Can Foreign Sales, Sales Growth, and Good Supervisions Affect Transfer Pricing Aggressiveness?

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**Keywords:**
Transfer Pricing, Foreign Sales, Sales Growth, Women on Board, Audit Quality

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This study examines the effects of foreign sales, sales growth, women on board, and audit quality on transfer pricing. The relationship between these variables is explained by agency theory. The sample used in this study is manufacturing companies listed on the Indonesia Stock Exchange from 2012 until 2019. The method used to determine the number of samples is purposive sampling. Panel data analysis and random effect model estimators have been applied to achieve the object of this study. The results of this study indicate that: (1) foreign sales do not affect transfer pricing; (2) sales growth is negatively associated with transfer pricing aggressiveness; (3) women on board is positively associated with transfer pricing aggressiveness; (4) audit quality does not affect transfer pricing.

*SARI PATI*

Penelitian ini bertujuan untuk menguji penjualan luar negeri, pertumbuhan penjualan, women on board, dan kualitas audit terhadap transfer pricing. Hubungan antara variabel dijelaskan dengan menggunakan teori agensi. Sampel penelitian ini adalah perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2012 sampai dengan 2019. Metode yang digunakan untuk menentukan jumlah sampel adalah purposive sampling. Analisis data panel dan estimasi random effect model digunakan untuk mencapai tujuan penelitian. Hasil penelitian ini mengindikasikan bahwa: (1) penjualan luar negeri tidak berpengaruh terhadap transfer pricing; (2) pertumbuhan penjualan berpengaruh negatif terhadap transfer pricing; (3) women on board berpengaruh positif terhadap transfer pricing; (4) kualitas audit tidak berpengaruh terhadap transfer pricing.

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**ARTICLE INFO**

**ABSTRACT**

| **Keywords:** | This study examines the effects of foreign sales, sales growth, women on board, and audit quality on transfer pricing. The relationship between these variables is explained by agency theory. The sample used in this study is manufacturing companies listed on the Indonesia Stock Exchange from 2012 until 2019. The method used to determine the number of samples is purposive sampling. Panel data analysis and random effect model estimators have been applied to achieve the object of this study. The results of this study indicate that: (1) foreign sales do not affect transfer pricing; (2) sales growth is negatively associated with transfer pricing aggressiveness; (3) women on board is positively associated with transfer pricing aggressiveness; (4) audit quality does not affect transfer pricing. |
| **Kata Kunci:** | Penelitian ini bertujuan untuk menguji penjualan luar negeri, pertumbuhan penjualan, women on board, dan kualitas audit terhadap transfer pricing. Hubungan antara variabel dijelaskan dengan menggunakan teori agensi. Sampel penelitian ini adalah perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2012 sampai dengan 2019. Metode yang digunakan untuk menentukan jumlah sampel adalah purposive sampling. Analisis data panel dan estimasi random effect model digunakan untuk mencapai tujuan penelitian. Hasil penelitian ini mengindikasikan bahwa: (1) penjualan luar negeri tidak berpengaruh terhadap transfer pricing; (2) pertumbuhan penjualan berpengaruh negatif terhadap transfer pricing; (3) women on board berpengaruh positif terhadap transfer pricing; (4) kualitas audit tidak berpengaruh terhadap transfer pricing. |
INTRODUCTION

Over the past decade, taxes have consistently played a crucial role in state revenue, contributing around 70 to 80 percent of the total. However, despite this significant contribution, tax revenues have not been meeting the predetermined targets (Masyitah, 2019). Several factors contribute to the failure to achieve tax revenue targets (Masyitah, 2019), with transfer pricing being identified as a primary concern based on a survey by Ernst & Young (2011). This survey aligns with the statement from the Director-General of Taxes, Ken Dwijugiasteadi, who highlighted that 2,000 multinational companies operating in Indonesia did not pay corporate income tax for a decade due to reported losses (Ariyanti, 2016). Ken further explained that these companies engaged in transfer pricing practices, shifting their profits to countries with lower tax rates than Indonesia (Ariyanti, 2016). The phenomenon of transfer pricing is exacerbated by Indonesia’s relatively high tax rates compared to other ASEAN countries (KPMG, 2013). The strategies that companies employ to substantially decrease their corporate tax obligations through the implementation of transfer pricing are referred to as transfer pricing aggressiveness (Richardson et al., 2013).

Supporting the Director-General of Taxes's statement, Network (2020) reported that Indonesia loses tax revenue due to tax avoidance through profit shifting to tax havens, amounting to $4.8 billion or approximately 69 trillion rupiahs annually. Additionally, Prabowo (2013) pointed out that the forestry and plantation sectors contribute to an estimated annual loss of 150 to 200 trillion rupiahs in tax revenue due to international tax avoidance practices, with transfer pricing being a key driver of such practices.

Setiawan (2014) stated that transfer pricing is a policy used to determine the transfer price of a transaction involving goods, services, intangible assets, or other transactions within a company. Jumaidi et al. (2017) explained that multinational companies often utilize transfer pricing by employing profit-shifting strategies, which involve shifting profits from countries with high tax rates to those with lower tax rates. The significant difference in tax rates between Indonesia and other countries is exploited by these multinational companies (Liana et al., 2020). Table 1 illustrates that a majority of multinational companies operating in Indonesia have branches in countries with lower tax rates. This indicates that multinational companies take advantage of tax rate disparities across countries (Liana et al., 2020).

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Number of Branches</th>
<th>Corporate Income Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Singapore</td>
<td>108</td>
<td>17%</td>
</tr>
<tr>
<td>2</td>
<td>Malaysia</td>
<td>34</td>
<td>24%</td>
</tr>
<tr>
<td>3</td>
<td>Great Britain</td>
<td>16</td>
<td>19%</td>
</tr>
<tr>
<td>4</td>
<td>Netherlands</td>
<td>14</td>
<td>20%</td>
</tr>
<tr>
<td>5</td>
<td>Mauritius</td>
<td>10</td>
<td>15%</td>
</tr>
<tr>
<td>6</td>
<td>Vietnam</td>
<td>10</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: processed from Liana et al. (2020) and other sources
There are various approaches that companies can employ when engaging in transfer pricing practices (OECD, 2017). One commonly used scheme is the sale of goods abroad, as explained by Pratama (2020). However, research specifically examining the relationship between foreign sales and transfer pricing is still limited, with Pratama (2020) being the only study found that investigated this relationship. The results of Pratama's study indicated that foreign sales did not have a significant effect on transfer pricing.

Another factor that management may consider in reducing the company's tax burden through transfer pricing schemes is sales growth (Anggraeni & Lutfillah, 2019). As company profits increase, the corresponding tax burden also rises (Rahmawati, 2017). However, research on the impact of sales growth on transfer pricing is still scarce. Anggraeni & Lutfillah (2019) conducted one of the few studies that tested this relationship in Indonesia, and their findings suggested that sales growth did not significantly affect the aggressiveness of transfer pricing. Further research is necessary to delve into the influence of sales growth on transfer pricing.

While transfer pricing can be a legitimate tax-saving strategy, it is crucial to conduct such practices ethically and within the bounds of the law (Pratama, 2020). Pratama (2020) also emphasized the importance of monitoring mechanisms implemented by company supervisors to prevent unethical behaviors like transfer pricing. Both internal and external supervision can play a role in ensuring ethical business practices (Chen et al., 2019).

One internal control measure that companies can implement is having women on the board of commissioners. Prabowo et al. (2017) highlight that the board of commissioners serves as an internal governance tool responsible for overseeing management activities and safeguarding stakeholder interests. The presence of women on the board can contribute to positive changes, as women are often recognized for their effective listening skills, heightened motivation, and ability to foster better teamwork compared to men (Sutrisno & Fella, 2020).

Considering the significance of women on the board in promoting ethical business practices, it becomes essential to investigate the impact of women's presence on transfer pricing practices. However, studies focusing on the relationship between women on the board and transfer pricing are still relatively scarce, both internationally and in Indonesia. Hence, the authors of this study aim to explore the association between women on the board and transfer pricing.

In addition to internal control measures, companies can enhance external supervision through independent parties (Brundy et al., 2014). Hiring qualified external auditors is one approach to ensure accurate financial reporting (Trisnawati, 2015). High-quality audits can improve compliance with legal requirements and reduce the likelihood of fraudulent practices like transfer pricing (Anggraeni & Lutfillah, 2019). However, these findings contradict several previous studies (Anggraeni & Lutfillah, 2019; Noviastika et al., 2016; Rosa et al., 2017).

This study incorporates several control variables to eliminate bias in the regression analysis (Fitania & Firmansyah, 2020). The selection of control variables is based on their frequency of use and significance in prior research on transfer pricing. The control variables included in this study are company size and profitability. The studies conducted by Waworuntu & Hadisaputra (2016), Rezky
& Fachrizal (2018), and Merle et al. (2019) revealed that the size of a company is positively associated with transfer pricing. Conversely, Yulia et al. (2019) arrived at contrasting findings on this matter. Additionally, research carried out by Richardson et al. (2013), Taylor et al. (2015), and Rahayu et al. (2020) showed that profitability is positively associated with transfer pricing. On the contrary, Waworuntu & Hadisaputra (2016) and Azzura & Pratama (2019) reached different conclusions regarding this relationship.

Transfer pricing in taxation is a longstanding issue that continues to be an intriguing subject for further research (Susanti & Firmansyah, 2018). Numerous studies have explored the factors influencing transfer pricing practices globally and within Indonesia. However, this study adds a new dimension by examining variables that have received less attention in previous research, namely foreign sales, sales growth, and women on board. Moreover, this study stands out by extending the observation period to eight years, surpassing the typical three to five-year span used in previous studies when selecting research samples.

Literature Review and Hypothesis Development

Jensen & Meckling (1976) defined the agency relationship as a contractual arrangement wherein one or more individuals (the principal) engage another party (the agent) to act on their behalf and in their best interests. In the context of this study, the principal is limited to shareholders and other stakeholders who have a vested interest in the company, including the government. The agency relationship typically involves the delegation of authority from the principal to the agent. However, challenges arise because the agent may not always act in the best interests of the principal, leading to agency problems.

According to Godfrey et al. (2010), problems within the agency relationship stem from the presence of information asymmetry between the agent and the principal. Agents possess more information pertaining to the company, while principals are unable to constantly monitor the agent's actions. Additionally, conflicts can arise as both parties, the agent and the principal, seek to enhance their own welfare. This misalignment of interests may lead the agent to take actions that are not aligned with the principal's preferences.

**Foreign sales and transfer pricing aggressiveness**

Based on agency theory, conflicts of interest and information asymmetry create opportunities for management (as agents) to engage in tax avoidance through transfer pricing strategies. One such strategy involves foreign sales. Davies et al. (2018) highlighted that many multinational companies divert their profits by conducting sales to tax havens and other foreign jurisdictions. Additionally, Arizoni et al. (2020) found that companies engaged in international transactions are more likely to employ aggressive tax measures. Safitri et al. (2015) shared a similar perspective, suggesting that companies operating across countries tend to engage in higher levels of tax avoidance compared to those operating solely within one country. This phenomenon is attributed to the varying tax rates between the countries in which they operate. Based on these observations, it can be concluded that foreign sales positively influence transfer pricing practices. Consequently, the first hypothesis in this study can be formulated as follows:

**H1:** Foreign sales is positively associated with transfer pricing aggressiveness.
Sales growth and transfer pricing aggressiveness

According to agency theory, conflicts of interest and information asymmetry provide management with opportunities to engage in tax avoidance through transfer pricing schemes. One such opportunity arises when there is significant sales growth. The higher the rate of sales growth, the more inclined management will be to practice tax avoidance through transfer pricing (Anggraeni & Lutfillah, 2019).

Furthermore, Dewinta & Setiawan (2016) elaborated that the practice of transfer pricing in response to sales growth occurs because a high intensity of sales creates opportunities for companies to generate higher profits. Consequently, as profits increase, the tax liabilities of the company also escalate (Purwanti & Sugiyarti, 2017). Based on this explanation, the second hypothesis of this study can be formulated as follows:

H2: Sales growth is positively associated with transfer pricing aggressiveness.

Women on board and transfer pricing aggressiveness

According to agency theory, conflicts of interest and information asymmetry create opportunities for management to engage in tax avoidance through transfer pricing strategies. However, these conflicts can be mitigated through effective internal controls. One aspect of sound oversight is diversifying the board of commissioners. Lucas-Pérez et al. (2015) suggested that the inclusion of women on corporate boards can enhance decision-making processes due to their perceived participative and process-oriented approach. In fact, several countries have implemented policies mandating the presence of women on company boards (Sutrisno & Fella, 2020).

Additionally, Syamsudin et al. (2017) suggested that boards with greater gender diversity possess a deeper understanding of the market, leading to increased creativity, innovation, and a positive image for stakeholders. Therefore, it can be inferred that the presence of women on the board of commissioners contributes to an effective supervisory mechanism for companies, which in turn has implications for reducing unethical business practices, including transfer pricing. Based on this explanation, the third hypothesis of this study can be formulated as follows:

H3: Women on board is negatively associated with transfer pricing aggressiveness.

Audit quality and transfer pricing aggressiveness

In accordance with agency theory, conflicts of interest and information asymmetry create possibilities for management to engage in tax avoidance through transfer pricing schemes. To mitigate these conflicts and asymmetries, companies need to establish effective supervision. Jaya (2016) argued that robust supervisory practices, such as audits and investigations, can reduce tax avoidance. Companies with higher audit quality tend to have a lower inclination to manipulate profits for tax purposes (Anggraeni & Lutfillah, 2019). Based on this explanation, the fourth hypothesis of this study can be formulated as follows:

H4: Audit quality is negatively associated with transfer pricing aggressiveness.

METHOD

This study adopts a quantitative research approach. The sample consists of manufacturing companies listed on the Indonesian Stock Exchange (IDX) during the period from 2012 to 2019. Manufacturing companies were selected as the research
focus due to their prominence in carrying out transfer pricing practices, as indicated by previous studies (Darussalam & Kristiaji, 2013; Gunadi, 1994). Moreover, based on data from the Investment Coordinating Board (BKPM) regarding foreign direct investment (FDI) realization, the manufacturing sector has consistently received the highest FDI inflows compared to other sectors in the past five years (BKPM, 2021). The choice of the study period is based on the implementation of the new income tax rate for corporate taxpayers starting from 2010. However, Indonesia only adopted the International Financial Reporting Standards (IFRS) convergence accounting standard in 2012. Hence, the research commences from 2012 to ensure consistent accounting reporting standards and the use of the same income tax rates.

The sample selection for this study utilized a purposive sampling technique, whereby companies were selected based on predetermined criteria (Sugiyono, 2013). The criteria for inclusion were that the companies had to be listed on the Indonesia Stock Exchange before January 1, 2012, and they needed to have financial or annual reports with complete information for the years 2012 to 2019. Following these criteria, a total of 71 companies were eliminated based on the first criterion, and an additional 41 companies were excluded based on the second criterion. As a result, the final sample size for this study consisted of 59 companies. These selected companies were observed over an eight-year period, resulting in a total of 472 observations available for analysis (Table 2).

The dependent variable employed in this study is transfer pricing aggressiveness, which is measured using an index developed by Richardson et al. (2013). The index comprises eight criteria. However, only seven criteria were utilized in this study as the eighth criterion could not be applied in the Indonesian context. The eighth criterion pertains to the presence of loss transfers between related parties without commercial justification. This criterion could not be utilized in the study due to the absence of regulations regarding group taxation in Indonesia, unlike in Australia.

To assess the level of transfer pricing aggressiveness in the company, each criterion will be evaluated to determine if the company meets the criteria. A score of one will be assigned if the company complies with the criterion, and zero otherwise. After weighting each criterion, the scores will be summed up. The total score will then be divided by seven, representing the number of indices. The seven indices used in this study are as follows: (1) the presence of interest-free loans between related parties, (2) the presence of debt relief/receivables between related parties, (3) the presence of provisions for impairment/allowance for bad debts/receivables between related parties, (4) the presence of non-

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing companies listed on the Indonesia Stock Exchange</td>
<td>171</td>
</tr>
<tr>
<td>2</td>
<td>Companies listed after January 1, 2012</td>
<td>(71)</td>
</tr>
<tr>
<td>3</td>
<td>Companies that do not have financial statements with complete information</td>
<td>(41)</td>
</tr>
</tbody>
</table>

Table 2 Sample Selection Results

Number of companies being sampled: 59
Number of Observations (59 x 8 years): 472

Source: processed by the author (2023)
monetary provisions without commercial justification, (5) the absence of formal documentation supporting the selection and application of transfer pricing methods based on the arm’s length principle or the absence of documentation related to the determination of prices between related parties, (6) the presence of disposal/transfer of assets to related parties without commercial justification, and (7) the absence of justification for applying the arm’s length principle to transactions between related parties.

The independent variables in this study encompass four variables: foreign sales, sales growth, women on the board, and audit quality. Foreign sales (FGNSLS) are measured using a model developed by Pratama (2020), which calculates the ratio of export sales (related party transactions included) to total sales as follows:

\[
FGNSLS = \frac{(Total\ Export\ Sales)}{(Total\ Sales)} \times 100\%
\]

The sales growth variable (SLSGRT) in this study was measured using the model employed by Anggraeni & Lutfillah (2019), which compares the sales in the current period to the sales in the previous period.

\[
SLSGRT = \frac{Sales\ t - Sales\ t-1}{Sales\ t-1}
\]

Where:
- \(Sales\ t\) = Sales in the current period
- \(Sales\ t-1\) = Sales in the previous period

The women on board (WOBC) variable in this study was measured using the model developed by Carter et al. (2003), which compares the total number of women serving on the board of commissioners with the total number of commissioners. On the other hand, the audit quality variable (AQMS) in this study was measured using the model developed by Herusetya (2014), known as the Audit Quality Metric Score (AQMS). This proxy was selected because it offers a more comprehensive assessment of audit quality compared to other single proxies (Herusetya, 2014). The AQMS proxy comprises five criteria: (1) BIG4, (2) SPCL, (3) TENURE, (4) CI, and (5) RQA.

This study incorporates two control variables, namely firm size and profitability. Firm size (SIZE) is measured using the model employed by Merle et al. (2019), which is the natural logarithm of total assets. On the other hand, profitability is measured using the model developed by Beaver (1966), namely Return on Assets (ROA). The research model is as follows:

\[
TP\_SUMSCORE_it = \alpha_0 + \beta_1FGNSLS_it + \beta_2 SLSGRT_it + \beta_3WOBC_it + \beta_4AQMS_it + \beta_5SIZE_it + \beta_6PROFITABILITY_it + \epsilon_it
\]

Where:
- \(TP\_SUMSCORE_it\) = transfer pricing of company \(i\) in year \(t\)
- \(FGNSLS_it\) = foreign sales of company \(i\) in year \(t\)
- \(SLSGRT_it\) = sales growth of company \(i\) in year \(t\)
- \(WOBC_it\) = women on board of company \(i\) in year \(t\)
- \(AQMS_it\) = audit quality of company \(i\) in year \(t\)
- \(SIZE_it\) = firm size \(i\) in year \(t\)
- \(PROFITABILITY_it\) = profitability of company \(i\) in year \(t\)
- \(\alpha_0\) = constant
- \(\epsilon_it\) = error
RESULT AND DISCUSSIONS

Descriptive statistics

According to Table 3, the TP_SUMSCORE variable exhibits an average value of 0.3238, a median of 0.2857, and a standard deviation of 0.1696. The maximum value observed for the TP_SUMSCORE variable is 0.7142, while the minimum value is 0.0000. These findings indicate that there are companies within the sample that do not engage in transfer pricing activities as per the criteria of the transfer pricing index. Furthermore, none of the sample companies fulfill all seven transfer pricing index criteria. The maximum number of criteria met by a sample company is five out of the seven.

The FGNSLS variable exhibits an average of 0.1819, a median of 0.0392, and a standard deviation of 0.2737, based on the data provided in Table 3. The maximum value observed for the FGNSLS variable is 0.9962, indicating that there are sample companies where the majority of their sales are derived from foreign sources. On the other hand, the minimum value of 0.0000 suggests that some sample companies do not engage in any foreign sales. Considering the average value of only 18%, it can be inferred that only a small portion of the sample companies conduct foreign sales transactions.

The SLSGRT variable displays an average of 0.0868, a median of 0.0660, and a standard deviation of 0.4690, as indicated in Table 3. The maximum value observed for the SLSGRT variable is 8.3709, suggesting that certain sample companies experienced sales growth as high as 837%. Conversely, there are companies that encountered negative sales growth, with the minimum value of -0.7873 reflecting a decline of 78.7%.

The WOBC variable has an average of 0.0732, a median of 0.0000, and a standard deviation of 0.1461. The maximum and minimum values of the WOBC variable are 0.6666 and 0.0000, respectively. These values indicate that there are sample companies that do not have any women on their board of commissioners. Furthermore, none of the sample companies have a board of commissioners consisting solely of women.

The AQMS variable has an average of 2.3686, a median of 2.0000, and a standard deviation of 0.9880. The maximum value of the AQMS variable is 5.0000, and the minimum value is 0.0000. These values indicate that there are sample companies with varying levels of audit quality. Some companies have a poor audit quality score of zero, while others have a perfect score of five.

Selection of the regression model

In panel data research, there are three models to choose from: the common effect model (CEM), the fixed effect model (FEM), and the random effect model (REM). To determine the best model among the three, a series of
tests were carried out, including the Chow test, Hausman test, and Multipier Lagrange test. Based on the results of these three tests, the random effect model was selected as the preferred model.

**Classic Assumption test results**

The results of the classical assumption tests were utilized to assess the chosen model in this research. The classical assumption test comprises four components. The first involves the normality test, the second entails the multicollinearity test for evaluating tolerance and VIF, the third encompasses the heteroscedasticity test to assess the absolute residuals of the dependent variable, and the fourth includes the autocorrelation test. As the chosen model is the random effect model or generalized least squares (GLS), only the normality test and the multicollinearity test are necessary for the classical assumption test. This is due to the GLS being assumed to meet the conditions of the Best Linear Unbiased Estimator (BLUE) regression model, thereby addressing heteroscedasticity and autocorrelation issues (Nachrowi & Usman, 2006).

The normality test was conducted to determine whether the distribution of residuals followed a normal distribution or not (Ghozali, 2016). The results of the normality test for 472 observations used in this study are presented in picture 1, utilizing the Jarque-Bera test. This test yielded a probability value of 0.002141, indicating significance. Consequently, the residuals in this study do not exhibit a normal distribution, implying a normality issue. However, violations of the normality assumption would only have a substantial impact if the sample size of the study is relatively small, typically fewer than one hundred observations (Gujarati & Porter, 2012). Given that this study encompasses 472 observations, the concern regarding normality can be disregarded.

**Picture 1 Normality test results**

<table>
<thead>
<tr>
<th>Series: Standardized Residuals Sample</th>
<th>2012 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation 472</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>-1.32e-15</td>
</tr>
<tr>
<td>Median</td>
<td>0.015115</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.332820</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.369159</td>
</tr>
<tr>
<td>Std. Dev</td>
<td>0.164564</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.324245</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.547756</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jarque-Bera Probability</th>
<th>12.29290</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: processed by the author (2023)</td>
<td></td>
</tr>
</tbody>
</table>
The multicollinearity test was conducted to determine whether there is a correlation between the independent variables in the research model (Ghozali, 2016). Based on table 4, it can be observed that there are no correlation values exceeding 0.90, indicating the absence of multicollinearity issues in the regression model of this research. The remaining 94.22% of the variance is attributed to other factors not considered in the independent variables of this study.

The low value of the adjusted R2 in this study can be attributed to several factors. Saragih et al. (2020) have pointed out that numerous financial and non-financial factors can influence transfer pricing. Based on Table 5, the adjusted R2 value of this study is 0.00578, indicating that the research model can explain approximately 5.78% of the variance in the dependent variable of transfer pricing. This assertion aligns with the findings of previous studies examining transfer pricing, which also reported low R2 values. Table 6 presents several of these previous studies with low R2 values.

### Table 4 Multicollinearity test results

<table>
<thead>
<tr>
<th>FGNSLS</th>
<th>SLSGRT</th>
<th>WOBC</th>
<th>AQMS</th>
<th>SIZE</th>
<th>PROFITABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0000</td>
<td>0.0267</td>
<td>0.0977</td>
<td>0.0041</td>
<td>-0.1171</td>
<td>-0.0626</td>
</tr>
<tr>
<td>0.0267</td>
<td>1.0000</td>
<td>0.0284</td>
<td>-0.0321</td>
<td>0.0050</td>
<td>0.1085</td>
</tr>
<tr>
<td>0.0977</td>
<td>0.0284</td>
<td>1.0000</td>
<td>-0.0382</td>
<td>-0.0079</td>
<td>-0.0183</td>
</tr>
<tr>
<td>0.0041</td>
<td>-0.0321</td>
<td>-0.0382</td>
<td>1.0000</td>
<td>0.3789</td>
<td>0.1186</td>
</tr>
<tr>
<td>-0.1171</td>
<td>0.0050</td>
<td>-0.0079</td>
<td>0.3789</td>
<td>1.0000</td>
<td>0.0918</td>
</tr>
<tr>
<td>PROFITABILITAS</td>
<td>-0.0626</td>
<td>0.1085</td>
<td>-0.0183</td>
<td>0.1186</td>
<td>0.0918</td>
</tr>
</tbody>
</table>

Source: processed by the author (2023)

### Regression test results

### Table 5 Regression test results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>T-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: FGNSLS</td>
<td>-0.0242</td>
<td>-0.6092</td>
<td>0.2713</td>
</tr>
<tr>
<td>H2: SLSGRT</td>
<td>-0.0210</td>
<td>-2.6325</td>
<td>0.0044***</td>
</tr>
<tr>
<td>H3: WOBC</td>
<td>0.0833</td>
<td>1.7678</td>
<td>0.0388**</td>
</tr>
<tr>
<td>H4: AQMS</td>
<td>0.0075</td>
<td>1.4004</td>
<td>0.0810*</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.0378</td>
<td>4.2323</td>
<td>0.0000***</td>
</tr>
<tr>
<td>PROFITABILITY</td>
<td>-0.0129</td>
<td>-0.4802</td>
<td>0.3156</td>
</tr>
<tr>
<td>C</td>
<td>-0.7789</td>
<td>-3.0516</td>
<td>0.0024***</td>
</tr>
<tr>
<td>R2</td>
<td>0.0698</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.0578</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Statistic</td>
<td>5.8176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob(F-Statistic)</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: probability values in this table are one-tailed probabilities. Statistical significance is denoted by *, **, *** representing the 10%, 5%, and 1% levels respectively. Source: processed by the author (2023)
A partial significance test, specifically the T-test, was conducted to examine the impact of each independent variable on the dependent variable. This test involved analyzing the probability value associated with each independent variable and comparing it to a predetermined significance level of 0.05. If the probability value is less than 0.05, the test fails to reject the null hypothesis (H0) and accepts the alternative hypothesis (H1), indicating that the independent variable significantly affects the dependent variable.

H1: Foreign sales is positively associated with transfer pricing aggressiveness.

The coefficient value of the foreign sales variable (FGNSLS) is -0.0242, and the probability value is 0.2713. The probability value is above the 5% significance value, which does not support H1. Therefore, it can be concluded that foreign sales have no significant effect on transfer pricing.

H2: Sales growth is positively associated with transfer pricing aggressiveness.

The coefficient value of the sales growth variable (SLSGRT) is -0.0210, and the probability value is 0.0044. The probability value is below the 5% significance value, which indicates that sales growth significantly affects transfer pricing. However, the variable coefficient of sales growth shows a negative number. Therefore, H2 is not supported, meaning sales growth is not proven to affect transfer pricing positively.

H3: Women on board is negatively associated with transfer pricing aggressiveness.

The variable women on board (WOBC) coefficient value is 0.0833, and the probability value is 0.0388. The probability value is below the 5% significance value, indicating that board women affect transfer pricing. However, the coefficient of the women on board variable shows a positive number. Therefore, H3 is not supported, which means that women on board are not proven to have a negative effect on transfer pricing.

H4: Audit quality is positively associated with transfer pricing aggressiveness.

The coefficient value of the audit quality variable (AQMS) is 0.0075, and the probability value is 0.0810. The probability value is above the 5% significance value, which does not support H4. Therefore, it can be concluded that audit quality does not affect transfer pricing.

**Discussions**

**Effect of foreign sales on transfer pricing aggressiveness**

Based on the results of hypothesis testing, it has been determined that foreign sales do not have a significant effect on transfer pricing. This finding contradicts the previously proposed hypothesis (H1) that suggested a positive relationship between foreign sales and transfer pricing.

<table>
<thead>
<tr>
<th>No</th>
<th>Authors</th>
<th>Dependent Variable</th>
<th>R² Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Richardson et al. (2013)</td>
<td>Transfer pricing aggressiveness</td>
<td>13.51%</td>
</tr>
<tr>
<td>2</td>
<td>Merle et al. (2019)</td>
<td>Transfer pricing intensity</td>
<td>7.2%</td>
</tr>
<tr>
<td>3</td>
<td>Marques &amp; Pinho (2016)</td>
<td>Strictness of transfer pricing</td>
<td>11%</td>
</tr>
<tr>
<td>4</td>
<td>Lo et al. (2010)</td>
<td>Transfer pricing manipulations</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: processed by the author (2023)
Several factors can explain these results. Firstly, the low ratio of foreign sales to overall sales could be a contributing factor. The average foreign sales ratio in this study is only 18%, with a median of 3%. This low ratio is similar to the findings of Pratama (2020), who also reported an average foreign sales ratio of 15%. Furthermore, it is important to note that not all foreign sales are conducted with related parties. Some foreign sales are made with independent third parties. Pratama (2020) stated that transactions with third parties comply with the arm's length principle, which means they do not significantly impact transfer pricing.

Secondly, various government incentives related to foreign sales can influence the pricing of such sales. These incentives may affect the company's motivation to engage in tax savings through transfer pricing (Pratama, 2020). For instance, companies may benefit from a 0% Value Added Tax (VAT) or exemption from Import Duty for goods that are exported or processed before being exported abroad.

The results of this study align with the findings of Pratama (2020), which could be attributed to the similar selection of manufacturing companies as research samples and the use of a similar proxy for foreign sales, namely the ratio of foreign sales to overall sales.

**Effect of sales growth on transfer pricing aggressiveness**

Based on the results of hypothesis testing, it has been found that sales growth is negatively associated with transfer pricing aggressiveness. This means that higher sales growth is associated with lower levels of transfer pricing. These results are inconsistent with the previously proposed hypothesis (H2).

According to agency theory, conflicts can arise due to agency problems between the principal and the agent. The principal expects the agent to generate significant profits for their benefit. Typically, high sales growth is accompanied by large profits. These substantial profits provide management with more flexibility in managing existing profits.

Enormous sales growth is likely to result in significant profits. These profits can help mitigate existing agency problems, as management no longer needs to engage in opportunistic practices such as transfer pricing. The need to engage in transfer pricing diminishes because the tax paid by the company when it is profitable becomes less significant compared to when it incurs losses.

In contrast, low sales growth presents a different scenario. If sales growth is low, the company's profits are likely to decrease or even result in losses. This decline in revenue may motivate managers to engage in transfer pricing practices to reduce the tax burden. Managers may carry out transfer pricing practices to meet the principal's expectations. Thus, low sales growth leads to a conflict of interest, and management may resort to transfer pricing practices to address this conflict.

Another factor that may contribute to the negative effect of sales growth on transfer pricing is that the sampled companies in this study are classified as old companies. The study specifically focuses on manufacturing companies listed on the IDX before January 1, 2012, making the research sample's company age longer than the average age of manufacturing companies in general.

According to Table 6, when categorizing the sample companies based on the model developed by Anthony & Ramesh (1992), it is found that 83% of the companies fall into the category of mature companies. Anthony & Ramesh (1992) explained that mature companies are typically in a stagnant phase...
where growth is limited, and their primary focus is on maintaining the existing conditions. These companies prioritize retaining their current investors and tend to have sufficient resources.

As mature companies are already established and have stable operations, they may be less motivated to engage in opportunistic practices such as transfer pricing. Since they have already achieved a certain level of success, their primary concern is to sustain their current position rather than aggressively pursue growth. Therefore, the inclination to utilize transfer pricing practices may be lower among mature companies.

<table>
<thead>
<tr>
<th>Table 7 Age distribution of the research sample companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Young</td>
</tr>
<tr>
<td>Adult</td>
</tr>
<tr>
<td>Old</td>
</tr>
</tbody>
</table>

Source: processed by the author (2023)

When mature or stagnant phase companies experience positive sales growth, they tend to benefit from additional resources, which can be used to improve the welfare of stakeholders, including the government through taxes. However, challenges arise when there is negative sales growth. In such cases, managers need to find ways to meet stakeholders’ needs. One strategy that company managers can employ to enhance stakeholder welfare is through transfer pricing.

This viewpoint is supported by research conducted by Wardani & Isbela (2018), which revealed that as companies age, they engage in fewer opportunistic practices like earnings management. Companies in the mature or stagnant phase typically resort to opportunistic practices such as transfer pricing only when necessary. Transfer pricing becomes necessary when companies experience a decline in profits resulting from low or negative sales growth. Consequently, sales growth in mature or stagnant phase companies has a negative impact on transfer pricing. Therefore, it can be inferred that in order to fulfill stakeholders’ interests, company managers resort to transfer pricing when there is low or negative sales growth.

The results of this study differ from the research conducted by Anggraeni & Lutfillah (2019), as their tests indicated that sales growth did not have an impact on transfer pricing aggressiveness. There are several possible reasons for these differences in the test results.

Firstly, Anggraeni & Lutfillah (2019) used a dummy variable as a proxy for transfer pricing, which is assigned a value of one if there is a sales transaction with a related party and zero otherwise. In contrast, this study employed the sum score approach as a proxy for transfer pricing. The different operationalization of the transfer pricing variable may contribute to the disparity in results.

Secondly, Anggraeni & Lutfillah (2019) focused their research on companies within the basic and chemical industry sub-sectors, while this study encompassed a broader sample of manufacturing companies. The variation in the industries included in the respective studies might lead to diverse outcomes.

Thirdly, the observation periods also differ between the two studies. Anggraeni & Lutfillah (2019) conducted their research from 2014 to 2017, while this study covered the period from 2012 to 2019. The variation in observation periods might have influenced the findings, as economic conditions and external factors can fluctuate over time.
Taken together, these methodological differences, variations in sample composition, and disparity in observation periods could account for the divergent results between this study and the research conducted by Anggraeni & Lutfillah (2019).

**Effect of women on board on transfer pricing aggressiveness**

Based on the results of hypothesis testing, it has been determined that there is a positive association between having women on the board of commissioners and transfer pricing aggressiveness. This finding suggests that companies with a higher representation of women on their boards tend to exhibit higher levels of transfer pricing aggressiveness. These results are inconsistent with the previously proposed hypothesis (H3).

According to agency theory, conflicts can arise due to agency problems between the principal and the agent. These conflicts often stem from management’s opportunistic practices that are not aligned with the interests of stakeholders. One form of such opportunistic behavior is the practice of tax avoidance through transfer pricing schemes. To mitigate conflicts, companies often recruit a board of commissioners to oversee and monitor the behavior of managers. Syamsudin et al. (2017) suggested that an effective board of commissioners was one that embraces diversity, including gender diversity. However, it is important to note that the presence of women on the board does not guarantee positive outcomes. Not all women possess the integrity required to fulfill their roles (Rozuli, 2018). Instances of female figures involved in corruption cases further illustrate this lack of integrity. For example, Angelina Sondakh was sentenced to ten years in prison for corruption cases related to the Ministry of National Education and the Ministry of Youth and Sports (Farisi, 2021). Another case is that of Ratu Atut, who was sentenced to twelve years in prison for bribery involving medical devices in Banten Province (Cipta, 2018).

Rozuli (2018) explained that two main factors contribute to women engaging in corrupt behavior: a desire for a glamorous lifestyle and greed for power. When examining their potential association with tax avoidance schemes, such as transfer pricing, these factors can shed light on why the presence of women on the board of commissioners is positively associated with transfer pricing. The desire for a glamorous lifestyle and greed may prompt women to encourage companies to engage in opportunistic practices, including transfer pricing.

Another factor that may contribute to the positive effect of women on the board on transfer pricing is the potential disharmony that arises within a diversified board. The presence of women introduces new perspectives and ideas, leading to numerous alternative decisions. However, this diversity can also slow down decision-making processes due to extensive debates among board members. This phenomenon aligns with the findings of research conducted by Aliani & Hamid (2011), which indicated that board diversification could lead to disharmony and suboptimal decision-making.

**Effect of audit quality on transfer pricing aggressiveness**

Based on the results of hypothesis testing, it has been determined that audit quality does not have a significant effect on transfer pricing aggressiveness. These results do not align with the previously proposed hypothesis (H4) that suggested a negative relationship between audit quality and transfer pricing aggressiveness.
One possible reason for the lack of impact of audit quality on transfer pricing aggressiveness is the absence of a significant difference between companies audited by reputable public accounting firms and non-reputable public accounting firms, as mentioned by Anggraeni & Lutfillah (2019). This lack of significance could be attributed to the fact that all public accounting firms in Indonesia adhere to the same audit quality standards, implementing rules set by the Professional Standards of Public Accountants (Winata, 2014). This suggests that the Indonesian Institute of Certified Public Accountants (IAPI) has made progress in minimizing the gap between public accountants in terms of audit quality.

This research aligns with previous studies conducted by Anggraeni & Lutfillah (2019) and Noviastika et al. (2016). The similarity of the results of this study with previous studies can be caused by the use of manufacturing companies as research samples. However, it deviates from the research conducted by Rosa et al. (2017), which found a positive relationship between audit quality and transfer pricing aggressiveness.

CONCLUSIONS
This study aimed to investigate the impact of foreign sales, sales growth, women on board, and audit quality on transfer pricing aggressiveness. The conclusions that can be drawn from this research are as follows.

Firstly, the findings suggest that foreign sales do not significantly affect transfer pricing. This could be attributed to the low ratio of foreign sales to total sales made by the companies in the sample. Moreover, not all foreign sales are conducted with related parties, and the government provides incentives that reduce the need for tax savings through foreign sales transactions.

Secondly, sales growth is negatively associated with transfer pricing aggressiveness. The study suggests that companies experiencing significant sales growth tend to have greater flexibility in managing profits, resulting in lower reliance on transfer pricing practices. Furthermore, the sample companies primarily belong to mature or stagnant phases, where they are less motivated to engage in opportunistic practices such as transfer pricing. Transfer pricing is more likely to be used in cases of low or negative sales growth.

Thirdly, the presence of women on the board of commissioners is positively associated with transfer pricing aggressiveness. This could be due to the relatively low proportion of women on boards, resulting in their opinions being undervalued. Additionally, the diversity brought by women on the board may disrupt harmony and lead to more debates, ultimately affecting decision-making processes.

Lastly, audit quality does not significantly impact transfer pricing. The study suggests that there is no significant difference in audit quality between reputable and non-reputable public accounting firms. This lack of distinction is likely because all public accounting firms in
Indonesia adhere to the same audit quality standards set by the Professional Standards of Public Accountants.

These conclusions shed light on the relationships between the examined variables and transfer pricing aggressiveness, providing valuable insights for companies and policymakers in understanding and addressing transfer pricing practices.

**Limitations and Suggestions**

This study is subject to several limitations that should be acknowledged. Firstly, the measurement of the transfer pricing variable using the sum score approach based on the model developed by Richardson et al. (2013) has its limitations. It assesses the qualitative aggressiveness of transfer pricing rather than quantitatively evaluating transfer pricing. Additionally, the focus of this research is limited to manufacturing companies, whereas Indonesia has a diverse range of industries, including mining, services, finance, and more.

Another limitation is the availability of data. The study utilizes financial statement data from companies listed on the IDX. As most of the listed companies are national companies, with only a small proportion being foreign-funded companies (PMA), the sample primarily consists of national companies, which might not fully represent the influence of foreign parties. This limited affiliation with foreign parties could lead to inconsistent results compared to the previously proposed hypotheses.

Furthermore, this study relies on financial statements as the data source. However, one of the transfer pricing proxies requires TP Doc data, which is only mandatory in the Annual Tax Return. Therefore, it is possible that a company has prepared a TP Doc but did not attach it to the financial statements. Additionally, this study cites data from financial statements, which were analyzed by a single author, lacking verification from other parties to confirm the accuracy of the data citation method.

Based on the conclusions and limitations described, the following suggestions can be made for future researchers and the tax authorities, specifically the Directorate General of Taxes in Indonesia. Future research can explore transfer pricing in other sectors, such as the service sector, whether listed on the IDX or not. According to data compiled by BKPM (2021), the service sector has experienced significant FDI realization in recent years, indicating substantial potential for transfer pricing in this sector. Additionally, researchers can consider utilizing different transfer pricing proxies to provide better comparisons of research results.

This research also has practical implications for the Directorate General of Taxes in exploring tax potential, particularly in the field of transfer pricing. Some suggestions for the tax authorities are as follows.

Firstly, the negative effect of sales growth on transfer pricing can serve as a reference and an initial indication for Account Representatives (AR) or tax auditors in profiling taxpayers. Companies with low or negative sales growth should not be disregarded, as they may be motivated to engage in transfer pricing practices.

Secondly, the positive effect of women on the board of commissioners on transfer pricing aggressiveness can be used as an additional reference for profiling taxpayers. AR and tax auditors can consider the presence of women on the board as an early indication of potential transfer pricing activities.

Thirdly, the finding that audit quality does not significantly affect transfer pricing suggests that AR and tax auditors should not solely rely on audits conducted by reputable
public accounting firms. It is important for them to conduct thorough research on taxpayers identified with potential transfer pricing issues, even if the company is audited by a reputable public accounting firms. These suggestions aim to enhance future research and provide insights for the tax authorities in addressing transfer pricing concerns effectively.

REFERENCES


Can Foreign Sales, Sales Growth, and Good Supervisions Affect Transfer Pricing Aggressiveness?


