Determinants of transfer pricing aggressiveness and the mediation role of tax burdens: Evidence from Indonesia

Febriyadi Tri Hadmoko[1], Ferry Irawan[2*]

[1] Department of Accounting, Polytechnic of State Finance STAN, Tangerang Selatan, Indonesia

[2] Department of Accounting, Polytechnic of State Finance STAN, Tangerang Selatan, Indonesia

*Corresponding Author(s) Email: ferry.irawan@pknstan.ac.id

ABSTRACT

Transfer pricing aggressiveness is influenced by various factors, including the complexity of operations, foreign direct investment, and tax haven utilization. This study was conducted to re-examine the factors that affect the transfer pricing aggressiveness by including the tax burden as a mediating variable which is expected to explain the inconsistency of the results of previous studies. This study uses data from manufacturing companies listed on the Indonesian Stock Exchange from 2016 to 2020 with a total observation of 350. The analysis technique uses panel data regression with Fixed Effect Model and Random Effect Model approaches. The results of the study show that the complexity of operations and tax haven utilization has a positive effect on transfer pricing aggressiveness. However, foreign direct investment does not affect transfer pricing aggressiveness. Further analyses indicate the tax variable partially mediates the effect of complexity operation and tax haven utilization on transfer pricing aggressiveness. In addition, the tax variable only has an indirect effect of foreign direct investment on transfer pricing aggressiveness. This means that foreign direct investment is used as a vehicle for transfer pricing.

Keywords: Transfer Pricing Aggressiveness; Complexity; Foreign Direct Investment; Tax Haven; Taxation

Introduction

Transfer pricing in business as usual is the price charged between divisions in a company (Mowen et al., 2015). However, the problem is that from a tax point of view, transfer pricing schemes are practices carried out by multinational companies to transfer their profits from countries with high tax rates to countries with low tax rates (Rugman & Eden, 2017). As a result, transfer pricing practices can reduce potential tax revenues (Nguyen et al., 2019).

Figure 1. Target and Realization of Tax Revenue in Indonesia
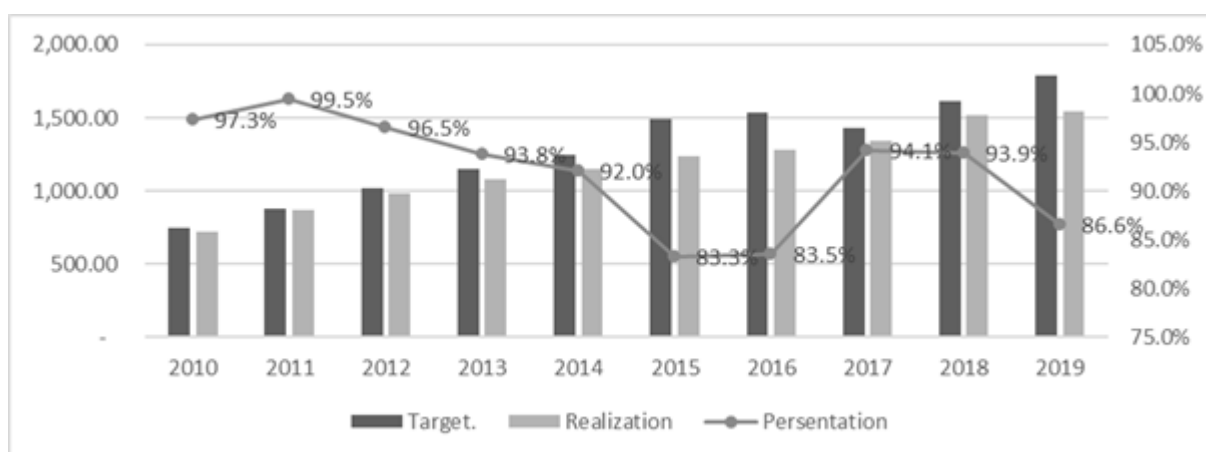
Source: Processed from National Public Procurement Agency

The failure to achieve revenue realization could be caused by profit shifting cases including, the alleged transfer pricing scheme carried out by PT AE Tbk. with its subsidiary in Singapore. According to the Global Witness report (2019) describes that PT. AE conducts coal sales transactions to its subsidiary in Singapore, namely Coaltrade Services International at a price of inexpensive. Then Coaltrade Services resells the coal at a high price to an independent party. With this scheme, International Global Witness indicates there is potential for tax payments of US$ 125 million lower than they should be to the Government of Indonesia (Global Witness, 2019).

Transfer pricing generally occurs in inter-company transactions. So, the mechanism for determining the price of transactions between companies (intra-firm trade) is determined by the company itself so that it does not go through a fair market price mechanism (Quint & Rudsinske, 2020). Meanwhile, one-third of global trade is carried out using inter-company transactions (Antras, 2003). Therefore, there is a very high possibility of potential loss of tax revenue from transfer pricing activities, so it is important to know what factors affect transfer pricing aggressiveness.

One of the factors that influence transfer pricing aggressiveness is operation complexity. One indication of the level of complexity of operations is indicated by the number of owners in subsidiaries (Liana et al., 2020). Tests carried out by researchers include Dinca & Fitriana (2019), Liana et al. (2020), Rezky & Fachrizal (2018), and Richardson et al. (2013) show that multinational influences transfer pricing decisions. There are limited studies that used business or operation complexity due to the forces of internalization on the effect of transfer pricing aggressiveness (Soesetio et al., 2021). Therefore, this topic needs to be re-examined within Indonesian cases.

Another factor that influences transfer pricing aggressiveness is foreign direct investment. Indonesia enjoys the second largest foreign direct investment inflow in ASEAN. Based on the ASEAN Statistical yearbook 2020, Indonesia enjoyed an FDI inflow of US$23,943 million (ASEAN, 2020). The inflow of funds through foreign direct investment can be useful in moving the Indonesian economy. On the other hand, FDI is used by multinational companies to generate global trade with intercompany transactions. Previous studies conducted by Choi et al. (2017) stated that transfer pricing can be used as a vehicle to shift profits from high-tax countries to low-tax countries. Therefore, the area of the relationship between FDI and transfer pricing aggressiveness becomes an opportunity for future research.

The factor that influences transfer pricing aggressiveness is tax haven utilization. Multinational corporations can take advantage of tax haven countries to reallocate taxable income to low-tax jurisdictions and reduce domestic taxes on foreign income (Desai et al., 2006). The tests using tax haven utilization and transfer pricing aggressiveness have been carried out by Taylor et al. (2015) showing that tax haven utility has a positive effect on transfer pricing aggressiveness. Domestic research by Waworuntu & Hadisaputra (2016) could not prove the existence of a relationship between the use of tax haven countries and the aggressiveness of transfer pricing. The lack of research and the inconsistency of research results linking the use of tax haven countries with transfer pricing aggressiveness provide opportunities for further research.

The tax burden is one of the reasons for multinational companies to practice transfer pricing (Desai et al., 2006). The difference in the tax burden between the two tax jurisdictions is borne by multinational companies in one ownership, encouraging companies to conduct transfer pricing to reduce the tax burden (Rugman & Eden, 2017). Several previous studies have tested the relationship between the tax burden and transfer pricing, but there are still research gaps, research by Lo et al. (2010), Abbas & Eksandy (2020), Jafri & Mustikasari

(2018), Mulyani et al. (2020), Susanti & Firmansyah (2018), Yulia et al. (2019) shows that taxes have a significant effect on transfer pricing, but research by Ainiyah (2019), Mispiyanti (2015), Saifudin & Putri (2018) shows that tax does not affect transfer pricing. Therefore, there is an opportunity to research the tax burden factor on transfer pricing. The role of the tax burden in other study shows that multinational company has a significant effect on the tax burden (Puspita et al., 2018), foreign direct investment affects the tax burden (Park et al., 2016), and tax haven utilization has a significant effect on tax burden (Utami et al., 2021). Therefore, the tax burden can mediate between independent variables to the dependent variable proposed in the study.

Given the threat of transfer pricing practices that can become a potential loss for state revenue by transferring profits or profits so it is necessary to research to determine the factors that affect the aggressiveness of transfer pricing. Thus, the Directorate General of Taxes, Indonesia, as the policyholder can take steps to anticipate the aggressive behavior of transfer pricing in multinational companies.

Literature Review

Transfer Pricing Aggressiveness

According to Jensen & Meckling (1976), agency theory is defined as a cooperation contract between the principal and the agent. The principal gives authority to the agent to carry out activities that are beneficial to the principal. The principal as the owner of capital has an interest in getting a return on his investment while the agent has an interest in getting a return through bonuses or work incentives. This difference in interests is called the agency problem. Shareholders will assess management in terms of its ability to generate maximum profits so that the bonuses obtained are also large. As a result, all means will be taken by management to produce financial statements that are "profitable" or "beautify" financial statements. This condition is exacerbated by the difference in the information received by each party or is referred to as asymmetric information. This difference in information is used to beautify financial statements by using a series of accounting policies, one of which is transfer pricing.

Transfer pricing is a sensitive topic in business and the global economy as the activity of transfer pricing by many multinational corporates may have an impact to reduce a country's tax revenue by exploiting regulatory gaps and moving earnings to nations with lower tax rates. Transfer pricing is referred to inter-company pricing arrangements linked to transactions between associated business entities (Holtzman & Nagel, 2014). Transfer pricing

is a method of tax avoidance and evasion in general. While tax evasion can be defined as the reduction of explicit taxes paid by firms by disobeying taxation rules, tax avoidance is a transaction method that aims to reduce tax liability by exploiting tax loopholes in a country without violating any taxation rules (Hope et al., 2013; Lanis & Richardson, 2013; Sugeng, Prasetyo, & Zaman, 2020). Recent studies from Hiemann & Reichelstein (2012) and Amidu, Coffie, & Acquah (2019) stated that although they can leverage operating performance by doing tax avoidance, managers refuse to engage in tax avoidance activities because of the conflict of interest that occurs between managers and shareholders. They only engage in avoidance activities when they stand to receive some personal benefit from doing so. Therefore, the assumption of the agency theory that is underlying humans as self-interested characters who are behaving rationally to maximize their private gains is supported.

The Complexity of Business Operations

Based on agency theory, managers as agents have interests that are different from the interests of the principal so the differences in decision making, especially in corporate strategy. The complexity of the company's operations is determined by the location and number of subsidiaries as well as product diversification and market share. The more ownership of the subsidiary, the more complex the company's operations (Liana et al., 2020). This study uses a multinational approach as an indicator of complexity. This research is reinforced by Richardson et al. (2013) who prove that multinational factor has a positive influence on transfer pricing decisions by taking advantage of differences in tax policies between countries. This research is strengthened by Rezky & Fachrizal (2018) who states that multinationality is related to transfer pricing aggressiveness. In addition, Dinca & Fitriana (2019) argue that the multinationality of companies in Indonesia affects transfer pricing aggressiveness to reduce group company taxes by placing subsidiaries in low tax jurisdictions.

H$_1$:   Operation complexity has a positive effect on transfer pricing aggressiveness

Foreign Direct Investment

A study from Choi et al. (2017) concludes that multinational companies tend to practice transfer pricing with the initial step through a series of foreign direct investments in the destination country. This study considers the results of research by de Mooij & Liu (2020) that is examining the relationship between transfer pricing regulation on real investment in

multinational companies and shows that the transfer pricing regulation causes a decrease in investment in multinational companies.

H$_2$:   Foreign direct investment has a negative effect on transfer pricing aggressiveness

Tax Haven Utilization

According to Agency Theory, managers as agents and stakeholders as principals have different interests so they are behind the differences in decision making, especially accounting and reporting policies. One of the studies conducted by Taylor et al. (2015) on 286 US multinational companies in the period 2006-2012 showed the use of tax haven countries. However, research conducted in Indonesia by Waworuntu & Hadisaputra (2016) shows there is no relationship between transfer pricing aggressiveness and tax haven utilization. The inconsistent results of these studies provide opportunities for further research on the relationship between tax haven utilization and transfer pricing aggressiveness.

H$_3$:   Tax haven utilization has a positive effect on transfer pricing aggressiveness

Tax Burden

A study from Lo et al. (2010) shows that taxes affect transfer pricing manipulation. Domestic research by Abbas & Eksandy (2020) who researched the effect of the effective tax rate, tunneling incentive, and exchange rate resulted in the conclusion that the tax burden proxied by the earning-tax rate and the exchange rate had a positive effect on transfer pricing aggressiveness. Similar results were also carried out in a study by Jafri & Mustikasari (2018), Mulyani et al. (2020), and Yulia et al. (2019) showed that taxes affect transfer pricing aggressiveness.

H$_4$:   Taxes has a positive effect on transfer pricing aggressiveness

The Mediation Role of Tax Burden on Transfer Pricing Aggressiveness

According to positive accounting theory, one of the hypotheses that explain agents' deviant behavior is the political cost hypothesis that declares management as an agent has opportunistic behavior that deviates by reducing the costs given to the government, one of which is reducing the tax burden. Liana et al. (2020) describe that the opportunity for multinational companies to use several tax policies in several countries through their subsidiaries can influence transfer pricing decisions. Multinational companies with several companies in various countries tend to use transfer pricing schemes to reduce or delay tax obligations (Dharmapala, 2008). Research by Puspita et al. (2018) shows that multinationality affects taxes. In addition, several works of literature are proxied by the effective tax rate or

effective tax rate affects transfer pricing (Abbas & Eksandy, 2020; Mulyani et al., 2020; Yulia et al., 2019).

H_5:   Taxes mediates the effect of operation complexity on transfer pricing aggressiveness

Moreover, research conducted by Choi et al. (2017) concluded that multinational companies carry out a series of funding through investments in destination countries to generate trade. Due to the difference in rates between countries, multinational companies tend to apply transfer pricing schemes for reasons of reducing the tax burden.

H_6:   Taxes mediates the effect of foreign direct investment on transfer pricing aggressiveness

Finally, several studies have tested the effect of tax haven utilization on taxes. Research by Utami et al. (2021) shows that tax haven utilization affects taxes. Thus, Sianipar et al. (2020) reinforced the model and found that the use of tax havens has a significant effect on tax avoidance as proxied by the effective tax rate.

H_7:   Taxes mediates the effect of tax haven utilization on transfer pricing aggressiveness

Control Variables

The control variable is a variable that is made constant or fixed so that the influence of the independent variable on the dependent variable is not influenced by other factors outside the study (Sugiyono, 2015). The control variables are treated the same in the multiple linear regression equation but are not included in the research hypothesis. The control variables in this study consist of three variables, namely firm size (Dinca & Fitriana, 2019; Rego, 2003; Taylor et al., 2015), tunneling incentive (Johnson et al., 2000; Susanti & Firmansyah, 2018), profitability (Jacob, 1996; Taylor et al., 2015), and leverage (Taylor et al., 2015)
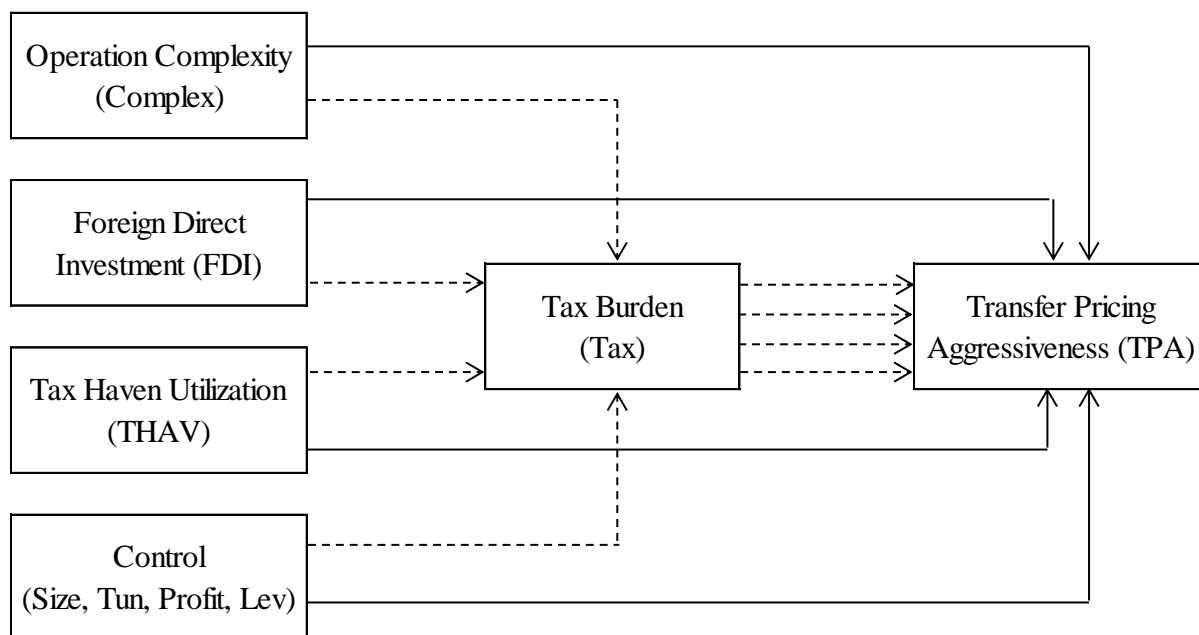
Methods

This study uses quantitative methods using statistical equations to determine the significance of the effect of the independent variable on the dependent variable. This research starts by making research designs, making research instruments, collecting data, processing and analyzing data, to making reports on research results. The data analysis technique uses descriptive data analysis and inferential data analysis (Sugiyono, 2015).

This study uses the manufacturing sector as the object population the study because it has a dominant number of companies (199) compared to other sectors. The population is then selected based on the specified criteria to obtain a research sample such as companies should have complete annual financial reports, should have transactions with foreign related parties,

and should have complete financial statement value data for the period 2016 to 2020. The result of the sample selection that matches the predetermined criteria is 70 manufacturing companies. To summarize, there are 350 (70 manufacturing companies x 5 years) company-year data are obtained for the study.

Figure 2. Research Framework.

This study uses four types of variables. First, the dependent variable, namely transfer pricing aggressiveness, which measured by the total score method of eight indicators taken from the information in the notes of the financial statements (Richardson et al., 2013). Second, independent variables, namely operation complexity, foreign direct investment, and tax haven utilizations. While operation complexity is measured by the multinationality approach by dividing sales of foreign-related parties by total sales (Liana et al., 2020), foreign direct investment is measured by the ratio of gross investment expenditures of tangible assets compared to the initial value of tangible assets (de Mooij & Liu, 2020). Furthermore, tax haven utilization is measured by (dichotomy) dummy in this study (Ramadhan & Kustiani, 2017), which means that if the company has transactions with related parties domiciled in a tax haven country, the value is one, and the value is zero if vice versa. Third, mediating variable, namely tax burden which is measured by effective tax rate namely total current tax expense divided by total profit before tax. Lastly, the control variables were also used in this study by including three variables which are firm size, tunneling incentive, profitability, and leverage. The detailed research framework can be seen in Figure 2.

Table 1. Research Instruments

Variables	Measurement
Dependent Variable:	
Transfer Pricing Aggressiveness	The total score of eight indicators taken from the information in the notes of the financial statements
Independent Variables:	
Operation Complexity	The index sum score of 7 Richardson criteria's
Foreign Direct Investment	$FDI = \dfrac{K_t - K_{t-1} + \text{Depreciation}}{K_{t-1}}$ K_t: Book value of tangible fixed assets in year t K_{t-1} : Book value of tangible fixed assets in year t-1 Depreciation : Depreciation value in year t
Tax Haven Utilization	1 denotes the company that conducts transactions with related parties domiciled in tax haven countries. 0 denotes the company that does not conduct transactions with related parties domiciled in tax haven countries
Mediation Variable:	
Tax Burden	$Tax = \dfrac{\text{Current Taxes}_{it}}{\text{Earning Before Tax}_{it}}$
Control Variables:	
Firm Size	Ln(Total Asset)
Tunneling Incentive	$Tun = \dfrac{\Delta(\text{Account Receivable} - \text{Account Payable})}{\text{Total Asset}}$
Profitability	$Profit = \dfrac{\text{Earning Before Tax}}{\text{Total Asset}}$
Leverage	$LEV = \dfrac{\text{Total Debt}}{\text{Total Asset}}$

This study uses Model 1 to analyze hypotheses one to four.

$$TPA_{it} = \alpha + \beta_{1it}Complex_{it} + \beta_{2it}FDI_{it} + \beta_{3it}THAV_{it} + \beta_{4it}Size_{it} + \beta_{5it}Tun_{it} + \beta_{6it}Profit_{it} + \beta_7Lev_{it} + \varepsilon \tag{1}$$

Models 2 and 3 to analyze hypotheses five to seven.

$$Tax_{it} = \alpha + \beta_{1it}Complex_{it} + \beta_{2it}FDI_{it} + \beta_{3it}THAV_{it} + \beta_{4it}Size_{it} + \beta_{5it}Tun_{it} + \beta_{6it}Profit_{it} + \beta_7Lev_{it} + \varepsilon \tag{2}$$

$$TPA_{it} = \alpha + \beta_{1it}Complex_{it} + \beta_{2it}FDI_{it} + \beta_{3it}THAV_{it} + \gamma Tax_{it} + \beta_{4it}Size_{it} + \beta_{5it}Tun_{it} + \beta_{6it}Profit_{it} + \beta_7Lev_{it} + \varepsilon \tag{3}$$

Descriptions

TPA	: Transfer Pricing Aggressiveness
Complex	: Operation Complexity
FDI	: Foreign Direct Investment
THAV	: Tax Haven Utilization
Tax	: Tax Burden
Size	: Firm Size
Tun	: Tunneling Incentive
Profit	: Profitability
Lev	: Leverage
α,β,γ	: Constants
ε	: error

Table 2. Regression Model Selection

Model	Model 1	Model 2	Model 3
Chow Test	FEM	FEM	FEM
Langrange Multiplier Test	REM	REM	REM
Hausman Test	REM	FEM	REM
Selected Model	REM	FEM	REM

*) FEM is Fixed Effect Model, REM is Random Effect Model

Table 3. Normality Test

Model	Jarque-Bera Probability	Decision
Model 1	0.361	Normally Distributed
Model 2	0.002	Not Normally Distributed
Model 3	0.381	Normally Distributed

Before analyzing the results of model regression, the Chow Test, Lagrange Multiplier Test, and Hausman Test were conducted to select the best regression model and the classical assumption test to obtain an estimated value that meets the BLUE (Best Linear Unbiased Estimator) criteria (Ghozali, 2016). Table 2 of the regression selection model, Tables 3 and 4 of normality and multicollinearity shows the detailed result of the classical assumption test. Table 2 shows that models 1 and 3 of regression are REM. While REM estimation is done using the GLS (Generalized Least Square) method so that the estimation method has

overcome heteroscedasticity disorders (Gujarati & Porter, 2009), Regression model 2 selected in the study are FEM, FEM model estimates using OLS (Ordinary Least Square) so that heteroscedasticity testing is carried out following Breusch-Pagan LM criteria. Since the Breusch-Pagan LM testing result is having probability values that are lower than 0.05, it can be inferred that the panel data regression model does exist. Thus, Table 3 shows that although there is anomaly data, it is still acceptable as the Central Limit Theorem (CLT) theory declared that research with a large enough sample size or a sample of more than 30 will have normally distributed data (Hill et al, 2011). This study uses observational sample data of 350 so that the residual data meets the classical assumption of a normally distributed.

Table 4. Multicollinearity Test

Variables	Coefficient Variance	Uncentered VIF	Centered VIF
Complex	0.019	1.208	1.036
FDI	0.002	1.208	1.050
THAV	0.000	1.140	1.029
Tax	0.001	1.335	1.057
Size	6.58E-05	294.430	1.057
Tun	0.016	1.246	1.078
Profit	0.010	1.308	1.070
Lev	0.057	298.368	NA

Table 5. Descriptive Statistics

Variable	Observation	Mean	Median	Std. Deviation	Max	Min
TPA	350	0.418	0.428	0.149	0.857	0.143
Complex	350	0.064	0.003	0.139	1.000	0.000
FDI	350	0.157	0.104	0.357	4.376	-0.999
THAV	350	0.277	0.000	0.448	1.000	0.000
Tax	350	0.127	0.235	1.338	8.995	-16.148
Size	350	29.077	28.758	1.527	33.494	25.640
Tun	350	0.051	0.014	0.464	0.000	0.078
Profit	350	0.076	0.053	0.126	0.709	-0.412
Lev	350	0.153	0.097	0.144	1.043	0.000

Result and Discussion

The first statistical analysis in this study uses the analysis of the mean, median, maximum value, minimum value, and standard deviation for each research variable. In addition, this study conducts data winsorizing to overcome the data outliers. Based on the results of descriptive statistics (Table 5), it is found that the mean TPA is 0.418, which means that the average enterprise has carried out transfer pricing activities according to the transfer pricing indicator. While the Complex variable shows that most companies in this study have regular business operations as the documented mean score of Complex variables in the study placed in the normal area, the minimum score of the FDI variable shows that some companies have negative values (-0.999) which indicates that the company tends to reduce direct investment.

The variable of the use of tax haven is measured by dichotomy. If there is a company that has a relationship with related parties in a tax haven country, it will be worth one while zero otherwise. The tax haven country in this study refers to the tax haven country index issued by the Tax Justice Network. The index can be accessed at https://cthi.taxjustice.net/en/. The tax haven utilization variable (THAV) show that there are 94 observation or about 26.87% of the total sample companies do relationship with related parties domiciled in tax haven countries. Besides that, the tax expense variable (Tax) shows that the average sample of research firms tends to reduce the overall corporate tax burden.

A partial significance test (t-test) is useful to determine whether each independent variable (partial) has a significant effect on the dependent variable. Partial significance testing is done by comparing the probability level (p-value) of each independent variable to the degree of significance. The degree of significance is 5% ($\alpha=0.05$). Based on the results of the partial test (t-test), Complex has a positive effect on the aggressiveness of transfer pricing. These results indicate that the more companies conduct transactions with related parties, the higher the level of complexity of the operations carried out. Thus, the higher the level of operating complexity can increase the company's aggressiveness in conducting transfer pricing. While FDI does not affect the aggressiveness of transfer pricing which indicates that funding conditions through foreign direct investment do not affect changes in the transfer pricing scheme efforts carried out by the company, THAV has a positive effect on the transfer pricing aggressiveness. These results prove that the level of aggressiveness of transfer pricing is directly proportional to the level of utilization of tax haven countries. Implicitly, companies with a high degree of transfer pricing aggressiveness tend to transact with related parties in tax haven countries. On the other hand, companies with low transfer

pricing aggressiveness tend not to transact with related parties in tax haven countries. Table 6 also shows that Tax has a positive effect on the aggressiveness of transfer pricing which indicates that the increase in the level of the tax burden is directly proportional to the increase in the level of aggressiveness of transfer pricing, and vice versa. Compared with previous studies, this study cannot prove that the reduction in the tax burden can be caused by the high level of aggressiveness of transfer pricing. Therefore, the tax burden factor has a significant influence on the aggressiveness of transfer pricing. Another factor suspected of driving the aggressiveness of transfer pricing is the absence of formal documents as a source of information on the selection and application of transfer pricing methods. A total of 92.57% of sample companies do not disclose information on documents using the transfer pricing method. Information on the use of transfer price methods such as Comparable Uncontrolled Price (CUP), Resale Price Method (RPM), Cost Plus Method (CPM), and Transaction Net Margin Method (TNMM).

Based on the fifth hypothesis testing using the approach of Baron & Kenny, (1986), it shows that the tax burden partially mediates the effect of operating complexity on transfer pricing aggressiveness. In addition, the test results prove that the increase in operating complexity has an indirect effect on the aggressiveness of transfer pricing. The tax burden factor acts as a mediator of these indirect effects.

Table 6. Hypotheses Testing Direct Effect

Relationship	Estimation	t-Statistics	Probability Value	Decision
Complex → TAP	+	3.146	0.000	H_1 Accepted
FDI → TAP	-	-0.100	0.460	H_2 Rejected
THAV → TAP	+	4.015	0.000	H_3 Accepted
Tax → TAP	+	2.342	0.010	H_4 Accepted

Table 7. Hypotheses Testing Indirect Effect

Model	t-Statistics	Probability Value	Decision
Complex → Tax → TAP	1.880	0.060	H_5 Rejected
FDI → Tax → TAP	2.023	0.043	H_6 Accepted
THAV → Tax → TAP	2.003	0.062	H_7 Rejected

The expansion effort of companies into various countries with the aims of profitability will intersect with different tax jurisdictions and increase their operational complexity. In addition, the policies of several tax jurisdictions are certainly different, creating a gap between the tax jurisdictions of one country and another. This gap can be exploited by multinational companies to carry out transfer pricing schemes so that it can result in profit-shifting. Multinational companies can shift profits from countries with high tax rates to countries with low tax rates. As a result, the global tax burden falls below the prevailing tax rate. It is proven in this study that the average sample of companies has a current effective tax rate of 12.74%, far below the generally accepted tax rate in Indonesia, which is 25%.

The results of testing the sixth hypothesis using the Baron & Kenny, (1986) approach show that the tax burden does not mediate the effect of foreign direct investment on the aggressiveness of transfer pricing. However, the test results prove that the increase in foreign direct investment has an indirect effect on the aggressiveness of transfer pricing. So, the existence of the tax burden variable has an indirect effect on the effect of FDI on the TPA even though the tax burden is not a mediator.

The results of this study are in line with research conducted by Choi et al., (2017). Choi et al., (2017) analyze whether the existence of taxes can lead to manipulation of transfer pricing for multinational companies. The results of the analysis state that funding through foreign direct investment induced by differences in tax rates between countries can motivate companies to carry out internal transfer pricing. This means that the existence of a tax burden due to differences in tax rates can be a supporting factor for transfer pricing.

Based on the seventh hypothesis testing, shows that the tax burden partially mediates the effect of tax haven utilization on the aggressiveness of transfer pricing. These results use the approach of Baron & Kenny, (1986) as a hypothesis testing step. In addition, the test results prove that tax haven utilization has an indirect effect on transfer pricing aggressiveness. The indirect influence is through the tax burden mediator.

The results of this study are similar to the results of research conducted by Taylor et al., (2015). The study concludes that the use of subsidiaries in tax haven countries is used for transfer pricing aggressiveness. In addition, according to (Slemrod & Wilson, 2009), the existence of a tax haven country will facilitate multinational companies to perform income shifting. Moreover, following the basic concept of transfer pricing schemes, companies can move their operating profits from high-tax countries to low-tax countries (Rugman & Eden, 2017). The profit shift can be done by manipulating the cost of goods sold so that it has an impact on gross profit. Not only that, but profit shifts can also be made by utilizing

transactions between related parties, such as intra-group service transactions, intangible property transactions, interest transactions, and stock transactions. If this activity is carried out by utilizing state tax haven facilities, then the company can have the motivation to do transfer pricing to shift profits (income shifting).

Conclusion and Suggestion

The results of the study show that the complexity of operations as proxied by multinationality has a positive effect on transfer pricing aggressiveness, in addition, tax haven utilization and tax have a positive effect on transfer pricing aggressiveness. However, foreign direct investment does not affect transfer pricing aggressiveness. As a result, there is no trade-off between fresh funds from investments and the erosion of the tax base. Meanwhile, the results of further research indicate that the tax variable partially mediates the effect of complexity operation and tax haven utilization on transfer pricing aggressiveness. However, the tax variable does not mediate the effect of foreign direct investment on transfer pricing aggressiveness, but the tax variable only has an indirect effect. This means that foreign direct investment is used as a vehicle for transfer pricing.

This study has several limitations, first, Research results can be different, if different in using the period of research data and or samples of the company sector and or research methods. Therefore, researchers can produce different conclusions. Second, this research cannot use private companies because there is no access to financial statement data. Third, the assessment of the transfer pricing aggressiveness index score may not be able to provide a complete picture of the transfer pricing activities carried out by the company. Further studies should be using samples other than manufacturing sector companies so that it can be implied in other IDX sectors by using qualitative research methods or even mixed methods as it allows the research results to be more comprehensive and confirmed with the latest issues related to transfer pricing.

References

Abbas, D. S., & Eksandy, A. (2020). The effect of effective tax rate, tunneling incentive, and exchange rate on company decisions to transfer pricing: Food and consumption sub-sector companies listed on the Indonesia evidence. *PalArch's Journal of Archaeology of Egypt/ Egyptology*, *17*(7), 14430–14442. https://archives.palarch.nl/index.php/jae/article/view/5486

Ainiyah, S. K. (2019). Pengaruh Beban Pajak, Nilai Tukar, Tunneling Incentive Pada

Transfer Pricing. *Jurnal Ilmu Dan Riset Akuntansi*, *8*.

Amidu, M., Coffie, W., & Acquah, P. (2019). Transfer pricing, earnings management and tax avoidance of firms in Ghana. *Journal of Financial Crime*, *26*(1), 235-259. https://doi.org/10.1108/JFC-10-2017-0091

Antras, P. (2003). Firms, contracts, and trade structure. *The Quarterly Journal of Economics*, *118*(4), 1375–1418. https://doi.org/10/d86md4

ASEAN. (2020). *ASEAN statistical yearbook 2020*. ASEAN. https://www.aseanstats.org/publication/asyb_2020/

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Choi, J. P., Furusawa, T., & Ishikawa, J. (2017). *Foreign direct investment and transfer pricing tax-induced FDI reasons for FDI. 1*(1), 1–36

de Mooij, R., & Liu, L. (2020). At a cost: The real effects of transfer pricing regulations. *IMF Economic Review*, *68*(1), 268–306. https://doi.org/10.1057/s41308-019-00105-0

Desai, M. A., Foley, C. F., & Hines, J. R. (2006). Do tax havens divert economic activity? *Economics Letters*, *90*(2), 219–224. https://doi.org/10/cdm9n4

Dharmapala, D. (2008). What problems and opportunities are created by tax havens. *Oxford Review of Economic Policy*, *24*(4), 661–679. https://doi.org/10.1093/oxrep/grn031

Dinca, M. H., & Fitriana, V. E. (2019). Do r&d expenditure, multinationality and corporate governance influence transfer pricing aggressiveness? *Jurnal Akuntansi & Bisnis : Jurnal Program Studi Akuntansi*, *5*(2), 102–114. https://doi.org/10.31289/jab.v5i2.2633

Ghozali, I. (2016). *Aplikasi analisis multivariete dengan program IBM SPSS 23 (Edisi 8)*. Badan Penerbit Universitas Diponegoro.

Global Witness. (n.d.). *Pengalihan uang batu bara indonesia, bagian 3: Jaringan luar negeri milik Adaro*. Globalwitness

Hiemann, M., & Reichelstein, S. (2012). Transfer pricing in multinational corporations: An integrated management-and tax perspective. *Fundamentals of international transfer pricing in law and economics*, *1*, 3-18. https://doi.org/10.1007/978-3-642-25980-7_1

Holtzman, Y. & Nagel, P. (2014). An introduction to transfer pricing. *Journal of Management Development*, *33*(1), 57-61. https://doi.org/10.1108/JMD-11-2013-0139

Hope, O. K., Thomas, W. B., & Vyas, D. (2013). Financial reporting quality of US private and public firms. *The Accounting Review*, *88*(5), 1715-1742.

https://doi.org/10.2308/accr-50494

Jacob, J. (1996). Taxes and transfer pricing: Income shifting and the volume of intrafirm transfers. *Journal of Accounting Research*, *34*(2), 301–312. https://doi.org/10.2307/2491504

Jafri, H. E., & Mustikasari, E. (2018). Pengaruh perencaan pajak, tunnneling incentive dan aset tidak berwujud terhadap perilaku transfer pricing pada perusahaan manufaktur yang memiliki hubungan istimewa yang terdaftar di Bursa Efek Indonesia periode 2014-2016. *Berkala Akuntansi & Keuangan Indonesia*, *3*(2), 63. https://doi.org/10.20473/baki.v3i2.9969

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Johnson, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Tunneling. *American Economic Review*, *90*(2), 22–27. https://doi.org/10.1257/aer.90.2.22

Lanis, R., & Richardson, G. (2013). Corporate social responsibility and tax aggressiveness: a test of legitimacy theory. *Accounting, Auditing & Accountability Journal, 26*(1), 75-100. https://doi.org/10.1108/09513571311285621

Liana, S., Poulus, S., & Pratama, A. (2020). The effect of share ownership concentration and company operation complexity towards transfer pricing decisions. *Journal of Accounting Auditing and Business*, *3*(1), 52–61. https://doi.org/10.24198/jaab.v3i1.25686

Lo, A. W. Y., Wong, R. M. K., & Firth, M. (2010). Tax, financial reporting, and tunneling incentives for income shifting: An empirical analysis of the transfer pricing behavior of Chinese-listed companies. *Journal of the American Taxation Association*, *32*(2), 1–26. https://doi.org/10.2308/jata.2010.32.2.1

Mispiyanti, M. (2015). Pengaruh pajak, tunneling incentive dan mekanisme bonus terhadap keputusan transfer pricing. *Journal of Accounting and Investment*, *16*(1), 62–74.

Mowen, M. M., Hansen, D. R., & Heitger, D. L. (2015). *Cornerstones of managerial accounting*. Cengage Learning.

Mulyani, H. S., Prihartini, E., & Sudirno, D. (2020). Analisis keputusan transfer pricing berdasarkan pajak, tunneling dan exchange rate. *Jurnal Akuntansi Dan Pajak*, *20*(2), 171–181. https://doi.org/10.29040/jap.v20i2.756

Nguyen, H. N., Tham, J., Khatibi, A., & Azam, S. M. F. (2019). Enhancing the capacity of tax authorities and its impact on transfer pricing activities of FDI en-terprises in Ha Noi,

Ho Chi Minh, Dong Nai, and Binh Duong province of Vietnam. *Management Science Letters*, *9*(8), 1299–1310. https://doi.org/10.5267/j.msl.2019.4.011

Park, S. J., Park, W. J., Sun, E. J., & Woo, S. (2016). Is foreign direct investment effective from the perspective of tax avoidance? An analysis of tax avoidance through the international transfer pricing behaviors of Korean corporations. *Journal of Applied Business Research*, *32*(3), 917–934. https://doi.org/10.19030/jabr.v32i3.9664

Puspita, E. R., Nurlaela, S., & Masitoh, E. (2018). Pengaruh size, debts, intangible assets, profitability, multinationality dan sales growth terhadap tax avoidance. *Manajemen, Akuntansi Dan Perbankkan*, 794–807

Quint, A. F., & Rudsinske, J. F. (2020). International trade and tax-motivated transfer pricing. *Cege Discussion Papers*, *406*, 1–42

Ramadhan, M. R., & Kustiani, N. A. (2017). Faktor-faktor penentu agresivitas transfer pricing. *Jurnal Akuntansi, Keuangan, Dan Perbankan*, *4*(1), 549–564

Rego, S. O. (2003). Tax-avoidance activities of U.S. multinational corporations. *Contemporary Accounting Research*, *20*(4), 805–833. https://doi.org/10/db323d

Rezky, M. A., & Fachrizal, F. (2018). Pengaruh Mekanisme Bonus, Ukuran Perusahaan, Leverage, dan Multinationality terhadap Keputusan Transfer Pricing pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2010-2014. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi, 3*(3), 401-415

Richardson, G., Taylor, G., & Lanis, R. (2013). Determinants of transfer pricing aggressiveness: Empirical evidence from Australian firms. *Journal of Contemporary Accounting and Economics*, *9*(2), 136–150. https://doi.org/10.1016/j.jcae.2013.06.002

Rugman, A. M., & Eden, L. (2017). *Multinationals and transfer pricing*. London: Routledge. https://doi.org/10.4324/9781315277554

Saifudin, S., & Putri, S. (2018). Determinasi pajak, mekanisme bonus, dan tunneling incentive terhadap keputusan transfer pricing pada emiten BEI. *Agregat*, *2*(1), 32–43. https://doi.org/10.22236/agregat

Sianipar, N. K., Yahya, I., & Sadalia, I. (2020). The determinants of tax avoidance with firm size as moderating variable at multinational companies. *International Journal of Research and Review*, *7*(7), 237–242. https://bit.ly/3kmKfCG

Slemrod, J., & Wilson, J. D. (2009). Tax competition with parasitic tax havens. *Journal of Public Economics*, *93*(11–12), 1261–1270. https://doi.org/10.1016/j.jpubeco.2009.08.004

Soesetio, Y., Rudhiningtyas, D. A., Sudarmiatin, S., & Mukhlis, I. (2021). Does

internationalization moderate the effect of SMEs size, age, and other financial determinants on investment opportunities set? Evidence from Indonesia. *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen, 18*(2), 164-186. https://doi.org/10.31106/jema.v18i2.10393

Sugeng, S., Prasetyo, E., & Zaman, B. (2020). Does capital intensity, inventory intensity, firm size, firm risk, and political connections affect tax aggressiveness*? JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen, 17*(1), 78-87. https://doi.org/10.31106/jema.v17i1.3609

Sugiyono, D. (2015). *Metode penelitian kuantitatif dan R&D*. Bandung: Alfabeta.

Susanti, A., & Firmansyah, A. (2018). Determinants of transfer pricing decisions in Indonesia manufacturing companies. *Jurnal Akuntansi & Auditing Indonesia*, *22*(2), 81–93. https://doi.org/10.20885/jaai.vol22.iss2.art1

Taylor, G., Richardson, G., & Lanis, R. (2015). Multinationality, tax havens, intangible assets, and transfer pricing aggressiveness: An empirical analysis. *Journal of International Accounting Research*, *14*(1), 25–57. https://doi.org/10.2308/jiar-51019

Utami, R. D., Cahyaningsih, C., & Kurnia, K. (2021). Pengaruh transfer pricing, thin capitalization, dan tax haven utilization terhadap agresivitas pajak (studi pada sektor industri barang konsumsi yang terdaftar di Bursa Efek Indonesia periode 2015-2018). *EProceedings of Management*, *7*(3)

Waworuntu, S. R., & Hadisaputra, R. (2016). Determinants of transfer pricing aggressiveness in Indonesia. *Pertanika J. Soc. Sci. & Hum*, *24*, 95-110

Yulia, A., Hayati, N., & Daud, R. M. (2019). The influence of tax, foreign ownership and company size on the application of transfer pricing in manufacturing companies listed on IDX during 2013-2017. *International Journal of Economics and Financial Issues*, *9*(3), 175–181. https://doi.org/10.32479/ijefi.7640