# TAX AVOIDANCE IN REVIEW BY INSTITUTIONAL OWNERSHIP, FIRM SIZE, AND LEVERAGE WITH PROFITABILITY AS A MODERATION VARIABLE (EMPIRICAL RESEARCH ON MANUFACTURING COMPANIES IN INDONESIA)

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#### **Abstract**

This research aims to determine the effect of institutional ownership, firm size, and leverage on tax avoidance with profitability as a moderating variable. The population in this research are manufacturing sector companies listed on the Indonesia Stock Exchange for the 2020-2022 period. The sampling method used was purposive sampling, so that 158 samples were taken according to the criteria. Data analysis method used is multiple regression analysis absolute difference method. The results of this research indicate that institutional ownership and leverage have an effect on tax avoidance, while firm size has no effect on tax avoidance. Then profitability can strengthen the influence of institutional ownership and leverage on tax avoidance, but profitability cannot moderate the effect of firm size on tax avoidance. The implication of this research is that it can be especially useful for the government so that the government can take preventive measures so that companies do not carry out tax avoidance.

Keywords: Institutional Ownership, Firm Size, Leverage, Profitability, Tax Avoidance

### 1. INTRODUCTION

The tax sector is the largest source of state revenue. According to Mustikasari, (2007), currently around 80% of APBN funds come from tax revenues. This is proof that tax revenues have become a reliable backbone for state revenues. Because the role of taxes is very large for the state, the government seeks to increase revenue from the tax sector. Efforts to optimize tax revenue are experiencing problems, one of which is the activity of tax avoidance or what is called tax avoidance (Swingly, C. and Sukartha, 2015) carried out by individual and corporate taxpayers.

In the last 50 years, the practice of tax avoidance has continued to increase significantly, and is carried out in countries that apply tax havens or apply low taxes (Moeljono, 2020). The state views that taxes are a company's obligation and is the main source of state revenue, but companies view taxes as a burden that reduces net profit. Theoretically, the purpose of establishing a company is profit maximization. This causes companies is tend to look for ways to reduce the amount of tax payments, both legally and illegally (Waluyo, et al. 2015).

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The impact arising from the practice of tax avoidance can be direct or indirect. The direct impact is the occurrence of stagnation (jamming) of economic growth and the rotation of the country's economic wheels. Because, state revenue and income from thetax sector has decreased significantly. While the indirect impact is reduced funds/subsidies from the government for the poor (Moeljono, 2020).

One of the companies suspected of practicing tax avoidance is PT. Coca Cola Indonesia (CCI), in 2014. The company allegedly committed tax avoidance, so that the tax burden paid was reduced by IDR 49.24 billion. The Directorate General of Taxes conducted an analysis, the result of which was that the company had committed tax avoidance, so that the tax burden that should have been remitted to the state was reduced. PT CCI did tax avoidance by minimizing the value of taxable income through the addition of expenses on advertising costs in 2002-2006 amounting to Rp 566.84 billion. Calculations by the Directorate General of Taxes of the company's total taxable income and the company's calculations show a difference of IDR 49.24 billion, which is PT CCI's income tax shortfall. (Mustami, 2014).

Another phenomenon of tax avoidance in Indonesia is PT RNI, a company affiliated with a Singaporean company. According to the Directorate General of Taxes (DGT), PT RNI has committed tax avoidance. PT RNI as a business entity has been registered as a limited liability company, but from a capital perspective it relies on affiliation debt, meaning that Singaporean owners provide loans to RNI in Indonesia in several areas such as Jakarta, Solo, Semarang and Surabaya, not investing but repaying debt. In PT RNI's 2014 financial report, it recorded a debt of IDR 20.4 billion. Meanwhile, the company's circulation was only Rp 2.178 billion. Not to mention that there was a retained loss in the same year's report of IDR 26.12 billion (Suryowati, 2016). From reports that companies are trying to reduce profits by increasing loans that later interest payments can reduce taxes (Sugianto, 2019).

The practice of tax avoidance is also carried out by Indonesian citizens, where the phenomenon of the Panama Papers scandal emerged, which involved hundreds of businessmen and politicians suspected of practicing tax avoidance. The panama document contains 11.5 million documents of companies around the world. The Mossack Fonseca company, a company domiciled in the country of Panama, provides "shell" company establishment services to deceive the tax authorities in the customer's country. Shell companies founded by Mossack Fonseca, since 1977 totaled 214,000 companies. With an estimated net worth of US\$7.6 trillion (Rp. 102,600 trillion) (Repbulika, 2016). The Mossack Fonseca company, in carrying out its operations so that its customers avoid paying state taxes, its customers collaborate by building a system with world financial institutions including Deutsche Bank, HSBC, Société Générale, Credit Suisse, UBS, and Commerzbank to store Customers' data (Ramadhan, 2016).

The practice of tax avoidance at the international level is also carried out by the Swedish giant IKEA. The world's largest furniture company is suspected of having committed tax avoidance of up to € 1,000,000,000 (Rp 14,900 trillion), from 2009 to 2014. The tax avoidance practice carried out by the IKEA company is by transferring

cash from all of its branches on the European continent to its subsidiaries. in the Netherlands, this move freed the company IKEA from paying taxes in Luxembourg. In 2014, PT IKEA's tax avoidance practices were carried out in Germany with a value of  $\in$  35,000,000 (Rp 523 billion), in France  $\in$  24,000,000 (Rp 359 billion), and in England amounting to  $\in$  11,600,000 (Rp 173 billion). Meanwhile, other European countries, such as Sweden, Spain and Belgium, lost tax revenue of between  $\in$  7,500,000 (Rp 112 billion) to  $\in$  10,000,000 (Rp 149 billion) (Pitoko, 2016).

The phenomenon of tax avoidance also occurred in December 2017 which was carried out by Gucci. The local newspaper La Stampa stated that the public prosecutor accused Gucci of tax avoidance because it was Gucci who declared product sales in Italy to be diverted to Switzerland, which incidentally is a country with more favorable taxes. When it should be, Gucci declared sales in Italy. On that, Gucci saved 1.3 euros, equivalent to US\$ 1.5 billion or Rp. 22.5 trillion in domestic taxes. This investigation is reportedly based on reports from former senior Gucci employees who have left the company (Suhendra, 2017).

One of the phenomenal and monumental cases is the practice of tax avoidance that is neatly arranged, organized and worldwide carried out by the banking institution HSBC Switzerland. Financial institutions in Switzerland really protect and keep customer data confidential. The financial institution is suspected of helping its customers not pay taxes, by covering a number of assets worth millions of dollars, in addition to handing over cash to customers and not being able to be traced by any authority, and also providing ways for customers to avoid tax. in the countries of its customers. The case was uncovered after several accounts became known to the public. The International Consortium of Investigative Journalists (ICIJ), which is a worldwide consortium of journalists conducting an investigation found that HSBC Switzerland kept more than US\$ 100,000,000,000 accounts from 106,000 customers from 203 countries. The findings also show that it is not only individuals or corporations that practice tax avoidance, but also government agencies, especially in the oil sector with a value of US\$ 12,600,000,000 (Getty, 2015).

In the manufacturing sector, there is one manufacturing company that has practiced tax avoidance, namely PT Bentoel Internasional Investama Tbk. The Tax Justice Network agency on Wednesday, May 8 2019 reported that a tobacco company owned by British American Tobacco (BAT) practices tax avoidance in Indonesia through PT Bentoel Internasional Investama Tbk, which causes the state to suffer losses of US\$14 million per year. Bentoel also made loans originating from Jersey through companies in the Netherlands to avoid interest payment tax deductions. Indonesia applies the tax deduction of 20%, but because there is an agreement with the Netherlands, the tax is 0%. From this strategy, Indonesia loses revenue for the state of US\$ 11 million per year. The reason is that from a debt of US\$ 164 million, Indonesia should be able to impose a tax of 20% or US\$ 33 million or US\$ 11 million per year. Even though Indonesia and the Netherlands later revised their agreement by allowing Indonesia to impose a tax of 5%, this regulation only took effect in October 2017, which means that Bentoel has completed the interest payment transaction on its debt. (Prima, 2019).

Another manufacturing sector company that is suspected of committing tax avoidance is PT Adaro Energi Tbk in 2019. International reports reveal that PT Adaro Tbk committed avoidance through tax its subsidiary, ServicesInternational, located in Singapore. Based on the Global Witness report entitled "Taxing Times for Adaro" on Thursday 4 July 2019, Adaro is reported to have diverted profits from the coal business mined in Indonesia to avoid taxes in Indonesia. The report also stated that during the 2009-2017 period, PT Adaro Energi Tbk through Coaltrade Services International paid USD 125 million or a less amount than it should have received in Indonesia. By transferring more assets through tax-free locations, Adaro has reduced Indonesia's tax bill and the money available to the Indonesian government for essential public services by almost USD 14 million annually (Prima, 2019).

According to the above phenomenon, the focus of this research is manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2022. Based on data from the Ministry of Industry of the Republic of Indonesia, it is found that the manufacturing industry was the largest contributor to Indonesia's state revenue in the tax sector, with an increase of 11.3%, equivalent to about IDR 103.07 trillion. This is followed by the trade sector with IDR 76.41 trillion and the mining sector with IDR 28.51 trillion. Another reason why the researchers chose the manufacturing sector as the focus of this study is that the manufacturing sector ranked first in terms of volume compared to other sectors in IDX. So there will be a lot more data available and more diverse if research is done in this field.

Factors that influence the practice of tax avoidance include institutional ownership, firm size, and leverage. In addition, there is also profitability as a factor affecting tax avoidance because companies can manage their personal assets with full authority so that companies can avoid these assets from being taxed (Fauziah & Kurnia, 2020).

Institutional ownership is suspected as a factor in tax avoidance practices. This is due to being able to intervene in management policies. However, on the contrary, institutional ownership is also able to become an internal supervisor of the running of the company's wheels from tax avoidance practices, by implementing good and correct corporate governance. Pohan (2009), institutional ownership is the percentage of shares owned by institutions and blockholder ownership (investors with a share ownership position of at least 5%). The existence of institutional ownership is expected to be able to encourage an increase in more optimal supervision of management performance. So that the higher the institutional ownership, the expected to be able to create better control. Research conducted by Zulianti et al. (2020), shows that institutional ownership has a positive effect on tax avoidance. In contrast, research conducted by Junaedi et al. (2021) stated that institutional ownership has a negative effect on tax avoidance. In contrast to research according to Oktaviyani and Munandar (2017) and supported by Anggraeni and Febrianti (2019) shows that institutional ownership has no effect on tax avoidance.

Another factor is firm size. Firm size is a scale on which a company can be classified according to the size of the company in various ways, one of which is the size of the assets it owns. Firm size will play a role in the practice of tax avoidance, because the larger the firm size as measured by Ln Assets, the greater the company's burden, one of these burdens is the company's tax burden. Large companies tend to have more room for good

tax planning and adopt effective accounting practices to reduce company ETR (Rodriguez and Arias, 2012). The research results of Puspita and Febrianti (2018), Haryanti (2021), and supported by Rahmayani et al. (2021) stated that firm size has a positive effect on tax avoidance. In contrast, research conducted by Puspita and Febrianti (2018), Honggoh and Marlinah (2019) and supported by Fauzan et al. (2019) stated that firm size has a negative effect on tax avoidance. In contrast to research according to Yohan and Pradipta (2019), Tebiono and Sukadana (2019) and supported by Mahdiana and Amin (2020) state that firm size has no effect on tax avoidance.

Kurniasih and Sari (2013: 58), leverage is an increase in the amount of debt which results in the emergence of additional cost items in the form of interest and a reduction in the income tax burden of corporate taxpayers. One of the company's strategies is to take advantage of debt debt policies to reduce the tax burden. Research conducted by Anggraeni and Febrianti (2019), Fauzan et al. (2019) and supported by Mahdiana and Amin (2020) argue that leverage has a positive effect on tax avoidance. In contrast, research conducted by Widyaningsih et al. (2018) stated that leverage has a negative effect on tax avoidance. In contrast to research according to Puspita and Febrianti (2017), Yohan and Pradipta (2019), Tebiono and Sukadana (2019) and supported by Mahdiana and Amin (2020) state that leverage has no effect on tax avoidance.

This research uses profitability as a moderating variable. Profitability is the level of a company's ability to make a profit. Therefore, companies can use high profitability to optimize profits. Measuring profitability in this research uses Return on Assets. The higher the ROA means the higher the amount of net profit generated from each rupiah of funds embedded in total assets. Profitability is proxied by ROA where the high or low value of ROA depends on the amount of net profit generated by utilizing the assets owned by the company.

Based on research (Vitasary & Willington, 2019) states that profitability is able to moderate the relationship between institutional ownership and tax avoidance. Based on research (Vitasary & Willington, 2019) shows that profitability is able to moderate the relationship between firm size and tax avoidance. And research (Vitasary & Willington, 2019) shows that profitability is able to moderate the relationship between leverage and tax avoidance.

This research aims to provide empirical evidence and examine the effect of institutional ownership, firm size, and leverage on tax avoidance with profitability as a moderating variable in the manufacturing sector on the IDX from 2020 to 2022.

### 2. LITERATURE STUDY

### **Planned of Behaviour Theory**

TPB theory or Theory of Planned Behavior, is an attitude that influences behavior in which a careful and reasoned decision-making process acts as an intermediary and can only have an impact on certain things (Ajzen, 1991). This theory is a theory of the development of Theory of Reasoned Action (TRA) which explains the relationship between individual behaviors. This theory also argues that individuals will do anything that can benefit themselves or in other words this theory explains a person's behavior based on intention or plan. There are three factors that influence this intention, namely:

- 1. Behavioral Belief, namely individual belief in the results obtained from a behavior. In Theory of Reasoned Action (TRA) this is called attitude towards behavior.
- 2. Normative Belief, namely individual belief in the normative expectations of other individuals, where these normative expectations make individuals want to make it happen. In Theory of Reasoned Action (TRA), this is called subjective norms for behavior.
- 3. Control Belief, is a person's belief in the existence of things that can inhibit or support the behavior displayed and his perception of how strong these things can support or inhibit his behavior (perceived power). Things that might hinder when the behavior is displayed can come from oneself, external, or environmental factors.

Budiman (2012), states that tax avoidance practices carried out by corporate taxpayers (companies) are often carried out through policies adopted by company leaders. Dyreng, S.D., Hanlon, M., & Maydew, (2010) also concluded that individuals (Top Executives) in a company have an influence on corporate tax avoidance.

When associated with this research, the Theory of Planned Behavior is a theory that explains the behavior caused by individuals that arises because of the intention to behave, this is related to the taxpayer's perception of the ethics of tax avoidance. The attitude of individuals in behaving well when carrying out tax provisions depends on the intentions they will take, so that if a taxpayer has bad intentions, then bad behavior will arise as well as in carrying out his tax provisions.

#### Tax Avoidance

Tax avoidance is a legal way to minimize the tax burden but still within the limits of applicable regulations, by means of tax planning (tax management). So that the practice of tax avoidance is how to get around regulations to ease the tax burden by paying attention to the impacts, (Zain, 2003). The practice of tax avoidance as a way of taking action to pay a lower tax burden, compared to the provisions of the applicable regulations. thus the taxpayer looks for weaknesses in tax regulations, so that in laws and regulations it is stated that the practice does not violate regulations and is legal.

According to tax law, tax avoidance is not prohibited even though it often gets unfavorable attention from the tax office because it is considered to have a negative connotation (Sari, 2014). But unfortunately tax avoidance causes the state to lose tens to hundreds of billions of rupiah each year in state income in the tax sector (Kifni, 2011). Whereas Pohan (2013) states that tax avoidance is a tax avoidance effort that is carried out legally and safely for taxpayers because it does not conflict with tax provisions, where the methods and techniques used tend to take advantage of the weaknesses (gray areas) contained in the law. and the tax regulation itself to minimize the amount of tax payable.

According to Rist and Pizzica (2015), measuring tax avoidance can use the Cash Effective Tax Rate (CETR) formula. Measurements using CETR can answer the problems and limitations of measuring tax avoidance based on the GAAP ETR model. The smaller the CETR value indicates that the greater the tax avoidance carried out, and vice versa. The greater this CETR indicates the lower the level of corporate tax avoidance. (Budiman and Setiyono, 2012).

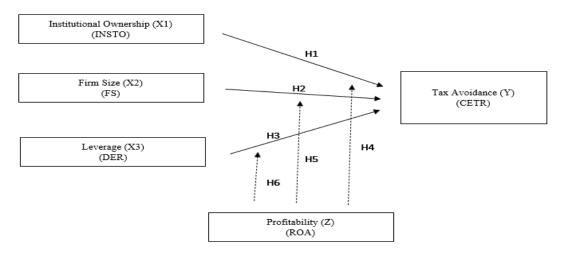


Figure 1. Conceptual Framework

### **Hypotesis**

### **Effect of Institutional Ownership on Tax Avoidance**

Institutional ownership is share ownership by the government, foreign institutions, trust funds, insurance companies, banks, investment companies and other institutions at the end of the year (Ngadiman and Puspitasari 2014). Institutional ownership plays an important role in monitoring, disciplining and influencing managers. The owner acts as the monitoring party of the company. Better monitoring of management performance can occur as a result of institutional ownership.

With a higher level of institutional ownership, it is hoped that it will increase the company's professional supervision so that it can carry out policies that lead to the common goals of a company based on applicable rules (Fitri dan Mamduh 2003).

Research conducted by Zulianti et al. (2020), shows that institutional ownership has a positive effect on tax avoidance. That is, large or small share ownership can affect the increase or decrease in tax avoidance and high institutional ownership will reduce tax avoidance, because the function of the institutional owner is to supervise and ensure tax compliance. In contrast, research conducted by Junaedi et al. (2021) stated that institutional ownership has a negative effect on tax avoidance, meaning that it indicates that institutional ownership plays an important role in monitoring the performance of managers so that they are more careful in making decisions. The greater the level of supervision over management performance, with institutional ownership, the amount of tax paid will be in accordance with what has been determined by the government. In contrast to research according to Oktaviyani and Munandar (2017) and supported by Anggraeni and Febrianti (2019) shows that institutional ownership has no effect on tax avoidance, meaning that institutional shareholders tend to avoid the risk of detection of tax avoidance activities and do not want to take risks that can damage the company's reputation. Based on the description above, the hypothesis can be made as follows:

## H1: Institutional ownership has an effect on tax avoidance

### **Effect of Firm Size on Tax Avoidance**

Firm size is a scale where the size of the company can be classified according to various ways, including: total assets, log size, sales and market capitalization, and others (Hasibuan 2009). The larger the company, the greater the total assets it has. Thus the company will carry out tax planning so that the tax burden can be as minimal as possible, the company can manage the company's total assets to reduce taxable income by utilizing depreciation and amortization expenses arising from expenses to acquire these assets because depreciation and amortization expenses can be used as a deduction from income corporate tax. In this research, the indicator used to measure the level of firm size is total assets because firm size is proxied by Ln total assets. The use of natural log (Ln) is intended to reduce excessive data fluctuations without changing the proportion of the actual original value, (Waluyo, et al, 2015).

The research results of Puspita and Febrianti (2018), Haryanti (2021), and supported by Rahmayani et al. (2021) stated that firm size has a positive effect on tax avoidance. This means that companies that have large total assets tend to be able to generate relatively large profits, so that the tax burden paid is even greater. Transactions owned by companies are more complex than small companies, allowing companies to avoid taxes from each transaction to reduce the tax burden paid. In contrast, research conducted by Puspita and Febrianti (2018), Honggoh and Marlinah (2019) and supported by Fauzan et al. (2019) stated that firm size has a negative effect on tax avoidance. That is, the larger the firm size, the lower the firm will avoid. The larger the size of the company, the more complex the transaction. So companies take advantage of loopholes to avoid higher taxes. In contrast to research according to Yohan and Pradipta (2019), Tebiono and Sukadana (2019) and supported by Mahdiana and Amin (2020) state that firm size has no effect on tax avoidance. This means that not only large companies, but also small and medium-sized companies continue to evade taxes even though the amount does not significantly affect state revenues and the tax authorities always prosecute large and small companies if there is a violation of tax provisions. Based on the description above, the hypothesis can be made as follows:

### H2: Firm Size has an effect on tax avoidance

### **Effect of Leverage on Tax Avoidance**

Leverage is a ratio that measures how much a business depends on debt to fund its operating and investment needs (Praditasari 2017). The greater the use of debt by the company, the greater the amount of interest expense incurred by the company, can reduce the amount of tax that must be paid by the company later (Surbakti 2012). Leverage measurement in this research uses the Debt to Equity Ratio (DER). The lower the DER level of a company, the better the condition of a company and the more trusted investors and creditors will be to provide loans or invest in the company.

Research conducted by Anggraeni and Febrianti (2019), Fauzan et al. (2019) and supported by Mahdiana and Amin (2020) argue that leverage has a positive effect on tax avoidance. That is, if a company uses debt to manage costs, interest expenses must be paid so that the use of corporate debt is used for income tax by obtaining income from interest which reduces taxable income. In contrast, research conducted by Widyaningsih

et al. (2018) stated that leverage has a negative effect on tax avoidance. That is, higher interest costs will cause the company's burden to reduce corporate taxes, and the company will pay a small amount of tax. In contrast to research according to Puspita and Febrianti (2017), Yohan and Pradipta (2019), Tebiono and Sukadana (2019) and supported by Mahdiana and Amin (2020) state that leverage has no effect on tax avoidance. This means that the interest expense resulting in the company's long-term yield debt is low so that the interest expense cannot have a significant effect on tax avoidance. Based on the description above, the hypothesis can be made as follows:

### H3: Leverage has an effect on tax avoidance

# Profitability moderates the effect of institutional ownership on tax avoidance

The existence of institutional ownership in a company will encourage more optimal monitoring of management performance through an effective monitoring process so that management will avoid prioritizing self-interest behavior. So it can be concluded that the higher the constitutional ownership, the higher the amount of the tax burden that must be paid by the company. This is due to the smaller the possibility of tax avoidance practices by companies caused by high supervision. Research by (Vitasary & Willington, 2019) states that institutional ownership has an effect on tax avoidance.

Companies need the existence of institutional ownership which will improve corporate oversight thereby reducing tax avoidance. The existence of profitability is able to moderate the relationship between institutional ownership and tax avoidance because profitability shows the company's ability to generate company profits related to the tax burden paid by the company. Research by (Vitasary & Willington, 2019) states that profitability affects tax avoidance. Based on this description, the following hypotheses can be made:

# H4: Profitability could moderate the effect of institutional ownership on tax avoidance

### Profitability moderates the effect of firm size on tax avoidance

The size of a company is determined based on the total assets owned by the company. Companies that have large total assets show good prospects in the long term and illustrate that companies are more stable and more able to generate profits compared to companies with small total assets. So it can be concluded that large companies have more and more complicated company operating activities so that there are gaps to be exploited in decisions to take tax avoidance actions. Meanwhile, small companies have limited activities and it is a little difficult to take tax avoidance measures. Research by (Vitasary & Willington, 2019) states that firm size has an effect on tax avoidance.

Companies with high total assets mean that these companies are large in size, so they tend to take advantage of existing loopholes to take tax avoidance measures. The existence of profitability is able to moderate the relationship between firm size and tax avoidance because profitability shows the company's ability to generate company profits related to the tax burden paid by the company. Research by (Vitasary & Willington, 2019) states that profitability affects tax avoidance. Based on this description, the following hypotheses can be made:

### H5: Profitability could moderate the effect of firm size on tax avoidance

### Profitability moderates the effect of leverage on tax avoidance

Leverage shows how much a company is financed by debt to meet its operational needs. However, debt will cause interest expenses which are a deduction factor for corporate taxes. So it can be concluded that the higher the leverage value, the higher the company's tax avoidance. This is due to the emergence of debt which can result in the emergence of interest expenses as a deduction from the company's taxable profit so that the tax paid is getting smaller. Research by (Vitasary & Willington, 2019) states that leverage has an effect on tax avoidance.

A company that has a high leverage value indicates that debt can result in interest expense as a deduction from the company's taxable profit so that the company's tax burden is smaller. The existence of profitability is able to moderate the relationship between leverage and tax avoidance because profitability shows the company's ability to generate company profits related to the tax burden paid by the company. Research by (Vitasary & Willington, 2019) states that profitability affects tax avoidance. Based on this description, the following hypotheses can be made:

# H6: Profitability could moderate the effect of leverage on tax avoidance

### 3. RESEARCH METHODOLOGY

This research is a quantitative research using secondary data. This research uses a population of manufacturing sector companies from 2020 to 2022 which are listed on the Indonesia Stock Exchange with a total of 53 companies. Initially, the raw data was 186 of 62 companies. After eliminating data due to outliers and case wise, the total sample is 158. The data collection method used is non-participant observation, and the sampling technique uses purposive sampling method. In this research, annual reports and financial reports are used as secondary data obtained from the IDX website and the company's official website.

The independent variables used in this research include institutional ownership, firm size and leverage. While the dependent variable is tax avoidance, and for the moderating variable is profitability, with the following calculation indicators:

### Tax avoidance

Referring to the book written by Rist and Pizzica (2015), tax avoidance can be calculated using the following formula:

$$CETR = \frac{Cash Tax Paid}{Pre Tax Income}...(1)$$

### **Institutional Ownership**

Referring to the article written by (vitasary and willington, 2019), institutional ownership can be calculated using the following formula:

$$INSTO = \frac{Number of Institutional Shares}{Number of Outstanding Shares}.$$
 (2)

### Firm Size

Referring to the book written by Abiodum (2013) and Niresh (2014) in Rosyeni rasyid (2014), firm size can be calculated using:

$$FS = Ln (Total Assets)...$$
 (3)

### Leverage

Referring to the book written by Kasmir (2016), leverage can be calculated using the following formula:

$$DER = \frac{\text{Total Debt}}{\text{Equity}}.$$
(4)

### **Profitability**

Referring to Kasmir (2014), profitability can be calculated using the ROA formula:

$$ROA = \frac{\text{Net Profit After Tax}}{\text{Total Assets}}...(5)$$

### **Data Analysis Technique**

The moderating variable regression technique using the absolute difference method was used for data analysis. The analysis technique was carried out by carrying out a regression on the absolute difference between the standardized independent variables and the hypothesized variable as the standardized moderating variable. When the absolute difference between the standard independent variable and the standard moderating variable is significant, the conclusion is that the moderating variable can moderate the effect of the independent variable on the dependent variable (Suliyanto, 2018).

The following is a multiple linear regression model using the absolute difference method:

$$Y = \alpha + \beta 1ZX1 + \beta 2ZX2 + \beta 3ZX3 + \beta 4ZZ + \beta 5 |ZX1 - ZZ| + \beta 6 |ZX2 - ZZ| + \beta 7 |ZX3 - ZZ| + e$$

#### Information:

Y = Tax avoidance

a = Constant

 $\beta$  = Regression coefficient parameters

ZX1 = Standardize Institutional Ownership

ZX2 = Standardize Firm Size

ZX3 = Standardize Leverage

ZZ = Standardize Profitability

|ZX1-ZZ|= Standardize Institutional Ownership with profitability standardization as a moderator

variable

|ZX2 - ZZ| = Standardize Firm Size with profitability standardize as a moderator variable

|ZX3 - ZZ| = Standardize Leverage with profitability standardize as a moderator variable

e = Error Term

#### 4. RESULT AND DISCUSSION

A total of 158 data from 53 manufacturing sector companies listed on the IDX for the 2020-2022 period obtained the following results:

**Table 1. Descriptive Statistics Result** 

	Descriptive Statistics									
	<b>.</b>	Minimu	Maximu	2.5	Std.					
	N	m	m	Mean	Deviation					
INSTO	158	.0005	.9998	.717164	.2857255					
FS	158	12.1174	30.9358	22.748711	5.4563349					
DER	158	.0338	3.1590	.754145	.6479479					
CETR	158	1586	.3850	.178334	.1204741					
ROA	158	2157	.3636	.064528	.0908783					
Moderating X1	158	2137	.3428	.050292	.0776034					
Moderating X2	158	-5.9284	10.0747	1.406637	2.0479246					
Moderating X3	158	4163	1.1020	.033766	.1279214					
Valid N (listwise)	158									

Source: Author's Processed Data

The descriptive statistics results in table 1 show that the minimum value of Institutional Ownership (X1) is 0.0005, and the maximum value is 0.9998, with a standard deviation of 0.2857255. Next, the minimum value of Firm Size (X2) is 12.1174, and the maximum value is 30.9358, with a standard deviation of 5.4563349. While the minimum value of Leverage (X3) is 0.0338, with a maximum value of 3.1590, and a standard deviation of 0.6479479. For the minimum Tax avoidance (Y) value is 0.1586, the maximum value is 0.3850, and the standard deviation is 0.1204741. And finally the minimum Profitability (Z) value is -0.2157, the maximum value is 0.3636, and the standard deviation is 0.0908783.

### **Classic Assumption Test**

The classical assumption test aims to know and test eligibility over the regression model used in research. Required conditions fulfilled, that is, the data must be normally distributed, no contains multicollinearity, heteroscedasticity, and autocorrelation.

a. The Normality test aims to determine whether in the regression model, the confounding or residual variables have a normal distribution (Ghozali, 2006). The normality test can be done in two ways, namely graphical analysis and statistical tests. For this research using a graphical analysis test.

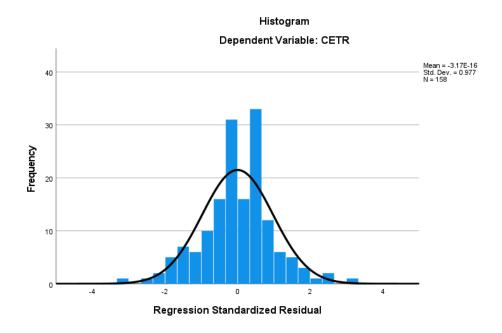


Figure 2. Normality-Graphical Analysis Test

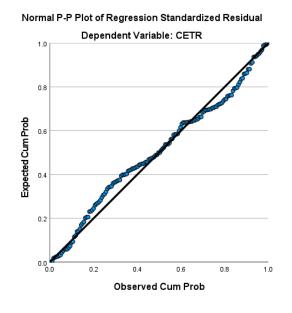


Figure 3. Normal P-P Plot Test

Based on the Histogram and P-P Plot output displays above, where the histogram graph gives a distribution pattern that is deviated to the right, which means that the data is normally distributed. Furthermore, in the P-P plot, it can be seen that the dots follow and approach the diagonal line so that it can be concluded that the regression model meets the assumption of normality.

b. Multicollinearity test aims to assess whether the regression model found a correlation between independent variables. The regression model is said to be free of multicollinearity if the tolerance value is > 10% and the VIF value is < 10. So, the tolerance value < 10% and VIF > 10 indicates a case of multicollinearity.

**Table 2. Multicollinearity Test** 

	Coefficients <sup>a</sup>								
		Unstandardize d Coefficients		Standardize d Coefficients			Collinearity Statistics		
	Model	В	Std. Error	Beta	t	Sig.	Toleranc e	VIF	
1	(Constant)	.142	.297		.480	.632			
	INSTO (X1)	.170	.208	.075	.820	.414	.972	1.029	
	FS (X2)	001	.011	010	104	.917	.968	1.033	
	DER (X3)	011	.030	032	353	.725	.979	1.022	
	ROA (Z)	.075	.098	.070	.767	.444	.981	1.019	

a. Dependent Variable: CETR (Y)

Source: Author's Processed Data

The multicollinearity test is used to assess whether the regression model finds a correlation between the independent variables. The test results show that there is no multicollinearity in the regression equation model and can be used in research. The values of all variables in this research have a tolerance value of more than 0.10 and a VIF value below 10. This means that there is no correlation between the independent variables in the regression model.

The multicollinearity test results show that all independent variables and moderating variables do not have symptoms of multicollinearity with tolerance values resulting from Institutional Ownership (INSTO), Firm Size (FS), Leverage (DER), and Profitability (ROA) variables, which are equal to 0.972; 0.968; 0.979; 0.981, while the VIF value generated by the Institutional Ownership (INSTO), Firm Size (FS), Leverage (DER) and Profitability (ROA) variables is 1.029; 1.033; 1.022; 1.019.

c. Heteroscedasticity test aims to check if in the regression model occurs dissimilarity variance of the residual of one observation to another observation. Test heteroscedasticity in research this is done using Glejser test. It says free heteroscedasticity when level significance above 5%.

**Table 3. Heteroscedasticity Test** 

	Coefficients <sup>a</sup>									
	Unstandardized Coefficients		Standardize d Coefficients			Collinearity Statistics				
		В	Std. Error	Beta	t	Sig.	Toleranc e	VIF		
(Constant	t)	041	.278		148	.883				
INSTO (X	1)	052	.195	024	266	.791	.972	1.029		
FS (X2)		.009	.010	.084	.923	.358	.968	1.033		
DER (X3	5)	.053	.028	.169	1.870	.064	.979	1.022		
ROA (Z)	)	.004	.092	.004	.047	.963	.981	1.019		

a. Dependent Variable: abs\_residual

Source: Author's Processed Data

Heteroscedasticity test was carried out to check for presence variance inequality of the residuals one observation to another the other on the regression model (Ghozali, 2018). Test heteroscedasticity in research this is done using glejser test. Basis of taking glejser test decision is if the level significance above 5% or 0.05, The test results show a regression model in this research free from heteroscedasticity. This is because significance value in each independent variables show a number greater than 0.05 or above 5%.

The results of the heteroscedasticity test found that each variable had a significance value > 0.05. Therefore, it is concluded that there are no symptoms of heteroscedasticity with the results of Institutional Ownership (INSTO), Firm Size (FS), Leverage (DER), and Profitability (ROA) variables each has a significance value of 0.791; 0.358; 0.064; 0.963.

d. The autocorrelation test aims to find out whether in the linear regression model there is a correlation between the disturbing errors in a certain period and the previous period (Ghozali, 2018). If the Durbin-Watson value is greater than the Durbin-Watson Table (DW) with a constant = 5% or 0.05, it can be concluded that there is no autocorrelation.

**Table 4. Autocorrelation Test** 

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson		
1	.634ª	.402	.374	.0953341	2.000		

a. Predictors: (Constant), Moderating X3, INSTO, DER, FS, Moderating

X2, Moderating X1, ROA

b. Dependent Variable: CETR

Source: Author's Processed Data

The results of the autocorrelation test obtained a Durbin-Watson value of 2.000. Because the Durbin-Watson score on the Durbin-Watson Table (DW) with a constant = 5% or 0.05 is 1.7014 which means it is smaller than the Durbin-Watson Test Results, it can be concluded that there is no autocorrelation.

The coefficient of determination test obtained an adjusted R Square value of 0.374. Therefore, it means that a 37.4% change in the value of tax avoidance in manufacturing sector companies on the IDX in 2020 – 2022 is influenced by Institutional Ownership, Firm Size, Leverage, Institutional Ownership moderation variables, Firm Size moderation variables, and Leverage moderation variables. And the remaining 62.6% is influenced by other variables.

Table 5. Result of F Test

	ANOVA <sup>a</sup>							
Mod	lel	Sum of Squares	df	Mean Square	F	S	ig.	
1	Regression	.747	4	.187		.419	.795 <sup>b</sup>	
	Residual	53.551	120	.446				
	Total	54.298	124					

a. Dependent Variable: CETR (Y)

b. Predictors: (Constant), ROA (Z), FS (X2), DER (X3), INSTO (X1)

Source: Author's Processed Data

The results of the F test obtained the value of Sig. equal to 0.795 more than the probability level, namely 0.05 or 0.795> 0.05 and the value of F count < F table, namely 0.419 <2.446. Thus, H0 is accepted and H1 is rejected. With the testing that has been done, it can be concluded that institutional ownership, firm size, and leverage simultaneously influence tax avoidance.

### **Result of T Test**

The value of t table with a significance value of 5% and df=n-k-1=158-3-1=154 is 1.65455. The results of the t-test are shown in table 6:

Table 6. Multiple Linear Test Results With T-Test

	Coefficients <sup>a</sup>									
		Unstand Coeffi		Standardize d Coefficients						
	Model	В	Std. Error	Beta	t	Sig.				
1	(Constant)	.088	.057		1.529	.128				
	INSTO	.107	.036	.254	2.951	.004*				
	FS	.002	.002	.069	.777	.439				
	DER	067	.015	361	-4.368	.000*				
	ROA	1.621	.590	1.223	2.746	.007*				
	Moderating X1	-1.355	.441	873	-3.070	.003*				
	Moderating X2	011	.017	194	666	.506				
	Moderating X3	.279	.103	.296	2.696	.008*				

a. Dependent Variable: CETR

Source: Author's Processed Data

Based on the results of the regression coefficient above, an equation model can be created as follows:

$$Y=\alpha+\beta1ZX1+\beta2ZX2+\beta3ZX3+\beta4ZZ+\beta5\;|ZX1-ZZ|+\beta6\;|ZX2-ZZ|+\beta7\;|ZX3-ZZ|+e$$

$$Y = 0.285 - 0.112ZX1 - 0.018ZX2 - 0.041ZX3 + 0.011ZZ - 0.052|ZX1 - ZZ| - 0.034|ZX2 - ZZ| + 0.032|ZX3 - ZZ| + e$$

<sup>\*</sup>sig 5%

### **Effect of Institutional Ownership on Tax Avoidance**

The significance value of INSTO (X1) is 0.004 < 0.05, and the value of t count > t table is 2.951 with a positive beta direction or 2.951 > 1.65455. Thus it can be concluded that institutional ownership has an effect on tax avoidance, so the first hypothesis (H1) is supported. This means that the lower the institutional ownership controlled by the company, the more passive it will be in reducing its tax payments. Meanwhile, high institutional ownership means greater pressure from company owners on management to reduce tax payments in order to obtain the maximum net profit. Company owners can make decisions so that management can reduce the tax burden so that companies can reduce tax payments which lead to higher tax avoidance (Ariawan & Setiawan, 2017). The results of this research are the same as the research conducted (Ariawan & Setiawan, 2017; Harahap, 2021; Murni et al., 2016; Sanjaya, 2021; Widuri et al., 2019; Yadasang et al., 2019) which says that institutional ownership influences on the variable of tax avoidance.

### **Effect of Firm Size on Tax Avoidance**

Based on the tests carried out, the results show that the firm size variable shows a t-count value of 0.777 < t table, namely 1.65455 and a significant value is 0.439 > 0.05. In the sense that the variable firm size has no effect on tax avoidance in other words (H2) is rejected. It can be concluded that the variables in this research have no effect because the larger the firm size, because large companies (having large assets) will tend to be more stable in producing profit compared to companies with small assets. Therefore, large companies will be better able to pay their tax obligations so that large companies tend not to do tax avoidance. This relates to the theory used in this research, namely Theory of Planned Behavior, the third factor, namely Control Belief. A large company will be in the spotlight and the center of government attention related to taxes that must be paid so that large companies will tend to comply with tax regulations and be careful in making decisions regarding tax payments, because if not, it will cause losses for the company such as sanctions and bad reputation in the eyes of the public and government. This makes sense because large companies that maintain their reputation will tend to avoid tax avoidance practices for fear of affecting their reputation which is in line with the notion of Control Belief, namely a person's belief in the existence of things that can inhibit or support the behavior displayed and his perception of how strong these things can support or hinder his behavior. Things that might hinder when behavior is displayed can come from self, external, or environmental factors. where the environment here is the view of society. The results of this research are in line with research ('Amala & Safriansyah, 2020) and also (Khomsiyah et al., 2021) which states that firm size has no effect on tax avoidance.

### Effect of Leverage on Tax Avoidance

The test results show a significant value of DER (X3) of 0.000 < 0.05, and the value of t count < t table is -4.368 with negative beta direction or -4.368 > 1.65455. Thus it can be concluded that leverage has an effect on tax avoidance, so the third hypothesis (H3) is accepted. Companies that prefer to use external funding such as debt will result

in the emergence of interest expenses which can be a deduction from taxable profits. Research conducted by (Adelina, 2012) states that an increase in the amount of debt will result in an increase in the interest expense that must be paid by the company. Other studies from (Swingly and Sukartha, 2015), (Dharma, 2016) and (Putri, 2017) also show that leverage has an effect on tax avoidance.

# The Effect of Institutional Ownership on Tax Avoidance with Profitability as a Moderating Variable

Based on the test results, it was obtained that the significance value of the Moderating X1 variable was 0.003 < 0.05 and t count < t table, namely -3.070 with negative beta direction or -3.070 > 1.65455. Therefore it can be concluded that profitability can moderate the influence of institutional ownership variables on tax avoidance variables. Therefore, the forth hypothesis (H4) is accepted. The existence of institutional ownership in a company will encourage more optimal monitoring of management performance through an effective monitoring process so that management will avoid prioritizing self-interest behavior. So it can be concluded that the higher the institutional ownership, the higher the total tax burden to be paid by the company. This is due to the smaller the possibility of tax avoidance practices by companies caused by high supervision. The existence of profitability is able to moderate the relationship between institutional ownership and tax avoidance because profitability shows the company's ability to generate company profits related to the tax burden paid by the company. This is in line with research conducted by (Ngadiman & Puspitasari, 2014) which states that institutional ownership has an effect on tax avoidance.

# The Effect of Firm Size on Tax Avoidance with Profitability as a Moderating Variable

The results showed that the significant value of Moderation X2 was 0.506 > 0.05, and t count < t table, namely 1.65455 with negative beta direction or -0.666 < 1.65455. Thus it can be concluded that profitability cannot moderate the effect of firm size on tax avoidance so that the fifth hypothesis (H5) is rejected. The existence of profitability is not able to moderate the relationship between firm size and tax avoidance. This is because firm size has no effect on profits because investors in channeling their funds do not take the size of the company as their only consideration, because besides firm size which can be measured by asset value there are other more important measurements that can describe company performance such as cash flow and other ratios. The results of the above research are in line with (Gunawan's research. K. et.al,2015) and (Novianus,2016) which shows that profitability is cannot strengthen or weaken the effect of firm size on tax avoidance.

# The Effect of Leverage on Tax Avoidance with Profitability as a Moderating Variable

The results showed that the significant value of the Moderating X3 variable was 0.008 < 0.05, and t count > t table, namely 2.696 or 2.696 > 1.65455. Thus it can be concluded that profitability can moderate the effect of leverage on tax avoidance so that

the sixth hypothesis (H6) is accepted. A company that has a high leverage value indicates that debt can result in interest expense as a deduction from the company's taxable profit so that the company's tax burden is smaller. The existence of profitability is able to moderate the relationship between leverage and tax avoidance because profitability shows the company's ability to generate company profits related to the tax burden paid by the company. This is in line with research conducted by (Fajar, 2018) which states that profitability can moderate leverage on tax avoidance.

### 5. CONCLUSION

The results of this research indicate that institutional ownership and leverage have an effect on tax avoidance, while firm size has no effect on tax avoidance. Then profitability can strengthen the influence of institutional ownership and leverage on tax avoidance, but profitability cannot moderate the effect of firm size on tax avoidance.

The limitation of this research is that there are no accessible annual reports for several manufacturing sector companies, thereby reducing the existing sample. Then in this research the results of the coefficient of determination produce an Adjust R Square of 0.019, which means that only 37.4% can be explained in this research variable. In comparison, 62.6% is explained by other variables not examined in this research.

Suggestions for further research are to improve the limitations of this research, such as changing variables and also being able to replace other sectors listed on the IDX. It is hoped that the government can use this research to develop countermeasures for companies to avoid taxes in various ways to reduce the taxes they have to pay.

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