Discovering the Intriguing Dynamics of Transfer Pricing: Tax Burden, Foreign Ownership, and Company Size
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Abstract
This research delves into the intricate interplay between tax burden, foreign ownership, and company size on transfer pricing practices within the mining subsector of manufacturing companies listed on the Indonesia Stock Exchange from 2018 to 2022. Through purposive sampling, 35 datasets out of a total population of 40 companies were selected for analysis. Multiple linear regression served as the analytical tool, and hypothesis testing was executed using SPSS version 25 software. The findings underscore that both tax burden and foreign ownership wield significant influence over transfer pricing practices. Notably, companies exhibit a propensity to leverage transfer pricing as a strategic tool for tax burden management, particularly in instances of heightened foreign ownership. Interestingly, however, company size does not exhibit a significant impact on transfer pricing practices, suggesting that entities of varying magnitudes within this subsector tend to adopt analogous approaches to transfer pricing policies. These findings are pivotal for both regulatory bodies and corporate managers, as they provide valuable insights into the factors shaping transfer pricing practices. Moreover, the formulation of tax policies geared towards fostering transparency and equity in business operations. By comprehensively understanding the dynamics at play in transfer pricing, stakeholders can navigate regulatory landscapes more adeptly and devise strategies that promote fairness and compliance within the realm of taxation. This study thus contributes to the broader discourse on tax policy and corporate governance, offering a nuanced understanding of the intricate relationship between tax structures, ownership dynamics, and corporate practices within the mining subsector of Indonesia’s manufacturing industry.

I. INTRODUCTION
The Indonesian Tax Authority faces significant threats due to its failure to meet tax revenue targets in recent years. The relatively low tax ratio in Indonesia indicates that a substantial portion of the tax base remains untaxed, possibly due to income leakage. One of the main causes of leakage is the practice of profit shifting through common transfer pricing schemes employed by taxpayers [1]. The Indonesian government has implemented several rule enforcement models in taxation related to transfer pricing through regular oversight via three different documents: the local file, which evaluates transaction appropriateness; the master file, which describes business activities conducted; and the country-by-country report, which provides detailed financial data of the company and its group [2].

The shift of transfer pricing practices towards profit transfer can result in the country losing significant revenue from corporate income taxes, reducing its ability to levy taxes on business activities. The phenomenon of transfer pricing has garnered global attention due to its serious implications for tax systems [3]. Currently, transfer pricing issues have become a highly important topic, drawing the attention of authorities in various countries, where they are beginning to issue regulations regarding transfer pricing determination. This increases the risk of abuse of transfer pricing practices to gain undue advantage [4].

Transfer pricing practices are often viewed negatively due to their manipulative potential. Therefore, transfer pricing is interpreted as a strategy commonly used by multinational companies to reduce tax burdens globally by shifting profits from entities in countries with higher tax rates to entities in countries with lower tax rates. Thus, the risks associated with transfer pricing practices are borne by countries applying higher tax rates.

* Corresponding author
Transfer pricing is not a new phenomenon in the realm of taxation. However, research reveals varying findings. Key factors influencing companies' decisions in implementing transfer pricing include the tax burdens borne by multinational companies [5],[6]. Tax influence is a major factor considered in the decision-making process by companies [7]. Differences in tax burdens between two jurisdictions managed by two or more companies with the same ownership drive companies to use transfer pricing as a strategy to reduce their tax burdens.

The second factor, [8] foreign ownership, refers to the ownership of shares by foreign entities or individuals from abroad, often referred to as controlling shareholders. As ownership increases, the opportunities for foreign shareholders to set policies regarding transfer pricing and transaction volume also increase. As transactions involving foreign parties, transfer pricing can also be influenced by foreign share ownership, which then affects companies' decisions to implement transfer pricing that benefits them.

The third factor, [9] company size, often measured by total company assets, is one of the indicators used to assess company scale. Companies with large total assets tend to have higher long-term stability. Therefore, large companies' management tends to avoid profit management practices, including transfer pricing. This is due to greater public scrutiny of large companies, making them more cautious in reporting their finances. Thus, the larger the company, the less likely transfer pricing practices are to occur.

The optimal tax revenue realization target of 100% for the period 2018-2022 was not achieved, with a significant decline in tax revenue. This decline is suspected to be influenced by factors such as tax burdens, foreign ownership, and company size. This research aims to identify whether there is a relationship between transfer pricing and these variables. The main advantage of this study is its ability to analyze various factors influencing transfer pricing and draw conclusions from its findings. The factors studied are expected to serve as references for future research in understanding the transfer pricing phenomenon more deeply. Additionally, this evaluation contributes to the understanding of the factors influencing transfer pricing practices. Although there are still differences in measurement results related to the impact of tax burdens, foreign ownership, and company size on transfer pricing, this underscores the importance of further study on this topic.

Positive Accounting
Accounting theory is a set of procedures that utilize accounting expertise, understanding, and insight, and apply the most appropriate accounting policies to address potential future situations [10]. Positive accounting theory operates on the belief in maximizing wealth and pursuing personal interests. This approach is highly beneficial in explaining managerial actions aimed at enhancing wealth and prosperity [11].

Agency Theory
Agency theory discusses the relationship between company owners and shareholders. The structure of agency relationships results from agreements made to utilize and appoint specialized capacities in making reasonable assessments [13]. Agency theory explains conflicts arising from differences in interests between management and shareholders, which emerge due to information asymmetry between them, where managers often prioritize their individual goals over the overall goals of the company.

Transfer Pricing
Transfer pricing is the decision that determines the cost of each labor and product transaction, which when referring to fairness standards, is made by a company with specific relationships [14]. Multinational companies implement transfer pricing as part of their strategy to shift tax liabilities from countries with high tax rates to countries with lower tax rates.

![Transfer Pricing Methods](source: [15])
Research Hypotheses

1) Tax Burden
The transfer of profits through intercompany transactions among entities in various countries imposes a tax burden. Differences in tax rates between countries drive multinational companies to reduce their tax liabilities by using transfer pricing practices. If this practice is not closely monitored, a country may incur significant losses as companies can shift taxable income to their subsidiaries abroad to reduce their overall tax burden and increase their parent company's income [6]; [1]; Taxes impact transfer pricing. [5] There is no contribution of tax burden to Transfer Pricing.
H1: Tax Burden contributes to Transfer Pricing.

2) Foreign Ownership0
Companies owned by foreign investors often strive to manage their tax burdens efficiently and reduce their tax payments [17]. Companies owned by foreign investors often endeavor to efficiently manage their tax obligations and minimize their tax liabilities. They might utilize transfer pricing strategies to relocate their earnings to jurisdictions with lower tax rates, thereby diminishing their overall tax burden. Entities with foreign ownership must assess the implications of transfer pricing within the global business landscape and ensure that their methodologies adhere to tax laws across different jurisdictions. Prioritizing fair, transparent, and compliant transfer pricing methodologies, consistent with standard arm's length principles, is crucial to avoid conflicts with tax authorities and ensure robust tax compliance. In Asian countries, including Indonesia, ownership structures often exhibit significant concentration, potentially leading to conflicts of interest between dominant shareholders and minority stakeholders. Minority shareholders typically rely on controlling interests to oversee company affairs due to their greater authority. This makes minority shareholders vulnerable, and controlling shareholders may abuse their power for personal gain. The abuse of power to maximize personal profit by redistributing wealth from others is called takeover [18]. [17] There a significant impact of foreign ownership on transfer pricing.
H2: Foreign Ownership contributes to Transfer Pricing.

3) Company Size
Company size can be observed when revenue growth, total assets, and increasing capital reflect increasing corporate strength [19]. Total assets reflect the current total value of all company assets, both liquid and non-liquid [20]. Company size has a positive correlation with the aggressiveness of transfer pricing practices in Vietnam, [17] The impact of company size on transfer pricing varies. [20] Company Size does not contribute to transfer pricing.
H3: Company Size contributes to Transfer Pricing.

III. METHODS
The researchers opted for a quantitative research methodology utilizing secondary data extracted from financial reports. The study population comprised 42 firms operating in the Mining sector listed on the Indonesia Stock Exchange during the timeframe spanning 2018 to 2022. Sample selection employed the purposive sampling technique, adhering to the subsequent criteria:
1) Samples consisted of companies in the mining sector, including subsectors such as coal production, gold, diversified metals, and minerals, listed on the Indonesia Stock Exchange from 2018 to 2022.
2) Companies must consistently publish financial reports throughout the period 2018 to 2022.
3) Companies must have foreign capital ownership and use foreign currency in their financial reporting during the period 2018 to 2022.
4) Companies must not incur losses during the period 2018 to 2022.

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Registered companies</td>
<td>42</td>
</tr>
<tr>
<td>2.</td>
<td>Did not disclose comprehensive financial reports</td>
<td>(8)</td>
</tr>
<tr>
<td>3.</td>
<td>Incurred losses</td>
<td>(18)</td>
</tr>
<tr>
<td>4.</td>
<td>Did not have foreign entity ownership</td>
<td>(7)</td>
</tr>
<tr>
<td>Total Sample</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Research Years</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Total Research Samples</td>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>

Source : [21]
Following the elimination process based on the aforementioned criteria, 7 enterprises were chosen from the initial pool of 42 companies. The selected firms include (1) PT. Adaro Energy Tbk (ADRO), (2) PT. Baramulti Suksesarsana Tbk (BSSR), (3) PT. Bayan Resources Tbk (BYAN), (4) PT. Golden Energi Mines Tbk (GEMS), (5) PT. Harum Energy Tbk (HRUM), (6) PT. Mitrabara Adiperdana Tbk (MBAP), and (7) PT. Indo Tambangraya Megah Tbk (ITMG). The total dataset observed over a span of 5 years amounts to 35 entries (5 years x 7 companies), which will be utilized in the study.

**Table 2. Variable Calculation**

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tax Burden</td>
<td>Tax Burden = ( \frac{\text{Income Tax Expense}}{\text{Taxable Income}} \times 100% )</td>
<td>Rasio</td>
</tr>
<tr>
<td>2</td>
<td>Foreign Ownership</td>
<td>Foreign Ownership = ( \frac{\text{Foreign Share Ownership}}{\text{Total Outstanding Shares}} \times 100% )</td>
<td>Rasio</td>
</tr>
<tr>
<td>3</td>
<td>Company Size</td>
<td>Company Size = ( \ln \text{Total Asset} )</td>
<td>Nominal</td>
</tr>
<tr>
<td>4</td>
<td>Transfer Pricing</td>
<td>Transfer Pricing = ( \frac{\text{Related Party Transactions Receivable}}{\text{Total Receivables}} \times 100% )</td>
<td>Rasio</td>
</tr>
</tbody>
</table>

Source: [22];[23];[24]

**Data Analysis Techniques**

Data analysis is the stage where data is processed into comprehensible information, enabling the identification of data characteristics and the utilization of this information to solve existing problems. The methodologies for data analysis encompass descriptive statistical examinations, classical assumption assessments, regression analyses, and hypothesis evaluations.

**IV. Results**

1. **Descriptive Statistical Test**

<table>
<thead>
<tr>
<th>Table 3. Descriptive Statistical Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive Statistics</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>Transfer Pricing</td>
</tr>
<tr>
<td>Tax Burden</td>
</tr>
<tr>
<td>Foreign Ownership</td>
</tr>
<tr>
<td>Company Size</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

Source: Secondary Data processed using SPSS 25.0, 2023

The results of descriptive statistical testing on 35 samples of mining sector companies, subsectors including coal production, gold, diversified metals, and minerals listed on the IDX from 2018 to 2022 are as follows:

a. For the transfer pricing variable, the minimum value recorded is 0.00250, the maximum value reaches 0.59620, and the average value is 0.1184. From this data, it can be concluded that there is significant variation in transfer pricing values, as indicated by the larger deviation from the mean.

b. The average tax burden is recorded at 27.51%, indicating that the majority of sample companies have a fairly normal tax burden level. Ideally, the tax burden rate should approach the tax rates set by law [25]. According to the Indonesian Income Tax Law (PPh), the corporate income tax rate was set at 25% starting from the 2010 tax year, which was then reduced to 22% starting from the 2022 tax year [26].

c. The foreign ownership variable has a minimum value of 0.0065, a maximum value of 1.1035, and an average value of 0.4620. This data indicates that the majority of manufacturing companies have foreign ownership below 50%, which still complies with the allowed limit in Indonesia [26].

d. The company size variable has a minimum value of 13.9627, a maximum value of 22.0958, and an average value of 18.7191. From these results, it can be concluded that the company size data is well distributed, with a smaller deviation from the mean.
2. Classical Assumption Test
   a) Normality Test

   ![Figure 2. P-Plot Normalitas](image)

   The Figure 2 above shows that the plotted points are around the diagonal line and follow its direction. This indicates that the data has a normal distribution.

   

   ![Table 4. Normality Test Results](table)

   The One-Sample Kolmogorov-Smirnov test resulted in an asymptotic significance value (2-tailed) of 0.171. The significance value 0.171 > 0.05, thus it can be concluded that the data is normally distributed.

   b) Multicollinearity Test

   ![Table 5. Multicollinearity Test Results](table)

   The tolerance values for all independent variables are 0.814, 0.987, and 0.808, all of which are greater than 0.1. Additionally, the variance inflation factor (VIF) values are 1.228, 1.014, and 1.238, all of which are less than 10. This indicates that the data meets the test requirements and shows that there is no correlation between the independent variables, thus the data does not experience multicollinearity issues.
c) Heteroscedasticity Test

![Heteroscedasticity Test Results](image)

Figure 3. Heteroscedasticity Test Results

No discernible trend of points dispersed both above and below the zero (0) mark along the Y-axis was identified, suggesting the absence of heteroskedasticity. Consequently, the regression model remains apt for forecasting transfer pricing.

d) Autocorrelation Test

![Autocorrelation Test Results](image)

Table 6. Autocorrelation Test Results

<table>
<thead>
<tr>
<th>Runs Test</th>
<th>Unstandardize Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Value</td>
<td>-.01948</td>
</tr>
<tr>
<td>Cases &lt; Test Value</td>
<td>17</td>
</tr>
<tr>
<td>Cases &gt;= Test Value</td>
<td>18</td>
</tr>
<tr>
<td>Total Cases</td>
<td>35</td>
</tr>
<tr>
<td>Number of Runs</td>
<td>16</td>
</tr>
<tr>
<td>Z</td>
<td>-.682</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.495</td>
</tr>
</tbody>
</table>

Based on the table 6 above, the significance value is 0.495 > 0.05, thus it can be concluded that the data is free from autocorrelation issues.

3. Multiple Regression Analysis

![Multiple Linear Regression Analysis Results](image)

Table 7. Multiple Linear Regression Analysis Results

<table>
<thead>
<tr>
<th>Coefficients(a)</th>
<th></th>
<th></th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.124</td>
<td>.197</td>
<td>.631</td>
<td>.532</td>
</tr>
<tr>
<td>Beban Pajak</td>
<td>-.463</td>
<td>.212</td>
<td>-.346</td>
<td>-2.178</td>
</tr>
<tr>
<td>Kepemilikan Asing</td>
<td>-.168</td>
<td>.065</td>
<td>-.373</td>
<td>-2.583</td>
</tr>
<tr>
<td>Firm Size</td>
<td>.010</td>
<td>.008</td>
<td>.195</td>
<td>1.220</td>
</tr>
</tbody>
</table>

Multiple linear regression equation:

\[ Y = 0.124 - 0.463X_1 - 0.168X_2 + 0.010X_3 + \varepsilon \]

a) The constant value "(α)" is 0.124, meaning if all independent variables, Tax Expense, Foreign Ownership, and Firm Size, are considered to be 0, then the Transfer Pricing value is 0.124.

b) The beta coefficient value (β1) for the Tax Expense variable (X1) in the regression model is -0.463, indicating that an increase of 1 unit in the Tax Expense variable will decrease the Transfer Pricing by 0.463 units, and vice versa.
c) The beta coefficient value ($\beta_2$) for the Foreign Ownership variable ($X_2$) in the regression model is -0.168, indicating that an increase of 1 unit in the Foreign Ownership variable will decrease the Transfer Pricing by 0.168 units, and vice versa.

d) The beta coefficient value ($\beta_3$) for the Firm Size variable ($X_3$) in the regression model is 0.010, indicating that an increase of 1 unit in the Firm Size variable will increase the Transfer Pricing by 0.010 units, and vice versa.

4. Coefficient of Determination Test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.602*</td>
<td>.362</td>
<td>.301</td>
<td>.11066488</td>
</tr>
</tbody>
</table>

The R square value is 0.362 (36.2%), indicating that the ability of the Tax Expense, Foreign Ownership, and Firm Size variables to explain the Transfer Pricing variable is 36.2%, and the remaining 63.8% is explained by other variables not included in the research model.

5. Hypothesis Testing

<table>
<thead>
<tr>
<th>Coefficients*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Tax Expense</td>
</tr>
<tr>
<td>Foreign Ownership</td>
</tr>
<tr>
<td>Firm Size</td>
</tr>
</tbody>
</table>

a. Influence of Tax Expense on Transfer Pricing

The significance value of the tax expense is 0.037 < 0.05, and the t value of -2.178, indicating that the tax expense variable has a negative impact on transfer pricing. This means hypothesis H1 is accepted.

The magnitude of taxes has a significant impact on companies in choosing the country to open their subsidiaries, to minimize taxes or transfer capital to safe areas where investments are protected [15]. Multinational companies can move their production abroad to take advantage of low production costs and/or tax savings[27]. Within the sphere of multinational corporations, numerous transactions transpire among subsidiaries, branches, or affiliated entities situated across diverse nations. The primary objective of transfer pricing revolves around establishing equitable and rational prices for commodities and services exchanged amid member companies within the group. Nonetheless, this process frequently becomes convoluted and complex owing to unique associations or mutual interests among the conglomerate's entities [17]. Therefore, due to differences in tax jurisdictions between countries, there are opportunities to avoid taxes in transactions involving related parties. The higher the tax rate, the lower the transfer pricing done by the company. Referring to agency theory with a focus on decision-making solely for the company's interests in setting transfer pricing to related parties to maximize global revenue. Therefore, a decrease in tax burden will impact an increase in transfer pricing activities.

b. Influence of Foreign Ownership on Transfer Pricing

The statistical significance of foreign ownership stands at 0.015, which is less than the threshold of 0.05, alongside a t-value of -2.583. This suggests that the foreign ownership variable exerts a negative effect on transfer pricing, affirming the acceptance of hypothesis H2.

Exclusive connections in transfer pricing, stemming from foreign ownership, indicate that foreign ownership leverages its control authority to direct corporate management regarding transfer pricing. Heightened foreign ownership augments the likelihood of employing transfer pricing within companies, yet even in the absence of foreign ownership control, companies still resort to transfer pricing as a tax avoidance strategy. Transfer pricing is influenced by company magnitude, foreign ownership, and organizational dynamics, chiefly driven by managerial objectives and the pursuit of maximizing tax value reduction[28].
c. Influence of Firm Size on Transfer Pricing

The significance value of firm size is 0.232 > 0.05, and the t value is 1.220, indicating that the firm size variable does not have an impact on transfer pricing. This means hypothesis H3 is rejected.

Firm size is an assessment of the magnitude of a company, usually using total assets as a proxy for firm size. Companies with large total assets indicate a mature company's ability to conduct business, so the company's cash flow tends to have a positive outlook for the company's long-term sustainability. Large companies will certainly get large profits as well, so companies tend to engage in transfer pricing to avoid taxed transactions because large companies tend to have high tax payments. However, in reality, all companies, both small and large, engage in transfer pricing to avoid taxes, so there is no effect of firm size on transfer pricing. This result is consistent with the theory that relatively large companies have less incentive to implement transfer pricing because of their caution in reporting their financial condition.[29].

V. CONCLUSION

From the analysis and discourse within this study, several deductions can be made. The study's outcomes suggest, in part, that Tax Expense (X1) significantly impacts Transfer Pricing. This is indicated by the significance level of 0.037, below the threshold of 0.05, and a t-value of -2.178. This observation underscores a negative correlation between tax obligations and transfer pricing strategies, implying that tax burdens play a pivotal role in motivating companies to employ transfer pricing. Additionally, the study's results reveal that Foreign Ownership (X2) notably influences Transfer Pricing. The significance level of 0.015, below 0.05, alongside a t-value of -2.583, indicates that substantial foreign ownership can wield its authority to direct corporate management in adopting transfer pricing to optimize profits and circumvent tax liabilities. However, the research findings indicate that Firm Size (X3) does not exert a significant influence on Transfer Pricing, with a significance level of 0.232, exceeding 0.05, and a t-value of 1.220. This suggests that neither large nor small companies, nor fluctuations in company size, affect shareholders' decisions concerning transfer pricing. Consequently, company size fails to instigate companies to partake in transfer pricing practices. From the coefficient of determination, it can be inferred that Tax Expense, Foreign Ownership, and Firm Size elucidate 36.2% of the variance in Transfer Pricing, leaving the remaining 63.8% to be explained by other unexplored factors.

REFERENCES


