

The Influence of Exchange Rate, Profitability and Tunneling Incentive on Transfer Pricing in Industrial Sub-Sector Companies

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ABSTRACT

This research aims to find out how much influence the exchange rate, profitability and tunneling incentive transfer pricing have on industrial sector companies in Indonesia. The samples used in this research were companies in the various services industry sectors on the Indonesia Stock Exchange in 2017-2022. The sampling method was carried out using the purposive sampling method. The sample in this company was 6 companies with an observation period of 5 years. The data was analyzed using panel data regression techniques with Eviews 12 software. Based on the research results, it shows that tunneling incentives influence transfer pricing decisions, while exchange rate and profitability have no influence on transfer pricing decisions.

INTRODUCTION

Background of the problem

Basically, transfer pricing is the determination of prices for goods and services exchanged between divisions which are profit centers in a company (Hirshleifer, 1956; Simamora, 1999; Hansen & Mowen, 2005; Horngren et al., 2015). Furthermore, transfer pricing is associated with special relationships that occur in internal and inter-company transactions (Indonesian Accountants Association, 2013; Kurniawan, 2015; Santosa & Suzan, 2018). Transfer pricing is the result of current business growth. The world of the industrial revolution greatly changed the global business structure between countries to become internationally based which resulted in regulations between countries. The challenge to international taxation lies in policy making, namely Base Erosion and Profit Shifting (BEPS) (Matsuoka, 2018). As a result, if the country is not ready to anticipate this development it will have an impact on the implementation of taxes and profit transfer or BEPS in the form of transfer pricing and if ignored it can lead to tax avoidance because companies can take advantage of this opportunity.

Experts have proven that transfer pricing can cause problems in multinational companies and is often used to pursue the highest possible profits by abusing existing regulations. Transfer pricing is carried out to avoid large taxes (tax avoidance). To avoid high taxes, companies can create subsidiaries in other countries with low tax rates. The factor in transfer pricing is tunneling incentives which are based on shareholders, often transferring assets and profits for their own primary benefit but the minority party still bears the burden incurred. Supervision carried out by internal and external parties can be a way to protect shareholders.

Research on the influence of exchange rates, profitability, and tunneling incentives on transfer pricing in industrial sector companies is an interesting topic in the fields of economics and accounting. The influence of exchange rates (foreign exchange rates) in transfer pricing can be significant because changes in exchange rates can affect selling prices and costs in transactions between companies operating in various countries. Changes in foreign exchange rates may also affect reported profits from international operations. Company profitability can also influence transfer pricing practices. More profitable firms may have incentives to adjust transfer prices to maximize profits in low-tax regions or minimize tax burden in high-tax regions. Tunneling incentives refer to managerial incentives to utilize transfer pricing practices as a tool to "dig tunnels" or move wealth from one corporate entity to another for personal or group gain. This may occur for example in a group of companies with separately regulated entities in different jurisdictions.

The research method used to study this phenomenon can involve analyzing historical company data to see the relationship between these variables. Methods such as panel data regression or correlation analysis may be used to measure the degree of relationship between these variables. Thus, research on the influence of exchange rates, profitability, and tunneling incentives on transfer pricing in

industrial sector companies has significant relevance in the context of economic globalization and challenges in international tax arrangements.

In a research journal written by Rina Tjandrakirana with the title *Journal of Accounting and Business* Vol 5, No 1, June 2020, Pages 26-39, the exchange rate has a significant negative effect on a company's decision to implement transfer pricing. This shows that a lower exchange rate will make companies decide to implement transfer pricing. Meanwhile, in the journal *Ekobis Dewantara* 2 February 2018 written by Bela Pratiwi, Faculty of Economics, Bachelorwiyata Tamansiswa University, the exchange rate variable has a value range of 0.00 to 4.58, so in this study the Exchange Rate has no effect. However, in research journals conducted by Sarifah et al. (2019) and Chan et al. (2004) shows test results that the exchange rate has a positive influence. This indicates that the agent (management) tends to use differences in currency exchange rates to straighten out their goals in using transfer pricing which can be seen in the financial statements in the exchange rate difference profit and loss account from operating assets and profit and loss before tax, where this can represent the level of trend. management in taking advantage of differences in currency exchange rates faced by the company in its use of transfer pricing.

in a research journal with the title *Journal of the Influence of Tax Management and Company Performance on Transfer Pricing Before and During the Covid-19 Pandemic*, the data in this research was taken using the documentation method. The profitability variable which is proxied by ROA partially has no influence on transfer pricing before and during the Covid-19 pandemic. Meanwhile, in a research journal written by Putri Arda Nuzul Ramadhany, Muhammad Nuryatno Amin, the results of this research show that profitability significantly and profitably influences transfer pricing. Businesses with high profitability are considered capable of implementing transfer pricing because they have abundant resources. Agency theory, which states that management is trusted with the capital it invests so that it can be processed and produce dividends, supports the findings of this research. However, in a research journal written by Michelle Philanthropy Mineri, research results show that profitability has a negative influence on transfer pricing. The limitation of this research is the small R² value which indicates that the independent variables chosen cannot explain their influence on the dependent variable, namely transfer pricing.

In the journal *Ekobis Dewantara* 2 February 2018 written by Bela Pratiwi, Faculty of Economics, Bachelorwiyata Tamansiswa University, the tunneling incentive variable has a value range of 0.00 to 1.00. The average value of tunneling incentive is 0.7143 and the standard deviation is 0.45835. This shows that tunneling incentives have no effect on transfer pricing. Meanwhile, in the research journal written by Thea Refgia with the title *The Effect of Taxes, Bonus Mechanisms, Company Size, Foreign Ownership, and Tunneling Incentives on Transfer Pricing* shows The results of testing the fifth hypothesis found that tunneling incentives have an effect on transfer pricing. However, in a research

journal written by Andika Dwi Hertanto, Amor Marundha, Idel Eprianto, Cris Kuntadi with the name *Economina Journal* Volume 2, Number 2, February 2023 e-ISSN: 2963-118, the results of this research explain that Tunneling Incentive partially has a negative effect but not significant to Transfer Pricing. This shows that increasing the value of the Tunneling Incentive will have an impact on reducing the implementation of Transfer Pricing because the incentives given to shareholders can reduce the level of adequacy of business funds so that there is no longer a need to implement Transfer Pricing.

Formulation of the problem

1. Does the Exchange Rate affect Transfer Pricing?
2. Does Profitability affect Transfer Pricing?
3. Does Tunneling Incentive affect Transfer Pricing?

LITERATURE REVIEW

1. Agency Theory

Agency theory focuses on two individuals, namely the principal and the agent. The principal delegates responsibility for decision making to the agent. Both principals and agents are assumed to be rational economic people who are motivated solely by personal interests, but they have difficulty distinguishing between preferences, beliefs and information. The rights and obligations of the principal and agent are explained in a mutually beneficial employment agreement. In management accounting research, agency theory is used to identify the combination of work contracts and information systems that will maximize the principal's benefit function, and behavioral constraints that arise from the agent's interests (Eko Raharjo, 2007:38).

According to Anthony et al. (2005:269) agency theory is a contractual relationship between the principal and agent, with the assumption that each individual is motivated by the satisfaction of his own interests, resulting in a conflict of interest between the principal and agent.

2. Transfer Pricing

The transfer pricing variable is seen based on whether or not there is sales data from related parties, by looking at receivables from related parties (Yuniasih and Rasmini, 2012). The purpose of the transfer transaction is to maximize profits. In research conducted by (Refgia, 2017), the transfer pricing calculation concept is obtained from receivables from related party transactions and divided by total receivables.

3. Exchange Rates

The exchange rate shows the number of currency units that can be purchased or exchanged for one unit of another currency. It is also a general agreement that foreign currency exchange rates are expressed in dollar terms (Sartono, 2018: 467-468). According to Marfuah and Azizah (2014), cash flows of multinational companies are denominated in several currencies where the value of each currency relative to the dollar will differ over time.

4. Profitability

According to Sartono (2014), profitability is a ratio that measures a company's ability to earn profits in relation to sales, total assets and own capital.

5. Tunneling Incentives

Tunneling is the transfer of resources out of the company for the benefit of controlling shareholders (Johnson et al., 2000). Based on research conducted by Hartati et al., (2015), tunneling incentive is a behavior of majority shareholders who transfer company assets and profits for their own benefit, but minority shareholders also bear the costs they charge.

6. Hypothesis Development

a. The relationship between Exchange rate and Transfer Pricing

This fluctuating exchange rate can influence transfer pricing practices in multinational companies (Marfuah & Azizah, 2014). With research conducted by Chan et al. (2004) shows that companies tend to reduce exchange rate risk by transferring funds to a strengthening currency exchange rate through transfer pricing (Chan et al., 2004). Based on the formulation above, the hypothesis for the influence of exchange rates on transfer pricing is formulated as follows:

H1: Exchange Rate has no effect on companies carrying out transfer pricing. "The research results show that the exchange rate has no effect on transfer pricing with a significance value of 0.2977, this figure is greater than 0.05 ($0.2977 > 0.05$)." This means that the first hypothesis is rejected.

b. The Relationship between Profitability and Transfer Pricing

Research conducted by Sari and Mubarok (2018) shows that profitability has a positive influence on company transfer pricing decisions. Researchers are of the opinion that when a company has higher profitability, the possibility of the company carrying out transfer pricing is higher. However, research conducted by Agustina (2019) shows that profitability has no effect on transfer pricing. hypothesis obtained, namely:

H2: The research results show that profitability has no effect on transfer pricing with a significance value of 0.1694, this figure is greater than 0.05 ($0.1694 < 0.05$). This means that the second hypothesis is rejected.

c. The Relationship of Tunneling Incentive to Transfer Pricing

Tunneling incentive is an activity carried out by the majority or controlling shareholder in the form of transferring company assets or resources with the aim of obtaining personal benefits. The link between tunneling incentives and transfer pricing can occur because transfer pricing can be manipulated to create gaps that allow tunneling. For example, a company may set buying and selling prices

between its subsidiaries in an unfair way, so that profits are shifted to subsidiaries located in countries with lower tax rates. This may result in increased profits for the parties involved in the scheme, but at the expense of the company as a whole or shareholders who are not involved in the practice.

Therefore, governments and regulators usually monitor transfer pricing practices closely and implement strict rules to prevent abuse and minimize the risk of tunneling. They may use a variety of tools, such as benchmarking rules, transfer pricing documentation, and tax audits, to ensure that the purchase and sale prices set are reasonable and not manipulated for tunneling purposes.

H3: Tunneling Incentive has an influence on transfer pricing. "The research results show that tunneling incentives have an effect on transfer pricing with a significance value of 0.0360, this figure is smaller than 0.05 (0.0360<0.05)." This means that the third hypothesis is accepted.

METODOLOGY

1. Definition and Measurement of Variables

a. Dependent Variable

The dependent variable in this research is Transfer Pricing. This variable uses a dummy variable measurement, namely companies that tend not to manipulate transfer pricing, especially sales and purchase transactions to related parties, get a value of "0", while companies that tend to manipulate transfer pricing, especially sales and purchase transactions to related parties, will get a value of "1." "

$$RPT \text{ Piutang} = \frac{\text{Piutang Pihak Berelasi} \times 100}{\text{Total piutang}}$$

b. Independent Variable

1) Exchange Rates

Different exchange rates will influence transfer pricing practices in multinational companies. The number of units of home country currency needed to pay for raw materials from abroad can change even though the supplier does not change prices.

$$ER = \frac{\text{Laba (Rugi) Selisih Kurs}}{\text{Laba (Rugi) Sebelum pajak}}$$

2) Profitability

The profitability ratio in this research is measured by Return on Assets (ROA).

$$ROA = \frac{\text{Net Income} \times 100}{\text{Total Assets}}$$

3) Tunneling Incentives

Tunneling can be done by selling company products to companies that have a relationship with the manager at a lower price compared to market prices, maintaining their position or job title even though they are no longer competent in running

their business or by selling company assets to companies that have a relationship with the manager. affiliated parties.

$$TNC = \frac{\text{Jumlah kepemilikan saham}}{\text{Jumlah saham beredar}}$$

2. Sampling Method

The population in this research is all companies in the Services Industry sector listed on the Indonesia Stock Exchange. Sampling in this study was carried out using a purposive sampling method, where the sample in this study was a population that met the sample criteria desired by the researcher in accordance with the considerations

Table 3.1 Research Sample Criteria

KRITERIA SAMPEL		
NO	KETERANGAN	JUMLAH
1	Perusahaan sub sektor Industri Servis yang tercatat di Bursa Efek Indonesia pada tahun 2019-2023	18
2	Perusahaan sampel yang tidak memiliki laba/rugi selisih kurs	(3)
3	Perusahaan sub sektor Industri Servis dalam keadaan menguji selama periode penelitian tahun 2018-2022	(1)
4	Perusahaan tidak memiliki kepemilikan saham diatas 25% sebagai pemegang saham pengendali oleh perusahaan asing	0
5	Perusahaan sub sektor Industri Servis yang tidak konsisten menerbitkan laporan keuangan per 31 Desember 2018-2022	(5)
6	Perusahaan dengan nilai ukur transfer pricing 0	(2)
Jumlah keseluruhan perusahaan yang memenuhi kriteria sampel		7
Jumlah data (n) = Jumlah sampel x 6 tahun		42

Table 3.2 Elimination of Research Samples

ELIMINASI KRITERIA		
NO	KETERANGAN	JUMLAH
1	Perusahaan sub sektor Industri Servis yang tercatat di Bursa Efek Indonesia pada tahun 2019-2023	18
2	Perusahaan sub sektor Industri Servis yang tidak menyediakan laporan keuangan dan laporan tahunan secara lengkap pada periode tahun 2018-2022	(3)
3	Perusahaan sub sektor Industri Servis yang tidak berpengaruh terhadap Exchange Rate	(1)
4	Perusahaan sub sektor Industri Servis yang tidak berpengaruh terhadap Profitabilitas	0
5	Perusahaan sub sektor Industri Servis yang tidak berpengaruh terhadap Tunneling Incentive	(5)
6	Perusahaan sub sektor Industri Servis yang tidak berpengaruh terhadap Transfer Pricing	(2)
Jumlah keseluruhan perusahaan yang memenuhi kriteria sampel		7
Jumlah data (n) = Jumlah sampel x 6 tahun		42

Operational variables present general variable concepts as well as other information regarding indicators, sizes and variable measurement scales. The following is a variable operationalization table:

Table 3.3 Variable Operationalization

Variabel	Konsep Variabel	Pengukuran	Skala
Exchange Rate	Exchange Rate merupakan harga mata uang terhadap mata uang lainnya. Sumber: Sadoyo Sukirno (2011:397)	Exchange Rate = $\frac{\text{Laba (Rugi) Selisih Kurs}}{\text{Laba (Rugi) Sebelum pajak}}$ Sumber: Martini (2004)	Rasio
Profitabilitas	Profitabilitas merupakan rasio yang mengukur kemampuan perusahaan memperoleh laba dalam hubungannya dengan penjualan, total aktiva maupun modal sendiri. Rasio profitabilitas dalam penelitian ini diukur oleh Return on Asset (ROA). Sumber: Sartono (2014).	ROA = $\frac{\text{Net Income} \times 100}{\text{Total Assets}}$ Sumber: Jusuf (2014)	Rasio
Tunneling Incentive	Tunneling incentive adalah suatu perilaku dari pemegang saham mayoritas yang mentransfer aset dan laba perusahaan demi keuntungan mereka sendiri, tetapi pemegang biaya dibebankan pada pemegang saham minoritas. Sumber: Hartati et al (2014)	TNC = $\frac{\text{jumlah kepemilikan saham}}{\text{Jumlah saham beredar}}$ Sumber: Pernyataan Standar Akuntansi Keuangan (PSAK) No. 15	Rasio
Transfer Pricing	Transfer pricing adalah suatu kebijakan perusahaan dalam menetapkan harga transfer suatu transaksi baik itu barang, jasa, harta tak berwujud, atau pun transaksi finansial yang dilakukan oleh perusahaan. Sumber: Setiawan (2014)	RPT Prutang = $\frac{\text{Prutang Pihak Berelasi} \times 100}{\text{Total Prutang}}$ Sumber: Refgita (2014)	Rasio

The data analysis technique used uses a panel data regression model which focuses on regression analysis with a combination of time series and cross section data which is also known as pooled time series.

3. Data Analysis Methods

a. Descriptive Statistical Analysis

Descriptive statistics provides information about the characteristics of variables which includes explanations about the average value (mean), standard deviation, minimum value and maximum value. "Descriptive statistics provide numerical measures that are very important for sample data, so that contextually they can be more easily understood by readers" (Ghozali, 2011: 19).

b. Panel Data Regression Estimation

1) CEM

According to Basuki and Prawoto (2017), the Common Effect Model is the simplest panel data model approach because it only combines time series and cross section data and estimates it using the Ordinary Least Square (OLS) approach.

2) FEM

According to Basuki and Prawoto (2017), this model assumes that differences between individuals can be accommodated from differences in intercepts, where each individual is an unknown parameter. To estimate panel data, the Fixed Effects model uses a dummy variable technique to capture intercept differences between companies. Differences in intercepts can occur due to several differences such as work culture, managerial and incentives. However, the slope is the same between companies. This estimation model is often also called the Least Squares Dummy Variable (LSDV) technique.

3) BRAKE

This model will estimate panel data where disturbance variables may be interconnected over time and between individuals. In the Random Effect model, differences in intercepts are accommodated by the error terms for each company. The advantage of using this random effect model is that it can eliminate heteroscedasticity. This model is also called the Error Component Model (ECM). The appropriate method to accommodate this random effect model is Generalized Least Square (GLS), with the assumption that the error component is homoscedastic and there are no symptoms of cross-sectional correlation.

According to Ghozali (2016), the decision to choose the type of model used in panel data analysis is based on three tests, namely the Chow test, Hausman test and Lagrange Multiplier test. The Chow test is used to decide whether to use the Common

Effect Model or the Fixed Effect Model. Hausman test to decide whether to use the Fixed Effect Model or Random Effect Model. Meanwhile, the Lagrange Multiplier test is used to decide whether to use the Random Effect Model or the Common Effect Model.

c. Panel Data Regression Model Techniques

According to Gujarati and Porter (2012:360), three tests can be used to select a model or estimation technique to test the regression equation to be estimated, namely the Chow test, Hausman test and Lagrange Multiplier test as follows:

1) Test Chouw

Ghazali and Ratmono (2013:269) chow test is a test carried out to choose a good approach between the fixed effect model (FEM) and the common effect model (CEM). The basis for decision making is as follows:

- a) If the probability for the cross section $F >$ a significant value of 0.05 then H_0 is accepted, so the most appropriate model to use is the Common Effect Model (CEM).
- b) If the probability for the cross section $F <$ a significant value of 0.05 then H_0 is rejected, so the most appropriate model to use is the Fixed Effect Model (FEM).

This test follows the F statistic distribution where if the F statistic obtained is greater than the F table value ($F_{stat} > F_{table}$) and the probability F value ($prob < \alpha$, where $\alpha = 0.05$) then H_0 is rejected, with the hypothesis:

H_0 : Common Effect Model (CEM) is better than Fixed Effect Model (FEM).

H_1 : Fixed Effect Model (FEM) is better than Common Effect Modal (CEM).

2) Hausman test

According to Ghazali and Ratmono (2013:289) the Hausman test aims to determine whether the model used is the Fixed Effect Model (FEM) or Random Effect Model (REM). From the results of this test, it can be seen whether the Fixed Effect Model is better than the Random Effect Model (REM).

The basis for decision making is as follows:

- a) If the probability value for a random cross section is > 0.05 , then H_0 is accepted, so the appropriate model to use is the Random Effect Model (REM).
- b) If the probability value for a random cross section is < 0.05 significant value then H_0 is rejected, so the most appropriate model to use is the Fixed Effect Model (FEM).

This test follows the chi-square distribution in degrees of freedom ($k=3$) with the hypothesis:

H0: Random Effect Model (REM) is better than Fixed Effect Model (FEM).

H1: Fixed Effect Model (FEM) is better than Random Effect Model (REM).

If the chi-square value obtained is greater than the table chi-square value ($\text{Chi-sq.stat} > \text{Chi-sq.tabel}$) and probability ($\text{prob} < \alpha$, where $\alpha = 0.05$), then H0 is rejected and it can be concluded that the Fixed Effect Model (FEM) is better, conversely if H0 is accepted it can be concluded that the Random Effect Model (REM) is better.

3) Lagrange Multiplier Test

According to Gujarati and Porter (2012:481) the Lagrange multiplier test is a test used to choose the best approach between the Common Effect Model (CEM) and Random Effect Model (REM) in estimating panel data. The Random Effect Model (REM) was developed by Breusch-pagan which was used to test significance based on the residual values from the OLS method. The basis for decision making is as follows:

- 1) If the Breusch-Pagan cross section value is > 0.05 , then H0 is accepted, so the most appropriate model to use is the Common Effect Model (CEM).
- 2) If the Breusch-Pagan cross section value is < 0.05 significant value then H0 is rejected, so the most appropriate model to use is the Random Effect Model (REM).

The hypothesis used is:

H0: Common Effect Model (CEM)

H1: Random Effect Model (REM)

d. Classical Assumption Test

According to Basuki (2016:297), the classical assumption tests used in linear regression with the Ordinary Least Squared (OLS) approach include linearity, autocorrelation, heteroscedasticity, multicollinearity and normality tests. However, in panel data regression not all tests need to be carried out.

- 1) Because the model is assumed to be linear, linearity tests are almost not carried out on linear regression models.
- 2) In the BLUE (Best Linear Unbias Estimator) requirements, the normality test is not included, and some opinions also do not require this requirement to be something that must be fulfilled.
- 3) Basically, autocorrelation tests on data that are not time series (cross section or panel) will be in vain, because autocorrelation will only occur in time series data.
- 4) When a linear regression model uses more than one independent variable, it is necessary to carry out a multicollinearity test. Because if there is only one independent variable, multicollinearity cannot occur.

- 5) The condition that data contains heteroscedasticity usually occurs in cross section data, where panel data is closer to the characteristics of cross section data than time series.

From the explanation above, it can be concluded that in the classical assumption test, only multicollinearity and heteroscedasticity are used.

The following is an explanation of the Multicollinearity and Heteroscedasticity Test according to Basuki (2016:108):

- 1) Multicollinearity Test

Test to see whether or not there is a high correlation between the independent variables in a multiple linear regression model. If there is a high correlation between the independent variables, then the relationship between the independent variables and the dependent variable will be disturbed. The statistical tool used in this research to test whether multicollinearity exists is to use Auxiliary Regression, by creating 3 regression models with different dependent variables, sequentially. Research data is declared free from multicollinearity if the R-square value of model 1 is greater than the other R-square values. (Winarno, 2011:5.3).

- 2) Heteroscedasticity Test

Test to see whether there is an inequality of variance from the residuals of one observation to another. A regression model that meets the requirements is one in which the residual variance from one observation to another is constant or is called homoscedasticity.

Hypothesis:

H0: There are no symptoms of heteroscedasticity in the regression model

H1: Heteroscedasticity symptoms occur in the regression model

The decision taken is that if the significant value is greater than 0.05 (alpha), then H0 is accepted. Conversely, if the significant value is smaller than 0.05 (alpha), then H0 is rejected.

- e. Hypothesis Testing

Hypothesis testing consists of a partial test (t test), statistical test (F test), and coefficient of determination test (R²). Here is the explanation:

- 1) Partial Test (t test)

According to Ghozali (2016:97) The t test can be used to determine the effect of the independent variable on the dependent variable individually (partially). The t test is used with a significance level of 0.05 and compares the calculated t

value with the t table value. According to (Ghozali and Imam, 2016:97) the basis for decision making is as follows:

- a) If the probability value is < 0.05 and the calculated t value is $> t$ table, then H_0 is rejected. This means that it can be concluded that the independent variables individually (partially) influence the dependent variable.
- b) If the probability value is > 0.05 and the calculated t value is $< t$ table, then H_0 is accepted. This means that the independent variable individually (partially) does not affect the dependent variable.

2) Statistical Test (F test)

The F test is used to test whether the regression model used can be used to predict the influence of independent variables on the dependent variable together. Hypothesis testing uses the F distribution with a significance level of $\alpha = 5\%$, so the testing criteria using the F test are

- a) If the probability value is > 0.05 then H_0 is accepted and H_a is rejected, and this means that together all the independent variables do not have a simultaneous and significant effect on the dependent variable.
- b) If the probability value is < 0.05 then H_0 is rejected and H_a is accepted, meaning that together the independent variables have a simultaneous and significant effect on the dependent variable.

3) Determination Coefficient Test (R^2)

According to Ghozali (2016:95) the coefficient of determination test is used to measure how far the model's ability is to explain variations in the dependent variable. The coefficient of determination value is between zero and one ($0 \leq R^2 \leq 1$). A small R^2 value means that the ability of the independent variables to explain dependent variations is very limited. A value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable. The fundamental weakness of using the coefficient of determination is that it biases the number of independent variables included in the model. For every additional independent variable, the R^2 value will definitely increase no matter whether this variable has a significant effect on the dependent variable (Ghozali and Imam, 2016: 95).

f. Panel Data Regression Analysis

According to Basuki (2016:276) panel data regression is a regression technique that combines time series data with cross section data. Meanwhile, according to Ghazali and Ratmono (2013: 232), by analyzing cross-sectional data in several periods, panel data is appropriate to use in dynamic change research.

RESEARCH RESULTS AND DISCUSSION

1. Descriptive Statistical Analysis

Table 4.1 Descriptive Statistical Analysis

	RPT	KURS	ROA	TNC
Mean	1382.056	232.1111	1226.083	5558.278
Median	1015.000	57.00000	801.5000	5147.000
Maximum	5198.000	10982.00	4631.000	9935.000
Minimum	14.00000	-6609.000	6.000000	2847.000
Std. Dev.	1346.433	2470.229	1251.136	1833.302
Skewness	1.147345	1.631530	1.048102	0.673295
Kurtosis	3.698578	12.69597	3.011645	2.745740
Jarque-Bera Probability	8.630419 0.013364	156.9890 0.000000	6.591312 0.037044	2.816930 0.244518
Sum	49754.00	8356.000	44139.00	200098.0
Sum Sq. Dev.	63450826	2.14E+08	54786987	1.18E+08
Observations	36	36	36	36

Source: Process data from E-views 12, 2024

Based on the data from the table above, it shows that the number of observation samples from this research is 36 data. Data comes from 6 sample companies with an observation period of 6 years from 2017-2022.

- Variable Y (Transfer Pricing) has a minimum value of 14,00000 and a maximum value of 5198,000. The average value of variable Y (Transfer Pricing) is 1382.056 with a standard deviation of 1346.433.
- Variable X1 (Exchange Rate) has a minimum value of -6609.000 and a maximum value of 10982.00. The average value of the variable X1 (Exchange Rate) during the observation period was 232.1111 with a standard deviation of 2470.229.
- Variable X2 (Profitability) has a minimum value of 6.000000 and a maximum value of 4631,000. The average value of the variable X2 (Profitability) during the observation period was 232.1111 with a standard deviation of 1251.136.
- Variable X3 (Tunneling Incentive) has a minimum value of 2847,000 and a maximum value of 9935,000. The average value of the variable X2 (Tunneling Incentive) during the observation period was 5558.278 with a standard deviation of 1833.302.

2. Panel Data Regression Elimination

- CEM Test

Table 4.2 CEM Test

Dependent Variable: RPT
 Method: Panel Least Squares
 Date: 05/19/24 Time: 15:50
 Sample: 2017 2022
 Periods included: 6
 Cross-sections included: 6
 Total panel (balanced) observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.080921	0.077248	1.047557	0.3027
KURS	-0.032072	0.101788	-0.315091	0.7547
ROA	0.026534	0.201018	0.131999	0.8958
TNC	0.098547	0.132196	0.745464	0.4614
R-squared	0.019414	Mean dependent var		0.138206
Adjusted R-squared	-0.072516	S.D. dependent var		0.134643
S.E. of regression	0.139440	Akaike info criterion		-0.997929
Sum squared resid	0.622190	Schwarz criterion		-0.821983
Log likelihood	21.96273	Hannan-Quinn criter.		-0.936519
F-statistic	0.211180	Durbin-Watson stat		0.611582
Prob(F-statistic)	0.887910			

b. FEM Test

Table 4.3 FEM Test

Dependent Variable: RPT
 Method: Panel Least Squares
 Date: 05/19/24 Time: 15:51
 Sample: 2017 2022
 Periods included: 6
 Cross-sections included: 6
 Total panel (balanced) observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.150120	0.124651	1.204327	0.2389
KURS	-0.049289	0.070340	-0.700721	0.4895
ROA	0.198085	0.180149	1.099581	0.2812
TNC	-0.063073	0.210411	-0.299760	0.0194

Effects Specification

Cross-section fixed (dummy variables)			
R-squared	0.620571	Mean dependent var	0.138206
Adjusted R-squared	0.508147	S.D. dependent var	0.134643
S.E. of regression	0.094428	Akaike info criterion	-1.669633
Sum squared resid	0.240751	Schwarz criterion	-1.273754
Log likelihood	39.05340	Hannan-Quinn criter.	-1.531461
F-statistic	5.519935	Durbin-Watson stat	1.469891
Prob(F-statistic)	0.000349		

c. REM Test

Table 4.4 REM Test

Dependent Variable: RPT
 Method: Panel EGLS (Cross-section random effects)
 Date: 05/19/24 Time: 15:52
 Sample: 2017 2022
 Periods included: 6
 Cross-sections included: 6
 Total panel (balanced) observations: 36
 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.106832	0.090418	1.181538	0.2461
KURS	-0.046488	0.069872	-0.665340	0.5106
ROA	0.159432	0.162526	0.980959	0.3340
TNC	0.023218	0.145681	0.159373	0.8744

Effects Specification

	S.D.	Rho
Cross-section random	0.072803	0.3728
Idiosyncratic random	0.094428	0.6272

Weighted Statistics

R-squared	0.032066	Mean dependent var	0.064675
Adjusted R-squared	-0.058678	S.D. dependent var	0.098545
S.E. of regression	0.101395	Sum squared resid	0.328993
F-statistic	0.353370	Durbin-Watson stat	1.096680
Prob(F-statistic)	0.786987		

Unweighted Statistics

R-squared	-0.001156	Mean dependent var	0.138206
Sum squared resid	0.635242	Durbin-Watson stat	0.567973

Source: Process data from E-views 12, 2024

3. Selection of Panel Data Regression Model Techniques

a. Test Chouw

Table 4.5 Test Chouw

Redundant Fixed Effects Tests
 Equation: Untitled
 Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	8.555600	(5,27)	0.0001
Cross-section Chi-square	34.181350	5	0.0000

Source: Process data from E-views 12, 2024

The Prob value is $0.0000 < 0.05$, then the FEM model is selected.

b. Hausman test

Table 4.6 Hausman test

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.896240	3	0.0482

Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
KURS	-0.049289	-0.046488	0.000066	0.7296
ROA	0.198085	0.159432	0.006039	0.6189
TNC	-0.063073	0.023218	0.023050	0.5688

Source: Process data from E-views 12, 2024

The Prob value is $0.0482 < 0.05$, so the FEM model was selected.

Based on the results of the Chow test and Hausman test, the best model in this research is FEM. Therefore, there is no need to carry out the Ghazali and Ratmono (2013) LM test.

4. Classical Assumption Test

a. Multicollinearity Test

	KURS	ROA	TNC
KURS	1	0.32323796...	0.18874039...
ROA	0.32323796...	1	0.18997812...
TNC	0.18874039...	0.18997812...	1

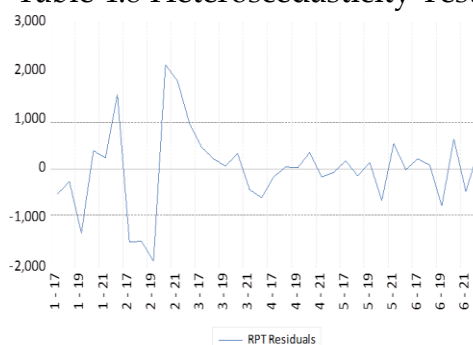
Table 4.7 Multicollinearity Test

Source: Process data from E-views 12, 2024

The correlation coefficient X1 and X2 is $0.3232... < 0.85$, X1 and X2 So it can be concluded that it is free from multicollinearity or passes the multicollinearity test (Napitupulu et al., 2021:141)

b. Heteroscedasticity Test

Table 4.8 Heteroscedasticity Test



Source: Process data from E-views 12, 2024

Through the residual graph above, heteroscedasticity is tested using the Glejser test, showing that the graph passes the limits of 500 and -500 or a significant value greater than 0.05. Therefore, H0 is accepted because there are no symptoms of heteroscedasticity or it passes the heteroscedasticity test.

5. Hypothesis Testing

a. t test

Table 4.9 t test

Dependent Variable: RPT
 Method: Panel Least Squares
 Date: 05/19/24 Time: 15:51
 Sample: 2017 2022
 Periods included: 6
 Cross-sections included: 6
 Total panel (balanced) observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.150120	0.124651	1.204327	0.2389
KURS	-0.049289	0.700721	-0.700721	0.4895
ROA	0.198085	0.180149	1.099561	0.2812
TNC	-0.063073	0.210411	-0.299760	0.0194

Source: Process data from E-views 12, 2024

The influence of the independent variable on the dependent variable partially is as follows:

- 1) The results of the t test on variable X1 obtained a calculated t value of $-0.700721 < 2.021075$ and a sig. $0.4895 > 0.05$, then H_0 is accepted, meaning that variable X1 has no effect on Y.
- 2) The results of the t test on variable X2 obtained a calculated t value of $1.099561 < 2.021075$ and a sig. $0.2812 > 0.05$, then H_0 is accepted, meaning that variable X2 has no effect on Y.
- 3) The results of the t test on variable X3 obtained a calculated t value of $-0.299760 < 2.021075$ and a sig. $0.0194 < 0.05$, then H_0 is rejected, meaning that variable X3 has an effect on Y.

b. F test

Table 4.10 F test

R-squared	0.620571
Adjusted R-squared	0.508147
S.E. of regression	0.094428
Sum squared resid	0.240751
Log likelihood	39.05340
F-statistic	5.519935
Prob(F-statistic)	0.000349

Source: Process data from E-views 12, 2024

The calculated F value is $5.519935 > F$ table, namely 2.851741 and the value is sign. $0.00349 < 0.05$, then H_0 is rejected and H_a is accepted, meaning that variables X1, X2, and X3 have an effect on variable Y.

c. Coefficient of Determination Test (R2)

Table 4.11 Coefficient of Determination Test (R2)

R-squared	0.620571
Adjusted R-squared	0.508147
S.E. of regression	0.094428
Sum squared resid	0.240751
Log likelihood	39.05340
F-statistic	5.519935
Prob(F-statistic)	0.000349

Source: Process data from E-views 12, 2024

The adjusted R-squared value is 0.508147 or 50.8147% . The coefficient of determination value shows that the independent variables consisting of X1, into this research.

6. Panel Data Regression Equation Analysis

$$\text{RPT} = 0.1501 - 0.0493 \cdot \text{KURS} + 0.1981 \cdot \text{ROA} - 0.0631 \cdot \text{TNC}$$

Source: Process data from E-views 12, 2024

From the regression analysis model above, it can be explained as follows:

- a. The Y constant resulting from data processing is 0.1501, which will increase by 15.01%.
- b. The regression coefficient for variable X1 is -0.0493. This means that if the exchange rate variable increases by 1% assuming the other variables remain constant, this will be followed by a decrease in the transfer pricing variable by 4.93%.
- c. The regression coefficient for the variable X2 is 0.1981. This means that if the profitability variable increases by 1% with the assumption that the other variables are constant, this will be followed by an increase in the transfer pricing variable of 19.81%.
- d. The regression coefficient for variable X3 is -0.0631. This means that if the tunneling incentive variable increases by 1% assuming the other variables are constant, this will be followed by a decrease in the transfer pricing variable by 6.31%.

DISCUSSION

1. The results of the t test on X1 (Exchange Rate) obtained a calculated t value of $-0.700721 < 2.021075$ and a sig value. $0.4895 > 0.05$, then H_0 is accepted, meaning that variable X1 (Exchange Rate) has no effect on Y (Transfer Pricing). This is in line with research conducted by Chan et al. (2004) showing that companies tend to reduce exchange rate risk through transferring funds to currency exchange rates that are strengthening through transfer pricing.
2. The results of the t test on variable X2 (Profitability) obtained a calculated t value of $1.099561 < 2.021075$ and a sig value. $0.2812 > 0.05$, then H_0 is accepted, meaning that variable X2 has no effect on Y (Transfer Pricing). This is in line with research conducted by Agustina (2019) showing that profitability has no effect on transfer pricing. And this research is not in line with research conducted by Sari and Mubarok (2018) which states that profitability has a positive influence on company transfer pricing decisions. Researchers are of the opinion that when a company has higher profitability, the possibility of the company carrying out transfer pricing is higher.
3. The results of the t test on variable X3 (Tunneling Incentive) obtained a calculated t value of $-0.299760 < 2.021075$ and a sig. $0.0194 < 0.05$, then H_0 is rejected, meaning that variable X3 (Tunneling Incentive) has an effect on Y

(Transfer Pricing). This research can be carried out using an empirical approach and data analysis to identify the relationship between unfair transfer pricing practices and incentives for tunneling. This is in line with research conducted by Bella Pratiwi (2018) and Refgia (2017) which states that tunneling incentives influence transfer pricing carried out by companies by increasing the buying price and reducing the selling price between companies in the same group and transferring profits. obtained from groups domiciled in countries that apply low tax rates.

CONCLUSIONS AND RECOMMENDATIONS

1. The Exchange Rate has no effect on Transfer Pricing in the Service industry sector listed on the Indonesia Stock Exchange for 2018-2022.
2. Profitability has no effect on Transfer Pricing in the Service industry sector listed on the Indonesia Stock Exchange for 2018-2022.
3. Tunneling Incentive has a negative effect on Transfer Pricing in the Service industry sector listed on the Indonesia Stock Exchange in 2018-2022.

Suggestions for future researchers are to expand the sample to cover various industrial sub-sectors to get more representative results. In addition, future researchers can analyze data over longer and longer periods to help identify trends and changes in the influence of these variables on transfer pricing.

ADVANCED RESEARCH

This research may have limitations such as a restricted dataset and sample size that limits the generalizability of its findings, potential inaccuracies in the measurement of key variables, reliance on specific model assumptions that may not fully capture real-world complexities, theoretical constraints that might overlook other relevant factors, the exclusion of external factors like international tax policies or economic conditions, and possible researcher bias in the interpretation of data and result

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