**TAX, TUNNELING ACTIVITIES, CORPORATE GOVERNANCE AND TRANSFER PRICING DECISION**

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*ABSTRACT*

*Multinational firms consider several factors to decide transfer prices in a-related party transaction. The Purpose of this study was to determine the effect of tax, tunneling activities, and corporate governance on transfer pricing with cash holding as mediating variable. This research used a quantitative approach and panel data analysis by taking data samples from 53 manufacturing companies listed on the IDX in 2013-2019, which met the research criteria as previously set. The result stated that tunneling activities and corporate governance have a significant positive effect on transfer pricing, while the tax has negative effect on transfer pricing. Tax, tunneling activities and corporate governance has no effect on cash holding. Thus, the effect of cash holding cannot intervene the effect of tax, tunneling activities and corporate governance on transfer pricing. In the future, tax authority can narrow the scope of transfer pricing investigation by examinating elements in financial report.*

***Keywords:*** *cash holding; corporate governance; transfer pricing; tax; tunneling activities*

**ABSTRAK**

Perusahaan-perusahaan multinasional mempertimbangkan beberapa aspek dalam menentukan harga transfer untuk transaksi pihak berelasi. Tujuan penelitian untuk menyelidiki apakah pajak, aktivitas *tunneling* dan tata kelola perusahaan mempengaruhi keputusan untuk melakukan transfer pricing. Formula penelitian juga menggunakan *cash holding* sebagai variabel intervening. Penelitian ini menggunakan metode kuantitatif dengan teknik data panel yang berasal dari 54 perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia dalam tahun 2013 – 2019. Hasil studi menunjukkan beberapa temuan. Pertama, aktivitas *tunneling* dan tata Kelola perusahaan berpengaruh positif signifikan terhadap keputusan transfer pricing. Namun, di sisi lain pajak berpengaruh negatif. Kedua, pajak, aktivitas tunneling dan tata Kelola tidak mempengaruhi *cash holding.* Oleh karena itu *cash holding* tidak dapat menjadi pemediasi antara pajak, aktivitas *tunneling*, dan tata kelola terhadap keputusan transfer pricing. Implikasi penting dari penelitian ini adalah otoritas pajak dapat melakukan penelaahan lebih detil terhadap elemen-elemen laporan keuangan dalam pemeriksaan transfer pricing.

**Kata kunci:** aktivitas *tunneling*; *cash holding;* pajak; tata Kelola perusahaan; transfer pricing

**Klasifikasi JEL:** F15; F13; Q56

1. introduction

Transfer pricing mechanism which been done by a company with cross-border transactions is transferring profit from countries with higher tax rate to countries with lower tax rates (Cravens & Shearon, 1996). This phenomenon result in potential loss on tax revenue country with higher tax rate. Janský and Palanský (2019) show that potential loss in developed countries is 6%, while in developing countries this number increasing to 17%.

Referring to Deloitte (2017), Indonesia is a developing country. Moreover, until 2019, Indonesia has the second highest tax rate in Southeast Asia. This condition makes Indonesia vulnerable to loss of tax revenue. According to Tax Justice Network, Indonesia’s losses due to local and foreign transaction with related party in the context of tax avoidance in 2019 are worth 67,7 trillion rupiah.

Responding to the issue of potential loss of tax revenue as the result of tax base erosion, Indonesia show seriousness to subdue the negative effect of transfer pricing by joining as a BEPS associate member and signs declaration of support for the BEPS research conducted by OECD in 2013. Furthermore, Indonesian government released a circular letter number SE-50/PJ/2013 concerning Technical Guidelines for the Audit of Taxpayers which have a Related Party. Indonesian government also implemented several regulations related to the treatment for related party transactions through the Law and implementing regulations. However, allegation for transfer pricing case that aim to reduce tax payment still occurring. For instance, indication of transfer pricing carried out by PT Adaro Indonesia and its affiliate company in Singapore, Coaltrade Service International Ltd in 2004-2008 (Wibowo, 2021). Another allegation carried out by PT Toba Pulp Lestari (TLP). TLP exported pulp to its affiliated company in Singapore, DP Marketing International Ltd (Maryono, 2020). The scheme used in both cases is selling the commodity prices with lower price than market price.

Potential loss of tax revenue related with tax expense paid. According to Lo et al. (2010), companies in China pay attention on tax saving when considering transfer pricing decision. In addition to tax, tunneling activities also effect transfer pricing. The Sumalindo is an example of the tunneling case related to transfer pricing. PT Sumalindo gave an interest free loan to its subsidiary, PT Sumalindo Hutani Jaya (SHJ) in 1997. According to Republika (2013), this case will not occur if the company implemented corporate governance. This is in line with Lo et al. (2010) which states that the ability of managers to engage in transfer pricing depends on corporate governance.

One of transparency and accountability form in corporate governance is financial statement audit by public accountant. However, assessing the fairness and prevalence of transfer pricing carried out by tax authority. In China, tax revenue after transfer pricing audit increased from RMB 460 million to RMB 987 in 2007.

However, the company’s consideration on deciding transfer pricing methods and activity is complicated (Al-Eryani et al., 1990). They must include role and strategy of management (Elliott & Emmanuel, 2000). According to Choi and Meek (2009, cited in Pendse, 2012), financial management theory stated that transfer pricing can be used as a tool for cash, risk, control management, and resource allocation.

Cash management aims to balance cash excess and shortage to create cash optimalization, which is when benefit on holding cash equal to the cost (Luo & Shang, 2015). Cash holding is one of the part in free cash management (Yılmaz, 2011). Cash holding has effect on the amount of cash, so the companies do not experience operating or investing activities related to cash (Martínez-Sola et al., 2013).

Transfer pricing and profit shifting in multinational companies are a concern for policy makers especially tax authority (Pendse, 2012). This is related to the function of tax collection and tax audit. However, validation process on transfer pricing requires large resource, meanwhile tax authority’s resources are limited in terms of budget, time, and human resource. For this reason, it is necessary to select the priority of taxpayers to be examined.

Still referring to Pendse (2012), transfer pricing also draws researcher attention. There was a lot of transfer pricing determination study with various result on variables signification, depends on object condition. In addition, cash holding as intervening variable has not been widely using in Indonesia.

Hirshleifer (1956) define transfer pricing as activity of determining the goods and service price which exchange between divisions within a company. Transfer pricing is useful in solving problems related to management accounting and controlling, including performance measurement (Rossing et al., 2017). Along with global development and complexity of international transaction, transfer pricing meaning has shifted into multinational enterprise practice in perform sales activity in such a way that generates profits in countries with lower tax rate (Hasset and Newmark, 2008 cited in Klassen et al., 2017). It means that transfer pricing has a neutral definition and negative definition when related to tax avoidance. This is known as the abuse of transfer pricing.

Cash holding is one of the cash management functions (Yılmaz, 2011). According to Martínez-Sola et al. (2013) , cash holding is mechanism to balance the cash excess and shortage in a company. There are three theories related to cash holding: Trade off theory (Kim et al., 1998), which states that there is a point where benefit and cost of holding cash are equal called by optimalization level of cash holding; pecking order theory (Myers & Majluf, 1984), which outlines the priority of management if there are cash excess or shortage; free cash flow theory (Jensen et al., 1986), which states that there is a tendency for management to hold large amount of cash for a specific purpose.

Income tax expense is the amount owed to be paid by the company as taxpayer based on allocation of income received in a certain period (Graham, 1959). Profit shifting for minimizing tax payment has become international worldwide concern. Klassen et al. (1993) show that income shifting by multinational companies is a response to tax rates change in Canada, Europe, and the United States. When Canada’s tax rate increasing, multinational companies shifted their profit from Canada to United States. However, when Europe’s tax rate decreasing, they shifted their profit back from United States to Europe afterwards.

Johnson et al. (2000) defines tunneling as the illegal seizure of assets by the majority shareholders for personal purpose that has negative impact on minority owners and market prices. According to (la Porta et al., 2000), tunneling is carried out in various form, including related party transaction with unreasonable prices, not distributing dividend, and placing someone in important position without proper qualification. The entity’s capital structure makes the majority shareholders have greater control than the minority owner. By manipulating transfer prices, they can expropriate resource that result gain for a party and loss for the other (Lo et al., 2010).

Corporate governance is a normative framework regarding regulation, legal system, financial and labor markets (Claessens, 2006). In practice, corporate governance includes financial statement, GMS, independent directors and commissioners, and audit committees (Wibowo, 2010). The corporate governance influenced by ownership structure, state regulation, economic competition, and management structure. According to Jensen and Meckling (1976), corporate governance is the part of agency problems which resolution can be done in several ways, including effective protection of shareholders and creditors, and obligation settlement for employees and other parties such as government (Purwani, 2010).

Research on determinants of transfer pricing has been done in various country with various industrial sectors. Lo et al. (2010) conducted research on all companies in China (other than financial service sectors) using financial statement data in 2004. Tax is computed with marginal tax rate, tunneling scaled by percentage of shares owned by majority shareholder, while transfer pricing measured by the ratio of gross profit transaction with related parties to gross profit transaction with independent parties. The result stated that the tax, tunneling, and corporate governance affect transfer pricing negatively.

Another study conducted by Wijaya and Amalia (2020) examined the effect of tax, tunneling, and corporate governance on transfer pricing using data samples from 25 manufacturing companies in 2013-2017. The result show that tax has positive effect on transfer pricing, tunneling has no effect on transfer pricing, and corporate governance has a negative effect on transfer pricing.

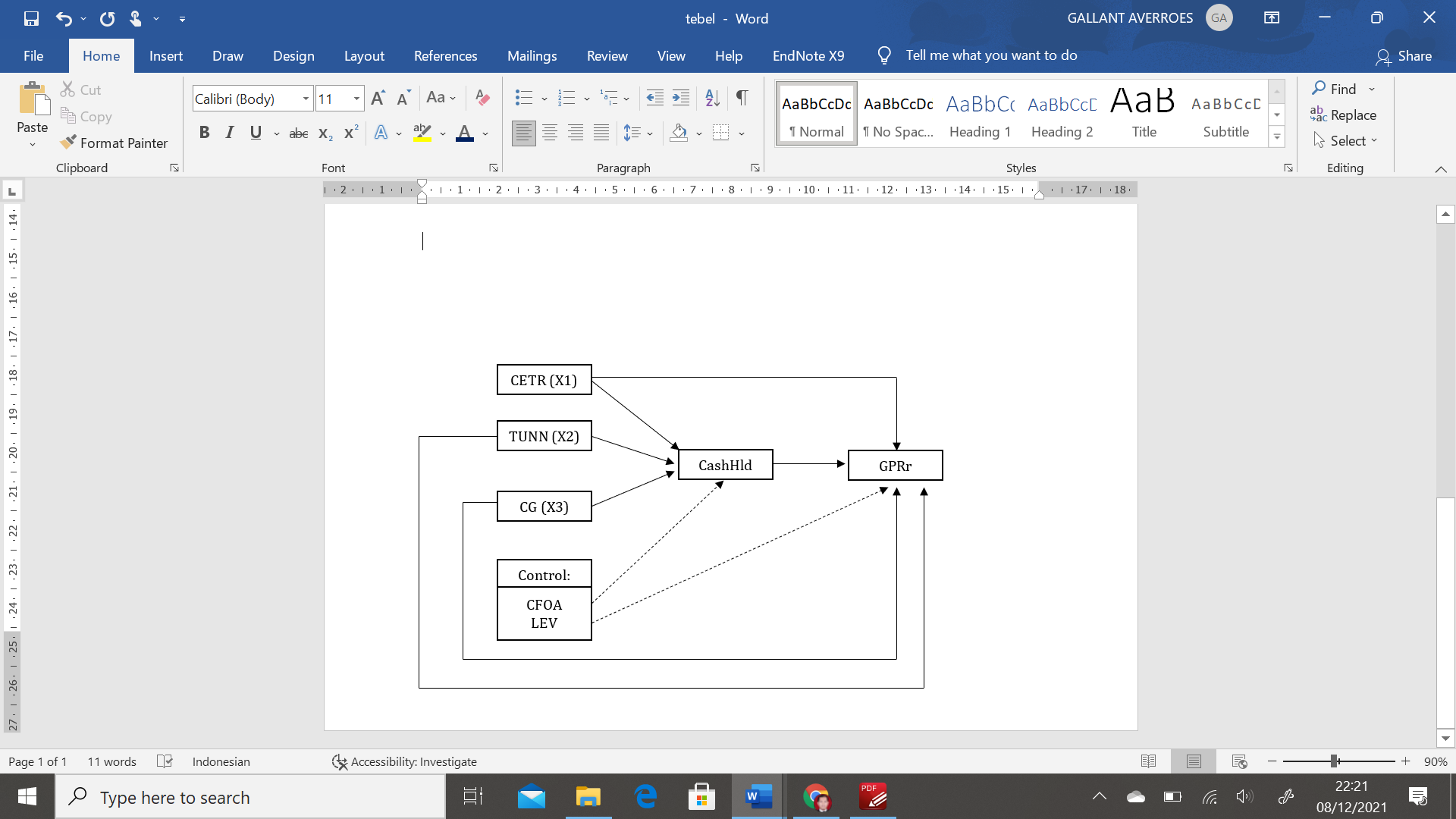
Tambunan and Septiani (2017) examines the effect of tax avoidance as measured by the cash effective tax rate (Cash ETR) on cash holding as computed by the ratio of casg and cash equivalent to total assets. This study used data from223 manufacturing companies in 2013-2015. The result stated that tax avoidance influences cash holding. Different results were produced by Hardianto et al. (2017) which stated that tax measured by the long run Cash ETR has no effect on company’s cash holding.

Research on the effect of tunneling on cash holding was proposed by Liu et al. (2015) using samples of family firms in China in 2004-2011. Tunneling was measured by a dummy variable for companies that conduct transaction with related parties and consider receivable with related parties. This study stated that tunneling affect cash holding negatively.

The research on the effect of corporate governance on cash holding was conducted by Kuan et al. (2011). This study used data form Taiwan’s Corporate Governance in 1997-2008. Corporate governance was measured by several variables including: separation of powers, ownership structure, and board characteristics including independence. The result concluded that the existence of independent board has an effect on increasing the company’s cash holding.

A different study conducted by Gallery et al. (2008) aims to show related party transactions based on cash approach. The study used the quarterly report of companies that have just been listed on Australian Securities Exchange (ASX) in March 2000 to December 2005. The result show that the company’s cash influenced related party transaction of payments to suppliers and employees positively.

The previous description has explained the phenomenon of transfer pricing indication that still exist in Indonesia even though there are regulations regarding transfer pricing. In addition, previous studies provide various result with different significance. Thus, this study aims to examine the effect of tax (CETR), tunneling (TUNN), and corporate governance (CG) on transfer pricing (GPRr) using cash holding (CashHld) as intervening variable. The research can be described as Figure 1 below:



**Figure 1. Research Framework**

Source: processed by the author, 2021.

Indrasti (2016) stated that transfer pricing carried out by multinational companies aims to manipulate profit, so they look lower than actual profit. This research is in line with Wafiroh and Hapsari (2016); Mulyani et al. (2020) which show the practice of transfer pricing result in tax expense being smaller than the tax should be. On the side internal company, managers as agents who manage company’s resource will try to reduce expense and cost as low as possible, including tax by conducting tax management (Fauziah & Saebani, 2018). Research by Kiswanto dan Purwaningsih (2014) stated that the company’s expectation to reduce tax is carried out by transfer pricing practice.

**H1: Tax expense has significant effect on transfer pricing.**

Companies with large taxes must have large amounts of cash as well (Das & Parida, 2016). In Indonesia, late payment of tax is subject to penalty of 2% per month calculated from due date until the date of payment, and part of the month is calculated as one full month (UU KUP). Tambunan and Septiani (2017) stated tax avoidance mechanism can increase cash holding. Optimum cash management is characterized by priotizing payment including the achievement of tax deduction (Trajković et al., 2014).

**H2: Tax expense has significant effect on cash holding.**

Companies that are centered on a part of ownership tend to tunnel the resource through transfer pricing in the sales between related party mechanism (Jafri & Mustikasari, 2018). One form of assets flow comes from special loans with related party (Jian & Wong, 2004). Johnson et al. (2000) proved that markets in developing countries experience greater tunneling than developed countries.

**H3: Tunneling has significant effect on transfer pricing.**

Tunneling generally occurs in developing countries (Shan, 2013). In China, companies hold cash for the purpose of tunneling which can harm company. This is because cash is a liquid asset that is easy to flow, especially to the owners of companies with family ownership (Liu et al., 2015). The nature of cash liquidity makes it easier to be transferred, either through direct grants or the placement into benefit investment for majority shareholders (Dittmar et al., 2003).

**H4: Tunneling has significant effect on cash holding.**

Research by Wijaya and Amalia (2020) stated that the better corporate governance, the more responsible the board in supervising the financial statement, thereby will reduce the practice of transfer pricing. The corporate governance function will reduce the likelihood of aggressive tax avoidance. The supervisory function is also influential in avoiding opportunistic activities such as transfer pricing (Solikhah et al., 2021). The role of corporate governance in protecting interest of all stakeholders including minority owners and creditors must be accompanied by setting up an effective governance mechanism (Rosa et al., 2017).

**H5: Corporate governance has significant effect on transfer pricing.**

Corporate governance is useful for ensuring the availability of cash as needed (Harford et al., 2008). Lack of cash will hinder the company’s operational activities. However, excess cash can motivate the managers to pursue personal interest and spend cash on unnecessary expense or unprofitable investment (Jensen & Meckling, 1976). Kuan et al. (2012) show that companies with independent board of directors have high level of cash holding in family ownership company. The cash will be reduced to cash reserves for investment purpose. This aims to avoid agency problems between owners and management or with minority owners.

**H6: Corporate governance has significant effect on cash holding.**

The survey result from Cravens (1997) stated that there were several respondents who linked the purpose of transfer pricing with cash management function. The linkage is the manager’s effort to seek global allocation of funds, in which there are regulatory restrictions regarding joint venture companies (Pendse, 2012). This makes it difficult for companies to find external source of capital and choose internal source from their affiliated companies through transfer pricing.

**H7: *Cash holding has significant effect on transfer pricing.***

1. research method and DATA

This study used data sources from financial and annual reports of manufacturing companies listed on the Indonesia Stock Exchange in 2013-2019. Manufacturing companies are chosen because they provide largest contribution to gross domestic product. In 2019, manufacturing sectors accounted for 19,62% of GDP in total, followed by the agriculture, forestry, and fishery industries (13,45%), trade (13,45%), and construction (10,60%) (Putra, 2020).

In addition, the manufacturing is the sectors with largest FDI investment compared to main sectors and services (Bappepam, n.d.). The research period started from the Indonesia’s declaration on BEPS project echoed by OECD in May 2013, followed by issuance of SE-50/PJ/2013 in Oktober 2013. The limitation of the research period until 2019 was intended to avoid the effect of financial statement biased caused by Covid-19 pandemic.

The sampling was carried out on the population of manufacturing companies with the following criteria:

**Table 1. Research Sample Selection Criteria**

|  |  |  |
| --- | --- | --- |
| **No** | **Criteria** | **Total** |
| 1 | Manufacturing companies listed on IDX 2013-2019 | 197 |
| 2 | Companies which financial and annual report for 2013-2019 period cannot be accessed completely | (3) |
| 3  4 | Companies that do not have foreign affiliation companies  Companies that do not have sales transaction with related party in 2013-2019 | (101)  (40) |
|  | **Number of samples** | **53** |
|  | **Year of samples** | **7** |
|  | **Total samples** | **371** |

Source: processed by the author, 2021.

Hypothesis testing was carried out with multiple linear regression used e-views10. The effect of mediating variable testing was carried out by path analysis used sobel test. The variables used in this study consist of:

**Dependent variable**

The dependent variable used in this study is the gross profit ratio transaction of related party and gross profit ratio transaction of independent party. Gross profit ratio is calculated by dividing gross profit by the number of net sales. This measurement adopts the study of Lo et al. (2010) with following formula:

**Independent variables**

The independent variables used in this study consist of :

**Tax**

This study adopted tax measurement with the taxes actually paid by company or Cash Effective Tax Rate as researched by Tambunan and Septiani, (2017) with following formula:

**Tunneling activities**

The measurement of tunneling in this study adopted form Tang (2016) with the following formula:

**Corporate governance**

The measurement of corporate governance in this study adopted form Lo et al. (2010) with some adjustment, with the following formula:

**Intervening variable**

The mediating variable in this study adopted the research by Foley et al., (2007), with the following formula:

**Control variables**

The control variables in this study consist of:

**Leverage**

**Cash flow from operating activities**

The Model in this study is the panel data model. Based on the hypothesis, the research model can be formulated as follows:

CashHld=αit+ β1CETRit+ β2TUNNit + β3CGit+ β4CFOAit+ β5LEVit+ εit (1)

GPRr=αit+ β6CashHldit+ β7CETRit+ β8TUNNit+ β9CGit+ β10CFOAit+β11LEVit+εit (2)

GPRr= αit+ β12CETRit+ β13TUNNit+ β14CGit+ β15CFOAit+ β16LEVit+εit (3)

1. RESULTS AND DISCUSSION

This study used panel data which has three models. Based on chow test, hausman test, and lagrange multiplier test, the most appropriation regression model for three research models is the random effect model.

The regression model used in this study is random effect model. Therefore, the classic assumption test needed is the normality test and multicollinearity test. The heteroscedasticity and autocorrelation test were not involved because the random effect model regression used a feasible generalized least square (FGLS) which has considered the heteroscedasticity and autocorrelation problems.

**Normality test**

**Table 2. Normality Test Result**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variables | Obs | Pr(Skewness) | Pr(Kurtosis) | Jarque-Bera | Probability |
| GPRr | 371 | -1.213786 | 3.611426 | 96.87660 | 0.00000 |
| CashHld | 371 | 1.094104 | 2.919544 | 74.11855 | 0.00000 |
| CETR | 371 | 1.602542 | 5.815372 | 281.3244 | 0.00000 |
| TUNN | 371 | 2.452760 | 14.61168 | 2456.255 | 0.00000 |
| CG | 371 | 2.048909 | 10.42869 | 1112.652 | 0.00000 |
| CFOA | 371 | 1.305285 | 7.428313 | 408.4870 | 0.00000 |
| LEV | 371 | 0.851718 | 2.399590 | 50.42791 | 0.00000 |

Source: processed by the authors from E-Views10’s Output, 2021.

Table 2 illustrates that probability’s normality test is less than significance level 0,05, which means the data is not normally distributed. However, normal assumptions with relatively large data can refer to the Central Limit Theorem (CLT). This study uses 371 research data consisting of 53 manufacturing companies with 7 years of observation. Thus, the data can be assumed to be normally distributed.

**Multicollinearity test**

**Table 3. Multicollinearity Test Result**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | CashHld | CETR | TUNN | CG | CFOA | LEV |
| CashHld | 1.0000 | 0.0464 | -0.1319 | -0.1651 | 0.2097 | -0.2331 |
| CETR | 0.0464 | 1.0000 | -0.0083 | -0.0089 | -0.0445 | -0.0831 |
| TUNN | -0.1319 | -0.0083 | 1.0000 | -0.1440 | -0.0694 | -0.0038 |
| CG | -0.1651 | -0.0090 | -0.1440 | 1.0000 | 0.0927 | 0.0486 |
| CFOA | 0.2097 | -0.0445 | -0.0694 | 0.0927 | 1.0000 | -0.2676 |
| LEV | -0.2331 | -0.0831 | -0.0370 | 0.0486 | -0.2676 | 1.0000 |

Source: processed by the authors from E-Views10’s Output, 2021.

Table 3 demonstrates he value of correlation coefficient of each independent variable with other independent variables. All coefficient values are below 0,8. So, it can be concluded that there is no multicollinearity problem between independent variables in this study.

**Research Hypothesis Testing**

**F Test and Coefficent Determinantion Analysis (R-squared)**

**Table 4. F Test and Coefficent Determinantion Analysis Result of Model 1**

|  |  |  |  |
| --- | --- | --- | --- |
| F-statistic | 3.350278 | R-squared | 0.043880 |
| Prob(F-statistic) | 0.005681 | Adjusted R-squared | 0.030783 |

Source: processed by the authors from E-Views10’s Output, 2021.

Table 4 shows the adjusted R-squared of Model 1 is 0,030783. In other words, research model 1 can explain the cash holding variable (CashHld) of 3,0783%. The F test probability of model 1 is 0,005681, or below the significance level 0,05. So, all the independent variables (tax, tunneling, and corporate governance) simultaneously effect on cash holding.

**Tabel 5. F Test and Coefficent Determinantion Analysis Result of Model 2**

|  |  |  |  |
| --- | --- | --- | --- |
| F-statistic | 5.837525 | R-squared | 0.087777 |
| Prob(F-statistic) | 0.000008 | Adjusted R-squared | 0.072740 |

Source: processed by the authors from E-Views10’s Output, 2021.

Table 5 shows the adjusted R-squared of Model 2 is 0,072740. In other words, research model 2 can explain the transfer pricing variable (GPRr) of 7,2740%. The F test probability of model 1 is 0,000008 or below the significance level 0,05. So, all the independent variables (tax, tunneling, and corporate governance) and intervening variable (cash holding) simultaneously effect on transfer pricing.

**Tabel 6. F Test and Coefficent Determinantion Analysis Result of Model 3**

|  |  |  |  |
| --- | --- | --- | --- |
| F-statistic | 5.826909 | R-squared | 0.073920 |
| Prob(F-statistic) | 0.000034 | Adjusted R-squared | 0.061234 |

Source: processed by the authors from E-Views10’s Output, 2021.

Table 6 shows the adjusted R-squared of Model 2 is 0,061234. In other words, research model 3 can explain the transfer pricing variable (GPRr) of 6,1234%. The F test probability of model 1 is 0,000034 or below the significance level 0,05. So, all the independent variables (tax, tunneling, and corporate governance) simultaneously effect on transfer pricing.

**t-Test and Multiple Linear Regression Model**

**Table 7. t-Test Result of Model 1**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | Coefficient | Std. Error | t-Statistis | 1 tailed Prob | Description | +/- |
| C | 0.124225 | 0.01999 | 6.21170 | 0.0000 |  |  |
| CETR | -0.00098 | 0.00998 | -0.09855 | 0.4608 | Not Effect |  |
| TUNN | -0.04172 | 0.06247 | -0.66781 | 0.2524 | Not Effect |  |
| CG | -0.05401 | 0.03910 | -1.38127 | 0.0840 | Not Effect |  |
| CFOA | 0.07646 | 0.03203 | 2.38690 | 0.0087 | Effect | + |
| LEV | -0.10722 | 0.04020 | -2.66679 | 0.0040 | Effect | - |

Source: processed by the authors from E-Views10’s Output, 2021.

Table 7 shows the result of the regression research model 1, with probability all the variables independent above significance level 0,05. Thus, tax, tunneling, and corporate governance have no effect on cash holding. The equation of research model is:

**CashHldit = 0,124225 - 0,000983CETRit - 0,041721TUNNit - 0,054009CGit + 0,076458CFOAit - 0,107215LEVit + εit**

**Table 8. t-Test Result of Model 2**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | Coefficient | Std. Error | t-Statistis | 1 tailed Prob | Description | +/- |
| C | -10.29474 | 2.12626 | -4.84172 | 0.0000 |  |  |
| CashHld | 12.48854 | 5.39979 | 2.31278 | 0.0106 | Effect | + |
| CETR | -2.30019 | 1.06174 | -2.16643 | 0.0154 | Effect | - |
| TUNN | 23.02883 | 6.35211 | 3.62538 | 0.0000 | Effect | + |
| CG | 11.68640 | 4.05146 | 2.88449 | 0.0021 | Effect | + |
| CFOA | 0.82915 | 3.36265 | 0.24657 | 0.4027 | Not Effect |  |
| LEV | -7.98983 | 4.07822 | -1.95915 | 0.0254 | Effect | - |

Source: processed by the authors from E-Views10’s Output, 2021.

Table 8 shows the result of the regression research model 2. The result is all the independent and intervening variables have probability below significance level 0,05. Thus, cash holding, tax, tunneling, and corporate governance affect transfer pricing. Cash holding, tunneling, and corporate governance affect transfer pricing positively, while the tax affect transfer pricing negatively. The equation of research model 2 can be written as follow:

**GPRrit = -10,29474 + 12,48854CashHldit – 2,30019CETRit + 23,02883TUNNit + 11,6864CGit + 0,82914CFOAit – 7,98983LEVit + εit**

**Table 9. t-Test Result of Model 3**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | Coefficient | Std. Error | t-Statistis | Prob | Description | +/- |
| C | -8.66467 | 2.05188 | -4.22279 | 0.0000 |  |  |
| CETR | -2.26843 | 1.06746 | -2.12507 | 0.0172 | Effect | - |
| TUNN | 21.87267 | 6.47531 | 3.37786 | 0.0004 | Effect | + |
| CG | 10.96764 | 4.09835 | 2.67612 | 0.0039 | Effect | + |
| CFOA | 1.96198 | 3.37609 | 0.58113 | 0.2807 | Not Effect |  |
| LEV | -9.65102 | 4.13347 | -2.33485 | 0.0101 | Effect | - |

Source: was processed by the author from E-Views10’s Output, 2021.

Table 9 shows the result of the regression research model 3. The result is all the independent variables have probability below significance level 0,05. So, tax, tunneling, and corporate governance affect transfer pricing. Tunneling and corporate governance affect transfer pricing positively, while tax affect transfer pricing negatively. The equation of research model 3 can be written as follow:

**GPRrit = -8,664676 – 2,268432CETRit + 21,87266TUNNit + 10,96764CGit+ 1,96198CFOAit – 9,65101LEVit + εit**

**Path Analysis Result**

**Tabel 10. Sobel Test Result**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variabel** | **Coeficient** | **Standard Error** | **Sobel Test Statistic** | **1 Tailed Probability** |
| **CETR** | -0.00098 | 0.12522 | -0.09845 | 0.4608 |
| **TUNN** | -0.04172 | 0.81591 | -0.64123 | 0.2607 |
| **CG** | -0.05401 | 0.57225 | -1.18354 | 0.1182 |
| **CFOA** | 0.07645 | 0.57948 | -1.65459 | 0.0490 |
| **LEV** | -0.10721 | 0.77308 | -1.73914 | 0.0410 |

Source: processed by the authors from sobel calculator’s Output, 2021.

Table 10 shows that probability of sobel test for all independent variables (tax, tunneling, and corporate governance) is above significan`ce level 0,05. This indicates that cash holding cannot mediate the effect of independent variable (tax, tunneling, and corporate governance) on dependent variable (transfer pricing).

**Discussion**

The result of the regression state that the tax has a negative effect on transfer pricing. The lower tax paid by the company, the higher profit margin on sales or purchase transaction with related party. This is due to difference of tax rates country where affiliated company was established, either higher or lower. It aims to reduce the tax expense of multinational enterprise globally. The test result is in line with Lo et al. (2010) who concluded that firms with lower marginal tax rates have higher gross profit ratios in related party transaction to take advantage of greater tax saving. The test result also consistent with Susanti and Firmansyah (2018) which states that the tax has a negative effect on transfer pricing.

The test result shows that tax has no effect on cash holding. Tax expense is a part of operating expense that can be calculated in advance and paid immediately on certain period as when income tax is due. Prudence in paying taxes and tax dispute settlement penalties should also has an attachment to the company’s cash. But companies tend to be careful when filing objection because sanction reasons such as fines Hardianto et al. (2017).

The result of this study is in line with Anderson and Hamadi (2016) which stated that tax burden has no effect on cash holding. In contrast, Das and Parida (2016) stated that company with large taxes must have large amount of cash as well. When associated with the financial reporting period, this opinion is less relevant. This is because the amount of cash on financial statement has considered of tax that must be paid for the period.

**Effect of tunneling on transfer pricing**

The result of this study state that tunneling activity has positive effect on transfer pricing. This is accordance with the pecking order theory (Myers & Majluf, 1984). Based on this theory the company will choose to distribute loans to related party, to aim the rights of related creditors will be prioritized to be fulfilled first than owners. In this case, minority owner has the most disadvantage. This result consistent with Jafri and Mustikasari (2018), which stated that company with centralized ownership structure tend to prefer to tunnel profit or company resources through transfer pricing for personal interest of majority owner rather than dividing the profit through dividends to all company owners.

**Effect of tunneling on cash holding**

The result of this study shows that tunneling activity has no effect on cash holding. This is due to provision of receivables or sales with credit mechanism to special parties that have considered the company’s cash outflows in the previous year. The result of this study is not in accordance with Gupta and Bedi (2020) which show that there is tendency for companies to increase their cash holding possibly due to tunneling.

**Effect of corporate governance on transfer pricing**

The result of this research shows that corporate governance has positive influence on transfer pricing. Considering tax related to profit shifting, transfer pricing is a part of tax avoidance mechanism (Bartelsman & Beetsma, 2003). The determination of the transfer pricing method used is part of extreme tax planning (Holtzman & Nagel, 2014). Transfer pricing practice does not violate the law, although it can be said to be unethical because it can reduce the expense that should be paid (Hansen et al., 1992). As long as the practice does not violate the law, the supervision function will not hinder the practice of transfer pricing.

This study’s result is consistent with Rosa et al. (2017) which stated that the corporate governance mechanism in Indonesia have not been effective in protecting the stakeholder’s interests. According to Rosa et al. the presence of external auditor is not enough to guarantee accountability of financial reporting, including transfer pricing behavior.

**Effect of corporate governance on cash holding**

The result of this study show that corporate governance had no effect on cash holding. Governance has more to do with operating and investing decision. In other word, the supervision has more impact on the value of money, not the amount of money held by company (Dittmar & Mahrt-Smith, 2007). Kuan et al. (2011) stated that independent directors existence has a positive effect on the level of cash holding in family firm in China. However, when tested on non-family-owned companies, independent directors as governance proxy has no effect on cash holding. Thus, the result is consistent with this study.

**Effect of cash holding on transfer pricing**

The result of this study shows that cash holding has positive influence on transfer pricing. This is accordance with the tradeoff cash holding theory proposed by Kim et al. (1998). Companies need to determine the appropriate level of cash amount to held, so that marginal benefit is equal with or greater than marginal cost. In other word, the company must determine the level of cash optimalization. When company holds too much cash, it needs to divert the cash. The transfer can be done by transfer pricing mechanism through sales transaction, loans, or investment to related parties.

The result is in line with Gallery et al. (2008) which stated that the company’s cash balance has influence transaction with related parties. The transaction refers to payment to the affiliated suppliers and company employees. Gallery et al. show that companies with high cash balance tend to have higher transaction amount with related parties.

**The effect of cash holding as mediating variable in explaining the indirect relationship of the independent variable to the dependent variable**

The result of this research show that cash holding cannot intervene the effect of tax, tunneling, and corporate governance on transfer pricing. A variable to be able to function as a mediator if the independent variable is able to significantly influence the mediating variable (condition a), the mediating variable is able to significantly influence the dependent variable (condition b), and when the effect of independent variable on the dependent variable, which was significant becomes insignificant (condition c) (Baron & Kenny, 1986). The result of this study does not meet condition a.

The use of cash in the company is prioritized for operating and investing purposes. The tax expense is the part of company’s operation activity. Cash constraint means there is not enough cash flow to be provided to the majority owner through tunneling. On the other hand, the use of cash for operation and investment activities is the focus of the supervisory board, so the amount of cash available is not of particular concern.

1. CONCLUSION

This study aims to examine the variables that can affect transfer pricing, used a random effect model and took data from the financial and annual report 53 manufacturing companies listed in IDX in 2013-2019. The result is described as follows: the smaller the tax expense, the higher the difference in profit from sales and purchase transaction with related party compared to independent party. This has an impact on reducing corporate tax multinational enterprise globally.

Tax expense that must be paid with cash basis requires the company to provide a certain amount of cash to meet tax obligation in certain period. However, the presentation of the cash value in financial statement has considered as part of the company’s operation. In addition, the precautionary principle of taxpayers in resolving tax dispute makes the company not provide cash as anticipation related to fulfillment of tax obligation.

Loans to related party are prioritized in multinational enterprise because they provide certainty of funding source. They also make the affiliate company as a creditor whose obligation must take precedence before the company’s owner. Giving loans will reduce the company cash, but this has been considered before the company realizing in provide loans.

The nature of transfer pricing which function as a company’s strategy in carrying out its operations is seen as not violating any rules. The supervisory function focuses more on the use of cash on operating and investing activities, rather than the amount of cash itself. Companies with high cash holding tends to tunnel assets to related party through sales, purchases, or giving soft loans. The level of cash owned by the company cannot intervene the effect of tax, tunneling, and corporate governance on transfer pricing. This is due to the usefulness of cash which prioritized for investment and operating purposes.

Based on the result of the research, the authors can give some suggestion: for DGT as tax authority, verification of transfer pricing aggressiveness indication can be done by looking at the components in the financial statement, with narrowing taxpayers prioritize purpose in transfer pricing audits. Further research can expand the population as sample research, use mediating or moderating variables into account the terms of treatment of a variable as a mediating or moderating variable

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