Profitability as a Moderator of Leverage and Firm Size on Tax Avoidance: Empirical Study at Indonesia Construction Companies

Anjar Indriyanti[1)*], Ibram Pinondang Dalimunthe[2)]

[1)3)]*Universitas Pamulang*

Jl. Surya Kencana No.1, Pamulang Bar., Kec. Pamulang, Kota Tangerang Selatan, Indonesia

[1)]indriyantianjar@gmail.com

[2)] ibram@unpam.ac.id

Abstract

This study aims to analyze the effect of profitability as moderating leverage and firm size on tax avoidance. The independent variables are leverage, firm size, the dependent variable is tax avoidance and profitability as a moderator. This research is quantitative data, with sample selection using purposive sampling. Sample study in this research are construction companies listed on the Indonesia Stock Exchange (IDX) in 2015-2020. Analysis method in this study processes using e-views version 9. The results of this study indicate that leverage and firm size have a significant effect on tax avoidance. The study also give evidence that profitability weakens the relationship between leverage and tax avoidance and profitability weakens the relationship between firm size and tax avoidance.

I. Introduction

Based on Law Number 16 of 2009, the Fourth Amendment to Law Number 6 of 1983 concerning General Provisions and Tax Procedures in Article 1 Paragraph 1 reads "Tax is a taxpayer's contribution to the state that is owed by an individual or entity that is coercive based on Law -Act, by not getting compensation directly and used for the needs of the state for the greatest prosperity of the people ". [1]Various regulations and laws regarding the basis for taxation in all business and service sectors have been regulated in such a way by the Government, including construction services. This is because construction services are an activity in the economic, social and cultural fields which has an important role in achieving various targets to support the realization of national development goals [2]. In accordance with Government Regulation Number 51 of 2008 based on Article 1 Number 2 and Number 3 "Construction Services are construction work planning consulting services, construction work implementation services, and construction work supervision consulting services". Meanwhile, construction work is the whole or part of a series of planning and/or implementation activities along with supervision which includes architectural, civil, mechanical, electrical and environmental work and their respective equipment, to create a building or other physical form [3].

In practice, tax collection by the government does not always get a good response from companies that are tax subjects. The Fiscal Policy Agency noted that the construction sector has a low *tax ratio and is undertaxe* . The construction sector's contribution to Gross Domestic Product (GDP) reached 14.1% in 2019, however, the sector's contribution to tax revenue was recorded at only 6.72% (www.ddtc.co.id). This happens when companies try to pay the lowest possible tax because taxes are considered to reduce revenue or net profit, while the government expects taxes to be as high as possible in order to finance development plans [4]. This difference in interests causes taxpayers to try to reduce tax payments, both legally and illegally. One way to legally reduce tax payments is *tax avoidance* . In general, tax avoidance is considered a legal action because it takes advantage of existing loopholes in the applicable tax regulations (*legal*) [5].

Factors that influence tax avoidance *can* come from internal factors or external factors. According to [6]"Internal factors that influence *tax avoidance* are *leverage, Leverage* arises as a result of companies financing assets with borrowed funds that have interest charges." In other words, with *leverage* it can be seen whether the assets owned by a company come from debt or from its own capital [7]. In the future, the size of *the leverage* owned by the company

---

[*] Corresponding author

can influence the size of the tax that the company must pay. This is because interest costs originating from these debts can be deducted in tax calculations, thereby causing the company's tax burden to be smaller [8].

Another factor which is also a determining factor in tax avoidance is *firm size* , the larger the company size indicates the greater the total assets of the company [9]. The larger the size of the company, it is assumed that the transactions carried out by the company will be more complex. So it is assumed that the greater the gap that can be exploited by taxpayers to carry out tax avoidance activities [10].

In generating profits, companies need profitability as an illustration of company performance, one of which is *the net profit margin.* Companies that have high liquidity illustrate that the company has good cash flow so that the company will pay all of its obligations including paying taxes in accordance with applicable regulations [11]. In contrast, [12]stated that companies that have low liquidity tend not to pay their obligations to pay taxes. Because companies will prefer to maintain their company's cash flow rather than having to pay taxes.

Based on the description above, it encourages researchers to conduct this research. The difference between this research and previous research lies in the respondents (Construction Companies) where Respondents (Construction Companies) are rarely used to assess the level of *tax avoidance* and profitability as moderating variables. This research was conducted using a sample of construction company respondents listed on the IDX in 2015-2020. Therefore, researchers are interested in raising the problem by conducting research entitled "The Effect of *Leverage* and *Firm Size* on *Tax Avoidance* with Profitability as a *Moderating* Variable (Empirical Study of Construction Companies Listed on the Indonesian Stock Exchange 2015-2020)

II. Literature Review

Based on agency theory, there are differences in interests between the government and taxpayers which lead to *tax avoidance practices* by taxpayers to reduce the tax burden. *Tax avoidance* actions can provide economic benefits to companies. The emergence of tax avoidance *is influenced by agency* problems. [13]*Agency* problems that arise due to tax evasion are caused by differences in interests between *agents* who wants to increase compensation from profits obtained by putting aside the long-term risks of the company (*principal*) from tax avoidance actions taken, while on the other hand *the principal* wants a low tax burden without risking the survival of a company [14].

The maturity stage of a *principal* is determined based on total assets, the greater the total assets indicating that the company (*principal*) has [14]. The company has a high level *of leverage* , so the assets owned by the company come from loans or debt. Meanwhile, if the company has a low level *of leverage* , then the assets owned by the company come from its own capital [15]. In the future, the size of *the leverage* owned by the company can influence the size of the tax that must be paid by the company [16]. This is because interest costs originating from these debts can be deducted in tax calculations, causing the company's tax burden to be smaller.

The resources owned by the company can be used by *agents* in reducing the tax burden that needs to be paid by *the principal* . [17]"Large size companies have sufficient and more resources to reduce their tax burden compared to smaller (*principal*) companies that carry out tax planning". Large companies tend to have more space to carry out good planning and adopt effective accounting practices to reduce the company's tax burden [18].

Net profit margin shows the ability of a company (*principal*) to generate profits during a certain period [19]. The increasing tendency of the amount of profit obtained regularly is an important factor in assessing the profitability of a *principal*. Profitability can also be a benchmark to determine whether the manager is successful or not in exercising his authority over the agent. If the company pays attention to the proportion of debt in the company and manages its debt effectively and efficiently in the company's operational activities, it will increase the company's ability to earn profits. Companies that have high profitability will carry out *tax avoidance* to reduce the amount of their tax obligations.

Trade-off theory (balancing theory)

The trade-off theory (balancing theory) is a theory that balances the benefits (tax protection) and sacrifices (interest) that arise as a result of the use of debt by companies. This theory is explained further in [20]that companies will increase debt when the tax savings are greater than the sacrifice, and the use of the debt will stop if there is a balance between savings and sacrifice due to the use of the debt. This is in line with the relationship between *leverage* and *tax avoidance* where interest costs from debt can be deducted in tax calculations, resulting in a smaller corporate tax burden.

Tax Theory

Taxes are one of society's obligations to the state and asforms of community participation in the development of the homeland and state. [21] Tax is "The people's contribution to cash country based Constitution (Which can forced) with gone receive lead services (counterperformance) which can be directly demonstrated and which used For pay

expenditure general". Tax is source funding important for economy something country because source reception country Which most potential And occupy percentage highest in The State Revenue and Expenditure Budget (APBN) is a tax. At the beginning of the year 1984, the government changed the tax system in Indonesia, which was initially *official assessment system* changed become *self-assessment system* . *official assessment system* is system collection tax Which give full responsibility for tax collection to the government, while *self- assessment system* is something system collection tax Which give taxpayers' authority to determine for themselves the amount of tax owed every year in accordance with tax laws and regulations apply [22].

Leverage

[23] *Leverage* is a financial ratio that describes the relationship between company debt and company capital and assets. In physics, *leverage* means using a lever to lift a heavy load using little force. This is also used in corporate finance, where companies need help in carrying out company performance. The *leverage* ratio shows how much of the company's assets are funded with debt, and is important to analyze because it is related to performance [24]. *Leverage* describes the source of operating funds used by the company. The *leverage* ratio also shows the risks faced by the company, so the uncertainty in generating profits in the future will also increase [25].

[26] *Leverage* is described to see the extent to which the company's *assets* are financed by debt compared to its own capital. The greater *the leverage* , the greater the investment risk. Companies with low *leverage* also have low *leverage risk.* [27] *Leverage* is divided into three types, namely *operating leverage, financial leverage,* and *combination leverage* . Companies use *operating leverage* and *financial leverage* with the aim of making profits greater than the cost of assets and sources of funds. This will increase profits for shareholders.

Firm Size

Company size is a scale that classifies companies into large and small companies according to various methods such as total assets or total company assets, stock market value, average sales level, and number of sales [28]. According to Law no. 20 of 2008 in Article 1 concerning General Provisions for Micro, Small, Medium and Large Enterprises. [17] Company size is that the size of the company is seen from the size of the *equity value* , sales value or asset value. Company size represents the characteristics of the company as indicated by the number of employees, sales size, market capitalization and number of *assets* . The size of the company will influence the ability to bear risks that may arise from various situations faced by the company. Large companies have lower risks than small companies. This is because large companies have better control over market conditions, so they are able to face economic competition [29].

Companies that have large total assets indicate that the company has reached the maturity stage where in this stage the company's cash flow is positive and is considered to have good prospects in a relatively long period of time, besides that it also reflects that the company is relatively stable and more able to generate profits than company with total assets which is a little small [30].

Tax Avoidance

Tax avoidance is often done by many companies. Tax avoidance can actually reduce state revenue because tax avoidance aims to minimize the insured tax that must be paid by companies [31]. [13]Other expected goals of tax avoidance to minimize the tax burden payable, maximize profit after tax, minimize the occurrence of tax surprises *if* there is a tax audit by the tax authorities and fulfill their tax obligations correctly, efficiently, and effective. [32]Tax avoidance is not free, some costs that must be borne are the sacrifice of time and energy to carry out tax avoidance, and the risk if tax avoidance is revealed. These risks range from those that can be seen, namely interest and fines, and those that cannot be seen, namely loss of the company's reputation, which has negative consequences for the company's long-term business continuity.

Profitability

The ratio that describes the level of profit earned by the company compared to the income received from its operational activities. The higher *the Net Profit Margin,* the better the operations of a company [33]. [34] " *Net Profit Margin* is a ratio used to show a company's ability to generate net profits after tax deductions."

Based on the above understanding, it can be concluded that *Net Profit Margin* is a comparison between net profit and sales. *Net Profit Margin* can also be referred to as a measure of profit by comparing profit after interest and taxes compared to sales. This ratio shows the company's net income from sales and can also be interpreted as the company's ability to reduce costs (measurement dimensions) in the company in a certain period

III. METHODS

This research uses a type of quantitative research with an associative approach. [34], associative research is research that aims to determine the relationship between two or more variables that have a causal relationship with other variables. In this study, the researcher took the object of research on construction companies listed on the Indonesia Stock Exchange for 2015-2020, by accessing and downloading research data in the form of company annual financial reports which are available on the official website, namely www.idx.co.id, www.idnfinancials .com, and the company's official website that became the population in this study. This study makes *leverage* and *firm size* as independent variables, *tax avoidance* as the dependent variable, and Profitability as a moderator. Variable operationalization is presented in table 1.

The population in this study are construction companies listed on the Indonesia Stock Exchange (IDX) in 2015-2020 with a total of 37 companies. The *sampling* technique in this research uses a *purposive sampling* technique with the aim of obtaining a representative sample according to the specified criteria, with the criteria as presented in Table 2. This research uses secondary data, where this research is taken based on financial reports published by listed companies. in the Indonesia Stock Exchange for the 2015-2020 period. In this research, data was collected through documentation studies, literature studies, and research tools using *the E-Views Series* 9 application.

Table 1. Variable Operationalization

Variable	Operational definition	Indicator
Leverage (X1)	use of funds or capital whose use has an obligation to pay fixed costs, namely in the form of interest.	$(DER) = \dfrac{\text{Total hutang}}{\text{Total ekuitas}}$
Firm Size (X2)	a measurement based on the size of the company and which describes the company's activities and income	$Size = Ln(\text{Total aset})$
Tax Avoidance (Y)	Minimizing the tax burden by exploiting the weakness of a country's tax provisions so that tax experts declare it valid because it does not violate tax regulations	$(ETR) = \dfrac{\text{Beban Pajak}}{\text{Pendapatan Sebelum Laba}}$
Profitability (Z)	the company's ability to generate profits within a certain period of time	$(NPM) = \dfrac{\text{Laba Setelah Pajak}}{\text{Penjualan}}$

Source: (Data processed by the author, 2021)

Table 2. Sampling Criteria

No	Criteria	Criteria Violation	Accumulation
1	Construction companies listed on the Indonesia Stock Exchange (IDX) in 2015-20 20 .	0	37
2	The company periodically publishes financial reports annually to the Indonesian Stock Exchange (IDX) .	(9)	28
3	The sample companies have complete information required with calculated indicators which are used as variables in the research	(3)	25
4	companies listed on the Indonesia Stock Exchange (BEI) did not experience losses in the 2016-2020 period	(13)	12
	The number of samples that meet the criteria		12
	Observation Year		6
	The total sample used in the study		72

Source: (Data processed by the author, 2021)

IV. RESULTS

Descriptive Statistics Test

According to [35]Descriptive statistics are statistics that are used to analyze data by describing or describing the data that has been collected as it is without intending to make generally accepted conclusions or generalizations. Descriptive statistics aim to describe the variable frequency distribution, maximum, minimum, average (mean) and standard deviation values in this study. Includes leverage and firm size variables on tax avoidance with profitability as a moderating variable . Data management in descriptive statistical analysis was carried out using Eviews 9 and

Microsoft Excel 2020. The results of the descriptive statistical analysis test in this study can be seen in the following table:

Table 3. Descriptive Statistical Test

	Tax avoidance (Y)	Leverage (X1)	Firm size (X2)	Profitability (Z)
Means	0.261091	1.251522	30.08416	0.206759
Median	0.239948	0.852718	29.57507	0.167301
Maximum	0.933483	5.833217	32.38703	0.444382
Minimum	0.011738	0.108266	28.32077	0.064439
Std. Dev.	0.182055	1.078751	1.297796	0.097485
Skewness	1.102267	1.817933	0.206695	0.887783
kurtosis	4.763646	6.914384	1486423	2.676351
Jarque-Bera	23.91126	85.62576	7.385421	9.772141
Probability	0.000006	0.000000	0.024904	0.007551
Sum	18.79858	90.10960	2166059	14.88668
Sum Sq. Dev.	2.353220	82.62303	119.5835	0.674741
Observations	72	72	72	72

Source: (Output E views 9 , 2021)

The results of the descriptive analysis in table 3 show that the number of samples (N). the total sample consists of 12 construction companies listed on the Indonesia Stock Exchange for 6 (six) consecutive years with a total of 72 data consisting of leverage (X1), firm size (X2), tax avoidance (Y), profitability (Z).

a. Tax avoidance (Y)

tax avoidance variable has a minimum value worth 0.011738 or 1% , maximum value equal to 0.933483 or 93%, average 0.261091 or 26% and standard deviation (standard deviation) of 0.182055 or 18% .

b. Leverage (X1)

leverage variable has a minimum value of 0.108266 or 11%, a maximum value of 5.833217 or 583%, an average value of 1.251522 or 125%, and a standard deviation (standard deviation) of 1.078751 or 107% .

c. Firm size (X2)

The variable firm size has a minimum value worth 28.32077 or IDR 28,320,770 , the maximum value is 32.38703 or IDR 32,387,030 owned, the average value is 30.08416 or IDR 30,084,160 and the standard deviation (standard deviation) is 1.297796 .

d. Profitability (Z)

The profitability variable has a minimum value of 0.064439 or 6%, a maximum value of 0.444382 or 44%, an average of 0.206759 or 21% and a standard deviation (standard deviation) of 0.097485 or 9%.

Classical Assumption Test Results

The normality test in this study was by comparing the JB (Jarque-Bera) probability value with an alpha of 0.05 (5%). If the calculated JB probability is greater than 0.05 (5%), it can be concluded that the residuals are normally distributed and vice versa, if the value is smaller then there is not enough evidence to state that the residuals are normally distributed. From the results of data processing, it shows that the probability value listed is 0.467713 (47%). The Jarque-Bera value is greater than the significance level, which is 1.519802 > 0.05. The probability value is greater than the significance level, which is 0.467713 > 0.05. Thus, the data used in this study is normally distributed data.

For multicollinearity test results, each variable has a correlation coefficient <0.80. So it can be concluded that each variable does not have multicollinearity symptoms .

The heteroscedasticity test was carried out using the white test. From the results of the heteroscedasticity test, the output data above shows that the p value is indicated by the Prob value. chi square(3) on Obs*R-Squared (Chi-Squeres) is 0.1302 . By because, the p value is 0.1302 > 0.05 then, H0 is accepted or the regression model is homoscedasticity and there is no problem with the assumption of non-heteroscedasticity.

The autocorrelation test is seen through the Durbin-Watson Test. From the results of data processing, the Durbin-Watson (DW) value is 2.0 90635 , the comparison uses a significant value of 5%, the sample size is 72 (n), and the number of independent variables is 3 (k=3), so in the Durbin-Watson table you will get du value 1. 7054 . Because the DW value of 2.0 90635 is greater than the upper limit (du) 1.7 054 and less than 4 - 1.7 054 (2. 2946), it can be concluded that the regression model does not have autocorrelation and this regression model is suitable for use.

Hypothesis Test Results
t test

Partial testing is used to test the effect of variables independent of the dependent variable. If the probability <0.05 then H1 is rejected and H2 is accepted so it can be concluded that the independent variables significant effect on the dependent variable. Meanwhile, if the probability > 0.05 then H1 is accepted and H2 is rejected so it can be concluded that the variable independent has no significant effect on the dependent variable.

Table 4. Test Results t

Variables	coefficient	Std. Error	t-Statistics	Prob.
C	2.062365	0.920290	2.240995	0.0283
LEV (X1)	0.085042	0.022628	3.758231	0.0004
SIZES (X2)	-0.068835	0.031329	-2.197165	0.0314
PROFIT (Z)	0.788948	0.354702	2.224258	0.0295

Source: (Output E views 9 , 2021)

a. Effect of Leverage on Tax Avoidance
   In the linear regression test, it can be seen that the leverage variable has a $_{calculated\ t}$ of 3.758231 when compared with the t $_{table}$ at a significance level of 0.05 with df = (nk-1) or (72 -3 - 1) = 68, namely 1.66757, so the $_{calculated\ t\ value\ is}$ higher . large t $_{table}$ 3.758231 > 1.66757. a significance probability value of 0.0004 indicates a value that is greater than the predetermined significance value of 0.05 (0.0004 < 0.05). so it can be concluded that leverage affects tax avoidance .

b. Effect of firm size on tax avoidance
   In the linear regression test, it can be seen that the firm size variable has a t $_{count}$ of -2.197165 when compared to the t $_{table}$ at a significance level of 0.05 with df = (nk-1) or (72 -3 - 1) = 68 which is equal to 1.66757, so the value t $_{count}$ is greater than t $_{table}$ -2.197165 > -1.66757. a significant probability value of 0.0314 indicates a value that is greater than the predetermined significance value of 0.05 (0.0314 < 0.05) so it can be concluded that firm size has an effect on tax avoidance .

c. The Effect of Profitability on Tax Avoidance
   In the linear regression test, it can be seen that the profitability variable has a $_{calculated\ t}$ of 2.224258 when compared with the t $_{table}$ at a significance level of 0.05 with df = (nk-1) or (72 -3 - 1) = 68, namely 1.66757, so the $_{calculated\ t\ value\ is}$ higher big t $_{table}$ 2.224258 > 1.66757. The significance probability value of 0.0295 indicates a value greater than the predetermined significance value of 0.05 (0.0295 < 0.05) so it can be concluded that profitability effect on tax avoidance .

Coefficient of Determination Test

The results of the test for the coefficient of determination from this study are presented in table 5 as follows:

Table 5. Test Results for the Coefficient of Determination

R-squared	0.209150	Mean dependent var	0.068148
Adjusted R-squared	0.174259	SD dependent var	0.118128
SE of regression	0.107343	Sum squared resid	0.783538
F-statistic	5.994476	Durbin-Watson stat	1.311326
Prob(F-statistic)	0.001097		
Unweighted Statistics			
R-squared	0.059477	Mean dependent var	0.261091
Sum squared resid	2.213258	Durbin-Watson stat	0.464236

Source : (Output E views 9, 2021)

Based on the results of the Adjust R2 determination test in table 5 above, the Adjust R-squered value is 0.209150. This shows that the variable tax avoidance can be explained by the dependent variable (leverage and firm size) and the moderating variable (profitability) of 20.9%. While the rest (100% - 20.9% = 79.1%) is explained by other variables not included in this study.

Simultaneous Test (Test F)

The results of the Simultaneous Test (F Test) from this study are presented in table 5. The calculated F value is 5.994476 and a significance value of 0.0001097. the table can be seen with the statistical table at a significance level of 0.05 with df-1 (k – 1) or (3-1 = 2) and df-2 (nk) or (72-2 = 70) (n) is the amount of data and k is the number of independent variables. The results obtained for F table are 3.13, so that F count > F table (5.994476 > 3.13) and the

probability value (F-statistic) < significance value (0.0001097 < 0.05). it can be concluded that all the independent variables of leverage , firm size , and profitability have a simultaneous effect on the dependent variable of tax avoidance .

Moderated Regression Analysis (MRA) Test Results
1. Profitability moderates the effect of leverage on tax avoidance

Table 6 . Regression Test Results with Moderation 1

Variables	coefficient	Std. Error	t-Statistics	Prob.
C	0.137903	0.106399	1.296091	0.1993
LEV (X1)	-0.048219	0.071018	-0.678964	0.4995
PROFIT (Z)	0.174837	0.436930	0.400150	0.6903
LEV*PROFIT (Z1)	0.704479	0.413950	1.701848	0.0934

Source : (Output E views 9, 2021)

Based on the MRA test results in table 12, it can be seen that the value of Prob. LEV*PROFIT is 0.0934 > significance is 0.05 and the value of Prob. PROFIT of 0.6903 > 0.05 significance. The MRA 1 coefficient is 0.704479 with a LEV regression coefficient of -0.048219. it can be concluded that profitability weakens the relationship between leverage and tax avoidance . The results of the MRA 1 test include a type of potential moderation because the Prob. PROFIT is non-significant and the interaction value Prob. LEV*PROFIT is non-significant, meaning that the moderating variable (PROFIT) has the potential to become a moderating variable.

2. Profitability moderates the effect of firm size on tax avoidance

Table 7 . Regression Test Results with Moderation 2

Variables	coefficient	Std. Error	t-Statistics	Prob.
C	0.878026	1.096861	0.800490	0.4262
SIZES (X2)	-0.024552	0.030104	-0.815592	0.4176
PROFIT (Z)	0.572190	0.979645	0.584078	0.5611
SIZE*PROFIT (Z2)	-0.000596	0.062879	-0.009476	0.9925

Source : (Output E views 9, 2021)

Based on the results of the MRA test in table 13, it can be seen that the prob. SIZE*PROFIT is 0.9925 > 0.05 significance and the Prob value. SIZE is 0.5611 > 0.05 significance. the MRA 2 coefficient is -0.000596 with a SIZE regression coefficient of -0.024552. then it can be concluded the variable profitability weakening the relationship between firm size and tax avoidance. The MRA 2 test results include a type of potential moderation because the value of Prob. Non-significant PROFIT and interaction value Prob. SIZE*PROFIT is non-significant, meaning that the moderating variable (PROFIT) has the potential to become a moderating variable. From the results above, it can be concluded that profitability cannot moderate the influence of firm size on tax avoidance.

Research Discussion
a. The Effect of Leverage on Tax Avoidance

Leverage affects tax avoidance . Leverage is the level of a company's ability to use assets or capital that has a fixed cost (debt or shares) in order to realize the company's goal of maximizing the value of the company concerned. Another definition of leverage is the company's ability to use assets or funds that have fixed costs to increase the level of income for company owners. This policy arises if the company in financing its operational activities uses loan funds or funds that have fixed costs such as interest expenses. Small changes in fixed costs will result in large price changes. Miaslanya such as interest costs, borrowing costs and others related to debt. When a company increases debt, there is a commitment to bear cash outflows over the next several periods even though cash inflows in the same period are uncertain. Therefore, the risk that must be borne is even greater. On the other hand, debt that is added to the balance sheet will increase the interest expense which will be deducted before calculating income tax. DER is used to determine each unit of own capital used to guarantee debt. For creditors, the greater the ratio, the higher the risk borne. On the other hand, for companies, the higher the ratio, the better because a low DER indicates that the funding provided by the owner as collateral is higher and the security margin for borrowers is greater.

This research is in line with that conducted by [36]high leverage values indicate that companies have a higher level of debt than their own capital. This is in line with the trade-off theory (balancing theory), which is a theory that balances benefits (tax protection) and sacrifices (interest) that arise as a result of using debt by companies. The high debt in a company will cause a fixed burden for the company, namely interest expense. A very high level of interest expense in a company can reduce the company's tax burden. So companies that have a high tax burden will prefer to owe to other parties rather than increase their own capital in order to minimize their tax burden. The results of this leverage test affect tax avoidance where the higher the leverage value the higher the possibility of tax evasion in construction companies listed on the Indonesia Stock Exchange.

b. Effect of firm size on tax avoidance

Firm size has an effect on tax avoidance. Firm size can be seen from the number of assets the company owns. The greater the total assets, the greater the size of the company. A large number of assets indicates that the amount of funding used to obtain these assets is also greater. The amount of funding reflects investment from investors or company debt, the larger the size of the company, the greater the need for funds.

The results of this study are in line with those conducted by [37]and [38]which state that firm size has an effect on tax avoidance . This indicates that the greater the total assets, the greater the size of the company. A large number of assets indicates that the amount of funding used to obtain these assets is also greater. The amount of funding reflects investment from investors or company debt, the larger the size of the company, the greater the need for funds and any increase in company size will increase avoidance tax. In accordance with the agency theory where the size of a large company has sufficient and more resources to reduce its tax burden compared to a smaller (principal) company that carries out tax planning so that optimal tax savings can be achieved . In this case taxes saving describes tax avoidance by companies in a legal way . Large companies tend to have more space to do good planning and adopt effective accounting practices to reduce the company's tax burden.

c. Effect of Profitability in moderating leverage on tax avoidance

Net Profit Margin is a measure of profit by comparing profit after interest and tax with sales which shows the company's ability to obtain net income or sales. If the company pays attention to the proportion of debt that exists in the company and manages its debt effectively and efficiently in the company's operational activities, it will increase the company's ability to earn profits. Companies that have high profitability will carry out tax avoidance to reduce the amount of their tax liability burden.

This research is in line with that conducted by [39]which states that profitability does not moderate leverage on tax avoidance . This is because companies with high profitability can influence the low influence of leverage on the tax avoidance of a company. Profitability shows the company's ability to generate profits. The results of this study are in line with agency theory which assumes that management as an agent who has the authority to make decisions on a company will consider funding from debt with the aim of minimizing the tax burden. However, with high profitability, management no longer considers using debt to fund its business as a tax management measure. Company management does not want to take the risk of high debt, because with high debt a company's cash flow becomes tighter, besides that company management will also avoid bonuses. A high level of leverage will affect management's goal of obtaining maximum compensation. Therefore, management will prefer to take advantage of high profitability to maximize company profits. Another thing that causes profitability to be unable to moderate tax avoidance is because after-tax profit has been deducted by the tax burden, this is in accordance with the analysis conducted by [40]which states that the motivation for doing tax planning is to maximize profit after tax. This happens because companies carry out tax planning to optimize profit after tax.

d. Effect of Profitability in moderating Firm Size on Tax Avoidance

This research is in line with that conducted by [41]who stated that profitability is unable to moderate the influence of company size on tax avoidance. In agency theory, company size is a scale that describes the size of a company as indicated by the number of assets, which means that the higher the value of the company's net profit, the higher its profitability. The size of the company with the greater the number of assets, the greater the capital required. invested and the greater the turnover of funds in the company being managed so as to improve the company's performance. However, it does not necessarily increase tax avoidance activities in companies. This means that the high or low level of profitability of large or small companies is not a guarantee of tax avoidance . So that profitability is not able to moderate the effect of company size on tax avoidance .

e. Effect of Leverage and Firm size on Tax avoidance

Leverage is used to measure how much total equity is financed with total debt . Debt can cause a decrease in taxes because there is interest expense arising from debt owned by the company. The lower this ratio indicates, the higher the level of funding provided by the financial owners of a company and vice versa [10]. This is because interest costs from debt can be reduced in calculating the tax burden so that the tax burden becomes smaller. Another determining factor in tax avoidance is firm size. Firm size in this study is proxied by the natural league of

the total assets of the taxpayer. The larger the total assets indicate the larger the size of the company, the larger the size of the company, it is assumed that the transactions carried out by the company will be more complex. So it is assumed that the bigger the loophole, the more tax payers can use it to avoid taxes. This theory is in line with research by [8]and [42]which states that leverage and firm size influence tax avoidance.

In this study the profitability of the construction companies sampled in this research is classified as low to medium, so companies need to carry out several strategies so that company profitability is maintained. Several strategies that can be carried out by companies are as follows : a) Stop various activities that do not bring profit to the company, b) Controlling various costs both internal and external to the company, c) Increasing company productivity by utilizing the assets owned by the company effectively and efficiently.

V. Conclusions

This study aims to determine the effect of leverage and firm size on tax avoidance with profitability as a moderating variable. Based on the data analysis that has been done, the researcher will provide several conclusions, namely Leverage has an effect on tax avoidance , Firm size has an effect on tax avoidance , Profitability cannot moderate Leverage on tax avoidance , Profitability cannot moderate Firm size on tax avoidance , Leverage and Firm Size have a simultaneous effect on Tax Avoidance. From the conclusions that the authors convey, the authors can convey several suggestions that can be used as input for further researchers. It is recommended that further research add samples and research objects other than construction companies listed on the Indonesia Stock Exchange, so that the research sample coverage is wider, so that more samples are obtained and the results of similar research are better. Limitation this research is research period only taking 6 years, it is hoped that further research development can extend the research period so that the results obtained can better reflect the Firm Size of companies on the Indonesian Stock Exchange. It is recommended that further research use different variables such as transfer pricing, institutional ownership, current ratio and other factors that are thought to influence the emergence of Tax Avoidance activities. Future research can use other variables as moderating variables such as constitutional ownership. And also can use intervening variables and or control variables in further research. Tax avoidance calculations using the cash effective tax rate formula and profitability using the calculation of the return on assets formula to support other variables.

References

[1]   J. L. E. Manuputty and S. Sudradjat, "Analisis Perhitungan Pajak Penghasilan Badan Pada Perusahaan Jasa Konstruksi," *Jurnal Ilmiah Akuntansi Kesatuan*, vol. 6, no. 3, pp. 205–216, 2018, doi: 10.37641/jiakes.v6i3.301.

[2]   R. Trianggara, "Penyimpangan kontrak jasa konstruksi dalam hal serah terima bangunan antara pengembang dengan kontraktor," *Universitas Diponegoro*, pp. 1–28, 2013.

[3]   R. Wahasusmiah, "Analisis Penerapan Pajak Penghasilan Atas Jasa Konstruksi dan Kesesuaian Standar Akuntansi Kontrak Konstruksi (PSAK No. 34)," *ACSY Politeknik Sekayu*, vol. VII, no. 2, pp. 22–32, 2018.

[4]   putri Vidiyanna Rizal, "Analisis Faktor-Faktor Yang Mempengaruhi Effective Tax Rate," *Jurnal Akuntansi*, vol. 9, no. 2, pp. 174–185, 2020, doi: 10.37932/ja.v9i2.136.

[5]   L. Arisa and I. A. Hanifah, "MACHIAVELLIAN I SM , SOCIAL RESPONSIBILITY , FAIRNESS ," vol. 07, no. 01, pp. 18–32, 2022.

[6]   P. W. Arianandini and I. W. Ramantha, "Pengaruh Profitabilitas, Leverage, dan Kepemilikan Institusional Pada Tax Avoidance," *E-Jurnal Akuntansi*, vol. 22, p. 2088, 2018, doi: 10.24843/eja.2018.v22.i03.p17.

[7]   B. Rohmansyah and D. Sunaryo, "Pengaruh Leverage, Profitabilitas Dan Ukuran Perusahaan Terhadap Agresivitas Pajak Pada Perusahaan Manufaktur Sektor Makanan dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Tahun 2013-2017," *Journal of Accounting Science and Technology*, vol. 1, no. 1, pp. 87–97, 2021.

[8]   H. BARLI, "Pengaruh Leverage Dan Firm Size Terhadap Penghindaran Pajak," *Jurnal Ilmiah Akuntansi Universitas Pamulang*, vol. 6, no. 2, p. 223, 2018, doi: 10.32493/jiaup.v6i2.1956.

[9]   S. N. Faizah and V. V. Adhivinna, "PENGARUH RETURN ON ASSET, LEVERAGE, KEPEMILIKAN INSTITUSIONAL DAN UKURAN PERUSAHAAN TERHADAP TAX AVOIDANCE," *Program Studi Akuntansi, Fakultas Ekonomi Universitas PGRI Yogyakarta*, vol. 59, 2017.

[10]   A. Azis and U. Hartono, "Pengaruh Good Corporate Governance, Struktur Modal, Dan Leverage Terhadap Kinerja Keuangan Perusahaan Pada Sektor Pertambangan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2011-2015," *Jurnal lmu Manajemen*, vol. 5, no. 3, pp. 1–13, 2017.

[11] I. P. Dalimunte and W. Prananti, "Pengaruh Cash Holding, Profitabilitas, Dan Financial Leverage Terhadap Income Smoothing Pada Perusahaan Manufaktur," *EkoPreneur*, vol. 1, no. 1, p. 13, 2019, doi: 10.32493/ekop.v1i1.3666.

[12] B. A. Khatami, I. Masri, and B. Suprayitno, "Pengaruh Net Profit Margin, Current Ratio, Dan Capital Intensity Ratio Terhadap Tax Avoidance," *Jiap*, vol. 1, no. 1, pp. 63–76, 2021.

[13] E. Sundari and Nofryanti, "PENGARUH DERIVATIF KEUANGAN DAN FINANCIAL LEASE," vol. 16, no. 2, pp. 142–150, 2019, doi: 10.25134/equi.v16i02.Abstract.

[14] F. UTAMA, D. J. KIRANA, and K. SITANGGANG, "Pengaruh Penghindaran Pajak Terhadap Biaya Hutang Dan Kepemilikan Institusional Sebagai Pemoderasi," *Jurnal Bisnis dan Akuntansi*, vol. 21, no. 1, pp. 47–60, 2019, doi: 10.34208/jba.v21i1.425.

[15] I. P. Dalimunte and W. Prananti, "Pengaruh Cash Holding, Profitabilitas, Dan Financial Leverage Terhadap Income Smoothing Pada Perusahaan Manufaktur," *EkoPreneur*, vol. 1, no. 1, p. 13, 2019, doi: 10.32493/ekop.v1i1.3666.

[16] R. S. Tiara Dewi, Muhammad Amir Masruhim, "Pengaruh Leverage Terhadap Effetive Tax rate dengan Profitabilitas Sebagai Variabel Pemoderasi pada Perusahaan Sektor Aneka Indutri yang Terdaftar di Bursa Efek Indonesia Periode 2013-2017," *Laboratorium Penelitian dan Pengembangan FARMAKA TROPIS Fakultas Farmasi Universitas Mualawarman, Samarinda, Kalimantan Timur*, vol. 2, no. 4, pp. 5–24, 2016.

[17] E. D. P. Sari and S. Marsono, "Pengaruh Profitabilitas, Leverage, Dan Ukuran Perusahaan Terhadap Penghindaran Pajak Pada Perusahaan Sektor Industri Barang Konsumsi Yang Terdaftar Di Bei Tahun 2016-2018," *Aktual: Journal of Accounting And Financial*, vol. 5, no. 1, pp. 45–52, 2020.

[18] F. M. Noor, "Pengaruh Profitabilitas Dan Ukuran Perusahaan Terhadap Nilai Perusahaan," *Jurnal Ilmu Dan Riset Akuntansi*, vol. 10, no. 9, pp. 1–23, 2021.

[19] S. B. Ass, "Analisis Rasio Profitabilitas Dan Solvabilitas Pada PT. Mayora Indah Tbk .," *Jurnal Brand*, vol. 2, no. 2, pp. 195–206, 2020.

[20] D. Pasaribu, "PENGUJIAN TEORI PECKING MODEL DAN TRADE OFF DALAM ANALISIS STRUKTUR MODAL PADA PERUSAHAAN FARMASI YANG TERDAFTAR DI BURSA EFEK INDONESIA Dompak," *J Chem Inf Model*, vol. 110, no. 9, pp. 1689–1699, 2017.

[21] Mardiasmo, *Perpajakan Edisi Revisi*. Andi (ed.), 2011.

[22] S. Resmi, *Perpajakan Teori dan Kasus*. Salemba Empat, 2014.

[23] J. Gultom, "PENGARUH PROFITABILITAS, LEVERAGE, DAN LIKUIDITAS TERHADAP TAX AVOIDANCE," *Universitas Pamulang*, vol. 4, No. 2, no. 2, pp. 239–253, 2021.

[24] R. Bisnis, D. A. N. Tingkat, P. Terhadap, and Y. Viandgo, "Analisis pengujian pengaruh ukuran perusahaan, profitabilitas, risiko bisnis, dan tingkat pertumbuhan terhadap," pp. 1–6, 2011.

[25] R. A. Azka, "Pengaruh Leverage , Firm Size , Dan Profitabiity Terhadap Firm Value Dengan Tax Avoidance Sebagai Variable Moderating," *Prosiding Seminar Nasional Pakar*, vol. 2, pp. 1–7, 2019.

[26] R. Handayani, "Pengaruh Return on Assets (ROA), Leverage dan Ukuran Perusahaan Terhadap Tax Avoidance Pada Perusahaan Perbankan yang Listing di BEI Periode Tahun 2012-2015," *Jurnal Akuntansi Maranatha*, vol. 10, no. 1, pp. 72–84, 2018, doi: 10.28932/jam.v10i1.930.

[27] Kasmir, *Analisis Laporan Keuangan*, Edisi Satu. Jakarta: PT Raja Grafindo Persada, 2014.

[28] A. N. Laoli and V. Herawaty, "Pengaruh Profitabilitas, Growth, Leverage, Operating Cycle Dan Prudence Terhadap Kualitas Laba Dengan Firm Size Sebagai Variabel Moderasi," *Prosiding Seminar Nasional Cendekiawan*, no. 2000, p. 2, 2019, doi: 10.25105/semnas.v0i0.5828.

[29] Santry Afriani Dewi, Firman Surya, and Zahara, "Analisis Pengaruh Kebijakan Hutang dan Ukuran Perusahaan terhadap Nilai Perusahaan dengan Agency Cost sebagai Variabel Intervening (Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2014-2017)," *Akuntansi dan Manajemen*, vol. 13, no. 1, pp. 34–58, 2018, doi: 10.30630/jam.v13i1.30.

[30] B. Rohmansyah and D. Sunaryo, "Pengaruh Leverage, Profitabilitas Dan Ukuran Perusahaan Terhadap Agresivitas Pajak Pada Perusahaan Manufaktur Sektor Makanan dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Tahun 2013-2017," *Journal of Accounting Science and Technology*, vol. 1, no. 1, pp. 87–97, 2021.

[31] Setyo, A. Artanti Yunis, and W. S. Adi, "PENGARUH UKURAN PERUSAHAAN, PROFITABILITAS, LEVERAGE, SALES GROWTH, DAN KINERJA KEUANGAN TERHADAP NILAI PERUSAHAAN," *in Conference on Economic and Business Innovation (CEBI)*, no. 35, pp. 1635–1646, 2022.

[32] S. D. Wardhani and Z. A. Adiwijaya, "Analisis Pengaruh Ukuran Perusahaan, Institusional Terhadap Penghindaran Pajak Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (Bei) Periode 2014-2017 Analyze the Effect of Size Firm , Return on Asset (Roa), Leverage , and Instituti," *Konferensi Ilmiah Mahasiswa Unissula (KIMU) 2*, no. Idx, pp. 76–97, 2019.

[33]   H. A. Fitriyani, "PENGARUH NET PROFIT MARGIN (NPM) DAN BIAYA OPERASIONAL PENDAPATAN OPERASIONAL (BOPO) TERHADAP RETURN ON ASSETS (ROA) (Pada Perusahaan Transportasi Yang Terdaftar Di Bursa Efek Indonesia Tahun 2013-2015," *Jurnal Bisnis dan Akuntansi Unsurya*, vol. 4, no. 2, pp. 94–106, 2019.

[34]   P. dr Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D.* Bandung: Alfabeta, 2017.

[35]   I. Ghozali and D. Ratmono, *Analisis Multivariat dan Ekonometrika (Teori, Konsep, dan Aplikasi dengan Eviews 10) (2nd ed.).* Badan Penerbit Universitas Diponegoro, 2017.

[36]   M. D. R. Saputra and N. F. Asyik, "Pengaruh Profitabilitas , Leverage Dan Corporate Governance," *Jurnal Ilmu dan Riset Akuntansi*, vol. 6, pp. 1–19, 2017.

[37]   I. Aulia and E. Mahpudin, "Pengaruh Profitabilitas, Leverage dan Ukuran Perusahaan Terhadap Penghindaran Pajak (Tax Avoidance)," *Syntax Idea*, vol. 3, no. 2, p. 354, 2021, doi: 10.36418/syntax-idea.v3i2.1050.

[38]   K. Alviyani, "PENGARUH CORPORATE GOVERNANCE, KARAKTER EKSEKUTIF, UKURAN PERUSAHAAN, DAN LEVERAGE TERHADAP PENGHINDARAN PAJAK (TAX AVOIDANCE)," *JOM Fekon*, vol. 3, No. 1, no. 564, pp. 1–73, 2014.

[39]   E. Sujannah, "Leverage, Kepemilikan Institusional, Dan Transfer Pricing, Penghindaran Pajak: Profitabilitas Sebagai Variabel Moderasi," *Jurnal Literasi Akuntansi*, vol. 1, no. 1, pp. 66–74, 2021, doi: 10.55587/jla.v1i1.3.

[40]   M. Raisa Nasution, "ANALISIS RASIO PROFITABILITAS SEBAGAI ALAT UNTUK MENILAI KINERJA KEUANGAN PADA PT JAYAWI SOLUSI ABADI MEDAN," vol. 7, no. 2, pp. 44–68, 2018.

[41]   M. Oktafiyani and C. B. Permana, "Jurnal Akuntansi dan Audit Syariah Peran Profitabilitas Dalam Memoderasi Tax Avoidance : Dilihat dari Ukuran Perusahaan," vol. 2, no. 1, pp. 1–14, 2021.

[42]   C. Tanjaya and N. Nazir, "Pengaruh Profitabilitas, Leverage, Pertumbuhan Penjualan, Dan Ukuran Perusahaan Terhadap Penghindaran Pajak," *Jurnal Akuntansi Trisakti*, vol. 8, no. 2, pp. 189–208, 2021.