

**TAX PLANNING: ANALYSIS OF ITS EFFECT ON INCOME SMOOTHING IN  
CONSUMER CYCLICALS COMPANIES 2017-2022 PERIOD**

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***ABSTRACT***

*One of the factors that influence companies to carry out income smoothing measures is tax planning. The purpose of this study is to determine the effect of tax planning on income smoothing both before and during the Covid-19 pandemic. The data used in this research is secondary data. The population in this study are Consumer Cyclical sector companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 period. The data is taken from the company's annual report. The sample in this study was 162 consisting of 27 companies for the 2017-2022 period after being selected using the stratified sampling method. This study uses logistic regression analysis techniques to prove the hypothesis assisted by SPSS 23 software. The results show that tax planning has an effect on income smoothing both before and during the Covid-19 pandemic. This research is expected to contribute to companies in predicting opportunities for income smoothing practices in financial statements, to help investors to be more careful in choosing companies, and to serve as a reference for future research using populations and other variables.*

**Keywords** : *Covid-19 Pandemic; Income smoothing; Tax Planning*

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## I. INTRODUCTION

As a result of the pandemic and Large-Scale Social Restrictions (PSBB), Indonesia's economic instability has resulted in cessation of commercial activities such as reduced wages and termination of employment (Ngadi et al., 2020). Consumer cyclicals sector companies are businesses that produce and sell goods and services that are heavily influenced by economic conditions. To account for its performance, companies must always report their profits in the form of financial reports. One method of using earnings information is the practice of income smoothing.

The process of income smoothing measures is carried out to maintain the company's good performance. Income smoothing is a method that seeks to reduce the uncertainty of earnings from year to year by transferring profits from high-income years to low-income years (Belkoui, 2007). The existence of income smoothing (income smoothing) is influenced by several factors, one of which is tax planning. With tax planning allows companies to reduce the tax burden (taxable income). Companies are involved in tax planning with the aim of lowering the tax burden to be paid and maximizing profit after tax which impacts on the value of the company. Profit is the basis for

determining the tax for a company. Therefore, with profits that do not fluctuate and are stable, it will minimize the company's tax burden.

The concept of tax planning and income smoothing can be explained through a type 1 agency theory approach, which is based on the different interests of management (agent) and owner (principal). Owners want companies to pay taxes on time, while management focuses on reducing the tax burden. In addition, shareholders want stable or growing income and sufficient return on shares, but management wants to maximize the outlay or contract premium earned.

This research raises the same topic to adjust accounting and taxation as well as the shortcomings of previous research by focusing on before and during the Covid-19 pandemic. Previous research has not examined tax planning behavior and income smoothing practices that are affected by the economic conditions of a country experiencing difficulties due to a pandemic or national disaster. The research study focuses on consumer cyclicals sector companies as a research sample, this is due to the fact that companies in this sector are companies that are influenced by economic conditions and business cycles. This study uses 2 variables, namely tax planning and income smoothing. The hypothesis

used in this study is that tax planning has a tendency towards income smoothing.

### **Agency Theory**

The agency theory used for this study is type 1, which occurs as a result of information asymmetry and diversity in risk-sharing attitudes between principals and agents (Jensen & Meckling, 1976). The agency conflict between owners and managers in the company is due to the division of ownership control that can be found in several large companies (Berle & Means, 1932).

In type 1 agency theory, the principal is a stakeholder or owner who has facilities and financing as the company's operational needs. The agent is responsible for managing the business on behalf of the principal. Principals are encouraged to enter into contracts to increase their wealth through the payment of dividends or the size of the share price. Meanwhile, agents are motivated to increase their welfare by increasing compensation.

### **Tax Planning**

According to Febrian et al. (2018), tax planning is an effort to reduce tax payments while remaining within the tax law, so that tax planning is a legal or legal technique if it is still within the rules of the tax law. According to Pohan (2014), tax planning is a stage in reducing the company's tax burden and increasing profits as mentioned above, in addition to minimizing the tax

burden and increasing profits. When a company can do good tax planning, it will increase revenue by reducing tax payments.

### **Income Smoothing**

According to Belkaoui (2001), income smoothing is a deliberate attempt to minimize fluctuations in the company's profit level. In this concept, smoothing is part of the business of company managers in order to minimize changes in profits that are not normal to the level permitted by accounting rules. Income smoothing is a strategy carried out by company management in reducing disclosed profit fluctuations and changing accounting variables or conducting real transactions within the company so that its financial performance is stable and makes it look profitable.

## **II. RESEARCH METHOD**

This research is a quantitative study of the effect of tax planning on income smoothing. The data is made in the form of numbers, which are then processed and analyzed to retrieve the results of the scientific knowledge hidden behind the numbers. This study uses secondary data such as annual audited financial reports of consumer cyclicals sector companies listed on the Indonesian stock exchange for the 2017-2022 period. Researchers collected secondary data in the form of audited annual financial reports from companies in the consumer cyclicals sector for the 2020-2021 period

through the IDX's official website, namely [www.idx.co.id](http://www.idx.co.id).

The population used in this research is 147 companies in the consumer cyclicals sector for the 2017-2022 period. The research sample consisted of companies from the consumer cyclicals sector that were listed on the Indonesia Stock Exchange for the 2017-2022 period. The sample was prepared based on the sampling criteria, namely 162 samples from 27 companies in the consumer cyclicals sector.

### **Dependent Variables**

#### **Tax Planning**

According to Pohan (2014), tax planning is a stage in reducing the company's tax burden and increasing profits as mentioned above, in addition to minimizing the tax burden and increasing profits. The tax retention rate calculation formula is used in this study for tax planning variables. The following is the formula used by Astutik and Mildawati (2016) to divide the tax burden by the pre-tax profit used to calculate the tax retention rate:

$$TRR = \frac{\text{Net Income}_t}{\text{Pretax Income}}$$

Information:

TRR = Tax Retention Rate (tax retention rate) company I in year t.

Net Income = net profit of company i in year t.

Pretax Income = Profit before tax of company i in year t.

### **Independent Variables**

#### **Income Smoothing**

Income smoothing according to Koch (1981) is a mechanism applied by management with the aim of eliminating fluctuations in reported earnings to adjust them both artificially and in real terms with the planned targets. The following is the Eckel index or income smoothing index formula used to calculate the dependent variable or income smoothing:

$$\text{income smoothing index} = \frac{CV\Delta I}{CV\Delta S}$$

Information:

$V\Delta I$  = Coefficient of variation for income change in one period

$CV\Delta S$  = Variable coefficient for change in income in one period

$CV\Delta I$  and  $CV\Delta S$  can be calculated as follows:

$$CV\Delta I = \frac{\sqrt{\sum(\Delta I - \bar{\Delta I})^2}}{n-1} : \bar{\Delta I}$$

$$CV\Delta S = \frac{\sqrt{\sum(\Delta S - \bar{\Delta S})^2}}{n-1} : \bar{\Delta S}$$

Information:

$CV\Delta I$  = Coefficient variation of changes in income

$CV\Delta S$  = Coefficient variation of changes in sales

$\Delta I$  = Change in income or net profit after tax between year n to year n-1

$\Delta S$  = Change in sales between year n to year n-1

$\Delta \bar{I}$  = Change in average income or net profit after tax year n to year n-1

$\Delta \bar{S}$  = Change in average sales year n to year n-1

n = The number of periods used for research

### Data Analysis Techniques

The analysis technique in this study is a quantitative analysis method. Quantitative analysis analyzes hypotheses with numbers as well as statistics. SPSS software is used as a quantitative data analysis. In this study, logistic regression analysis was used with a significance level of = 5% to test the hypothesis.

## III. RESULTS AND DISCUSSION

### Descriptive Test Analysis

**Table 1. Descriptive Test Analysis Results**

	N	Descriptive Statistics			
		Minimum	Maximum	Mean	Std. Deviation
Tax Planning	162	-.478	1.784	0.75477	0.236731
Income Smoothing	162	0	1	0.67	0.473
Valid N (listwise)	162				

Source: data processed by author, 2023

Based on the results in the descriptive analysis table above, N is the number of samples in this study, amounting to 162. The average value of the income smoothing variable indicates that there are several samples that apply income smoothing and there are also those that do not indicate income smoothing. This is because the number 0.67 is in the middle of the minimum and maximum numbers. Meanwhile, the tax planning variable shows an average value of 0.754

which means that some companies have significant tax planning potential because it is close to the maximum value.

Descriptive test results for the independent variable tax planning which is calculated through the tax retention rate has a minimum value of -0.478 out of 162 samples, the lowest tax planning value is owned by PT. Adiperkasa Active Map Tbk. during 2020. Meanwhile, the highest tax planning score was 1,784 out of 162 samples, namely PT. Mitra Pinasthika Mustika Tbk. during 2017 and 2022. The income smoothing variable has a minimum value of 0 which means the company does not apply income smoothing, while the maximum value is 1 which indicates that the company applies income smoothing.

### Logistic Regression Test

**Table 2. Hosmer and Lemeshow Test**

Step	Chi-square	Df	Sig.
1	14.565	8	0.068

Source: data processed by author, 2023

The Hosmer and Lemeshow Test is a Goodness of fit test used to show the accuracy of the model used. There is agreement with the data if there is no significant difference between the model and research data or if the significance is higher than 0.05. On the other hand, if the Hosmer and Lemeshow Test scores are lower than 0.05, there is a significant difference between the model and the research data. The table above shows the results of the Hosmer and Lemeshow tests which

have a chi-square value of 14.565 and a significance value of 0.068. These results can be predicted from the observational data because the significance value is higher than 0.05. Thus, the model used is adequate or in accordance with observational data and this linear logistic regression model is suitable for further analysis purposes.

**Assessing the Overall Model (Overall Model Fit)**

**Table 3. Overall Model Test Results (Block Number 0)**

Iteration	-2 Log likelihood	Coefficients	
		Constant	
Step 0	1	206.256	.667
	2	206.231	.693
	3	206.231	.693

Source: data processed by author, 2023

Probability L is the probability of a model used to calculate input data (Ghozali, 2018: 332). The test is carried out by comparing the initial value -2LL with -2LL in the next stage. If the nominal -2LL block number = 0 is higher than the nominal -2LL block number = 1. (-2LogL) decreasing can show that the regression model is said to be good (Ghozali, 2018: 333). Table 3 shows that the Log Likelihood value of -2 at step 0 (Block number 0), namely before the independent variable is included, is 206,256 with a coefficient value of 0,667. Then the -2 Log Likelihood value is shown in the following table.

**Table 4. Overall Model Test Results (Block Number 1)**

Iteration	-2 Log likelihood	Coefficients		
		Constant	X	
Step 1	1	201.170	-0.402	1.415
	2	200.946	-0.583	1.719
	3	200.946	-0.594	1.735
	4	200.946	-0.594	1.735

Source: data processed by author, 2023

In the table above it is known that after entering the independent variable, it produces a test which has a final log -2 probability value of 200.946 in table 4. Thus, the -2 Log probability value decreases by 5,31 which indicates that there is a possibility of a model that fits the data. This decrease means that the addition of the independent variables can improve the fit of the model so that the hypothesized model fits the data. When the value falls between the initial log probability -2 and the final log probability -2, it can be considered that the model fits the data.

**Determination Coefficient Test**

**Table 5. Determination Coefficient Test Results**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	200.946 <sup>a</sup>	0.032	0.045

Source: data processed by author, 2023

The coefficient of determination (R<sup>2</sup>) quantifies the ability of an independent variable to explain its dependent variable. by squaring the correlation coefficient can produce the coefficient of determination. The coefficient of determination (R<sup>2</sup>) assesses how well the model is made to explain the independent variables. The logistic regression coefficient of determination is obtained from Nagelkerke R Square due to the value of Nagelkerke R Square. The Nagelkerke R Square coefficient is a modification of the Cox and Snell coefficient which ensures a different value from 0 (zero) to 1 (one). Nagelkerke's R-squared value is

0.045 based on table 5. This shows that the dependent variable explains 5% of the independent variables, while the remaining 95% is explained by additional factors that are not explained in this study.

### Classification Matrix Test

**Table 6. Classification Matrix Test**

Observed	Predicted	Income Smoothing Percentage		
		Smoothing Practice	Carrying Out Practice	Correct
Step 1 Income Smoothing	Not Practicing Income Smoothing	3	51	5.6
	Carrying Out Income Smoothing Practice	6	102	94.4
Overall Percentage				64.8

Source: data processed by author, 2023

By calculating how true and false values are for the dependent variable, the classification matrix can be used to estimate the accuracy of the model. The classification matrix describes the ability of the regression model to assess the possibility of fraud. Table 6 shows the capacity of the logistic regression model to predict fraud at the model prediction level of 64.8%. The percentage accuracy of the classification table explains that there is no significant difference between the predicted data and the observational data, thus proving that the logistic regression model is good enough.

### Hypothesis Test Results

**Table 7. Logistics Hypothesis Test**

	B	S.E	Wald	df	Sig.	Exp (B)
Step X	1.735	.808	4.609	1	0.03	5.667
1 Constant	-0.594	.616	0.928	1	0.335	.552

Source: data processed by author, 2023

The regression equation can be formed from the table above as follows:

$$IE = a + b1TRR + \epsilon$$

$$IE = -0.594 + 1.735 + \epsilon$$

The following is how to interpret logistic regression using a probability approach (Santoso, 2014):

- Negative values have a probability of 0.
- A positive value greater than 1 is considered to have a probability of 1.
- A positive value between 0 and 1 indicates that it can be adjusted according to the level of gain.

The regression equation above can be done with the following analysis:

- A constant value of -0,594 means that without tax planning, there will be no income smoothing in consumer cyclicals sector companies.
- The tax planning regression coefficient is 1,735 (positive value), which means that every company carries out tax planning, so there is a possibility of income smoothing practices in consumer cyclicals sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2017-2022.

Wald test (t) is used to test the hypothesis of the partial effect of the independent variable on the dependent variable. The hypothesis put forward is:

- a. The hypothesis is accepted if the Sig value  $< 0.05$ .
- b. The hypothesis is rejected if the Sig value  $> 0.05$ .

Table 7 explains that the tax planning variable has a significance value of 0.03. This result is less than alpha ( $0.03 < 0.05$ ). It can be seen that during 2020-2022, the tax planning variable partially has a tendency towards the income smoothing variable in consumer cyclicals sector companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 period.

The results of the hypothesis test prove that tax planning has a tendency towards income smoothing. The significance level of the tax planning variable is 0.03 which is lower than the significance threshold = 0.05, indicating that H1 is accepted. If the significance value is lower than = 0.05, it means that the tax planning variable has a tendency towards income smoothing. This is used as a determining factor to apply the amount of tax that must be paid to the state by reducing the existing fluctuations. Thus, managers seek to smooth profits in order to minimize the tax burden. Prior to the Covid-19 pandemic, management carried out profit monitoring activities to carry out tax planning so that the tax

burden paid by the company could be minimized. The existence of tax planning management can maximize company profits. With stable and non-fluctuating profits, the company can minimize the tax burden.

#### **IV. CONCLUSION**

The results of this study show that the tax planning variable has a tendency to detect the income smoothing practices of consumer cyclicals companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 period. This shows that companies use tax planning as a policy to reduce the company's tax burden and income smoothing so that company profits remain stable both before and during the Covid-19 pandemic. Then it is used as a determining factor in determining the amount of tax to be paid to the state in reducing existing fluctuations. Thus, management seeks to balance profits in order to reduce the tax burden. This research is expected to contribute to companies in predicting opportunities for income smoothing practices in financial statements, to help investors to be more careful in choosing companies, and for further research to add other variables and populations that have not been studied extensively and further researchers can add the most recent period such as after the Covid-19 pandemic (2022 and above) to compare the results of the research that has been carried out.

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