results of the simultaneous test (F test) of this study are as follows:

Table 9. F Statistical Test Results

F-statistic	Prob(F-statistic)
3.765842	0.036621

Source: Data Processing Results with Eviews 8

Based on the F-Statistic value and the Prob (F-statistic) value in this study is 3.765842 with a probability value of 0.036621. The probability value of the F-statistic is smaller than the significant value of $\alpha = 5\%$, it can be concluded that the independent variables in the study, namely Income Shifting, and Return on Asset, jointly affect the dependent variable Transfer pricing.

Statistical Test t

The t statistical test is used to determine the effect of an independent variable individually in explaining the variation in the dependent variable (Ghozali, 2018). The criteria used to see the effect of these variables by looking at the sig value (p-value) in the Coefficient table. If the sig. value is smaller than the alpha value (5%), it can be said that there is an influence between the independent variable and the dependent variable partially.

Table 10. Results of the t Statistical Test

Variable Relationship	T count	Prob.	Results
IS $\rightarrow$ TF	-2.122463	0.0435	H1 accepted
ROA $\rightarrow$ TF	2.568783	0.0163	H2 accepted

Source: Data Processing Results with Eviews 8

First hypothesis (H1)

Based on the t test results, the t value is -2.122463 and significant at 0.0435 < 0.05. Based on these results, it shows that Ho1 is rejected and Ha1 is accepted, meaning that it is proven that Income Shifting affects Transfer Pricing in Energy sector companies listed on the IDX in 2019-2022.

Second hypothesis (H2)

Based on the t-test results, the t-count value is 2.568783 with a significance value of 0.0163 < 0.05. Based on these results, it shows that Ho2 is rejected and Ha2 is accepted, meaning that it is proven that Return on Assets (ROA) has a significant effect on Transfer Pricing in Energy sector companies listed on the IDX in 2019-2022.

Discussion**Effect of Income Shifting on Transfer Pricing**

Based on the results of testing the first hypothesis, it shows that Income Shifting affects Transfer Pricing in energy sector companies listed for the period 2019 - 2022. These results indicate that the greater the practice of Income Shifting, the higher the tendency of companies to do Transfer Pricing. This can happen because companies with Income Shifting strategies try to minimize the tax burden by allocating profits to countries or entities with lower tax rates. This is in line with the findings of Lo et al. (2010) which states that there is a relationship between tunneling incentive and the company's decision in determining transfer price. In addition, the results of this study support the views of Frandyanto & Riandoko (2017) who explain that Income Shifting is more common in multinational companies that take advantage of differences in tax rates between countries to optimize after-tax profits. By doing Transfer Pricing, companies can allocate profits to jurisdictions with lower taxes, so that the overall tax burden becomes smaller.

Effect of Return on Asset on Income Shifting

Based on the results of testing the second hypothesis, it shows that Return on Assets affects Transfer Pricing in energy sector companies listed for the period 2019 - 2022. This result shows that the higher the level of Return on Assets (ROA) of a company, the more likely the company is to do Transfer Pricing. This is because companies with high profitability tend to face greater tax burdens, thus creating an incentive for management to allocate profits to affiliated entities in jurisdictions with lower tax rates in order to minimize tax burdens and optimize after-tax profits. This finding is in line with Prasetyo & Mashuri's (2020) research which states that the higher the profit generated by the company, the greater the potential for management to use Transfer Pricing as a strategy to reduce tax burden. In addition, research by Ollimsar et al. (2024) also supports this result by finding that profitability has a positive and significant influence on Transfer Pricing.

CONCLUSIONS AND SUGGESTIONS**Conclusion**

Based on the test results and discussion that has been described, it can be concluded that Income Shifting affects Transfer Pricing in energy sector companies listed for the period 2019 - 2022. Return on Asset has an effect on Transfer Pricing in energy sector companies listed for the period 2019-2022. The test results of the coefficient of determination obtained an Adjusted R-Square value of 0.164969 or 16.49%. This means that the variables of Income Shifting, and Return On Asset together have an influence on Transfer Pricing by 16.49%. While the remaining 83.51% is influenced by other variables outside the research model that are not used in this study.

Suggestion

Based on the conclusions obtained, companies in the energy sector are advised to pay more attention to the Transfer Pricing strategy applied, especially in relation to Income Shifting and Return on Assets (ROA). Since these two variables have an influence on Transfer Pricing decisions, companies need to ensure that the strategies used remain in accordance with applicable tax regulations to avoid audit risks and tax penalties. In addition, multinational companies in the energy sector should be more transparent in financial reporting and affiliated transactions, and comply with the arm's length principle to ensure that Transfer Pricing practices are carried out with fairness and business prevalence. For future researchers, it is recommended to develop this research by adding other variables that can affect transfer pricing, such as tunneling incentive, leverage, or company size, so as to provide a broader picture of the factors that encourage companies to practice transfer pricing. In addition, future research can also use samples from other industry sectors or extend the research period to obtain more comprehensive results.

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