

ANALYSIS OF FACTORS AFFECTING TAX AGGRESSIVITY IN PROPERTY AND REAL ESTATE COMPANIES LISTED IN INDONESIA STOCK EXCHANGE, 2017-2019

Anisa Alfarisi Rambe
Wiwik Utami

ABSTRACT

This research aims to analyze the factors that influence tax aggressiveness in property and real estate companies listed on the Indonesia Stock Exchange in 2017-2019. The factors include leverage, profitability, Capital Intensity Ratio, and inventory intensity. Leverage is proxied using the Debt-to-Equity Ratio (DER) formula, profitability is proxied using the Return On Assets (ROA) formula, and tax aggressiveness is proxied using the Effective Tax Rate (ETR). This type of research is quantitative. The population in this study were property and real estate companies listed on the Indonesia Stock Exchange for the period 2017-2019 which consisted of 62 companies with a total population of 62. Determination of the sample using a random sampling method with the Slovin formula with a total of 53 samples selected. The results showed that Leverage has no significant effect on tax aggressiveness. Profitability has no significant effect on tax aggressiveness. Capital Intensity Ratio has a significant positive effect on tax aggressiveness, and Inventory Intensity has a significant negative effect on tax aggressiveness.

Keywords: Leverage, Profitability, Capital Intensity Ratio, Inventory Intensity and Tax Aggressiveness

INTRODUCTION

Taxes are one of the biggest sources of state revenue. Based on Law Number 16 of 2009 which is the fourth amendment to Law Number 6 of 1983 concerning General Provisions and Tax Procedures in Article 1 paragraph 1 "tax is a compulsory contribution to the state owed by an individual or entity that is compelling, based on the Law without receiving direct compensation and used for the state's needs for the greatest prosperity of the people".

Companies are taxpayers and contribute greatly to state revenue. This is reflected in the amount of tax the company pays each period. Meanwhile, companies always consider tax to be a burden that reduces company profits, so the company tries to make efforts to reduce its tax burden. On the other hand, the government wants optimal taxes to finance the country's development plans. The difference in interests between taxpayers and the government causes an effort to reduce tax payments by taxpayers which is called aggressive taxation or tax aggressiveness.

Tax aggressiveness is an aggressive tax planning. The tax planning is considered aggressive if it violates existing tax regulations and has a negative impact on the company's sustainability. The phenomenon of corporate tax aggressive cases has often occurred, one of which is the property and real estate sub-sector which is published on an online news site (www.merdeka.com) on Thursday, August 22, 2013, regarding the SIM simulator case that reveals tax avoidance on property transactions. In court proceedings it was revealed that the developer had sold a luxury house to the defendant for Rp. 7.1 billion in Semarang. However, the notarial deed only says Rp. 940 million. That means there is a price difference of Rp. 6.1 billion. For this transaction, there is a potential VAT (Value Added Tax) that must be paid by 10 percent multiplied by Rp. 6.1 billion or Rp. 610 million. Another disadvantage is that the final income tax (PPh) is 5 percent multiplied by Rp. 6.1 billion or Rp. 300 million. The total tax shortfall was IDR 900 million. If this developer sells hundreds of luxury housing units, the state's losses can reach tens of billions of rupiah from one housing project. In addition, the defendant also bought a house in the Depok area for Rp 2.65 billion. However, the sale and purchase certificate only says Rp. 784 million, or there is a difference of Rp. 1.9 billion. The potential for unpaid VAT is 10 percent times Rp. 1.9 billion or Rp. 190 million and final PPh 5 percent times Rp. 1.9 billion or Rp. 85 million. The total tax is underpaid developer of Rp. 275 million from just one housing unit. The difference in value clearly causes a loss of potential state revenue.

With the facts of the court, it is possible that the Directorate General (DG) of Taxes will develop a case of buying a house by the defendant with 7 SIM simulators into a tax investigation on charges of tax evasion, considering that there is an attempt to conceal the real transaction. In this case, the seller may be charged with embezzlement of Article 4 (2) Income Tax (PPh) at a rate of 5% of the final transaction value, while the buyer may be charged with embezzlement of Land and Building Acquisition Tax (BPHTB) with a rate of 5% of the transaction value. From some of the phenomena above, it is evident that tax avoidance measures for the past few years have become a very important issue to get more attention. Not only is it an example for the wider community including related companies, but it can also be a benchmark for the government to be able to continue to make efforts to reduce taxpayer non-compliance.

The Directorate General of Taxes recorded that tax revenue from the property and real estate sector fell in 2016. The potential for tax revenue from the property and real estate sector comes from Final Income Tax (PPh) Article 4 paragraph 2, namely the income received by sellers (developers, developers), for doing land / building sale and purchase transactions of 5% and Value Added Tax (VAT) on transactions of taxable goods in the form of land / buildings that are not very simple housing categories at 10%. Meanwhile, the tax collected by local governments in property transactions is a 5% fee for land and building rights (BPHTB). The Directorate General of Taxes found a potential loss of tax revenue due to not reporting the actual transactions of buying and selling land / buildings including property and real estate. This occurs because the tax paid uses a Tax Object Selling Value (NJOP) based

transaction, not an actual or real transaction based. Tax revenue realization in Indonesia has not been achieved due to several factors, including the low level of taxpayer compliance. The growth of companies in the property and real estate sector increased by 10% compared to other sectors, but the growth in these sectors did not increase state revenues from property and real estate taxes. (Sjahril et al 2020)

Samrotun (2016) states that there is a tax avoidance mode in the property and real estate sector, namely avoiding taxes on canceled orders by means of VAT on installments that have been paid on canceled property units, never reported to the Directorate General of Taxes, and not reporting income from penalty fees and booking fee for canceled units to the Directorate General of Taxes. And the next mode, the developer makes the sale in installments so that tax payments are in accordance with the installments while the consumer or bank has paid in full. The case above shows that many corporate taxpayers avoid paying taxes to the state. Tax imposition is given by the government to taxpayers as taxpayer participation to increase the growth rate of the country's development. Taxes paid by taxpayers are not a voluntary contribution but an attraction of the people's wealth by coercion so that in paying taxes, taxpayers must be able to follow the applicable tax regulations (Adisamartha and Noviyari, 2015).

Companies that are currently established generally do not aim for the welfare of their shareholders by earning a profit, the company is also not satisfied with saving a little in taxes. In practice, these companies will try in various ways to save as much tax as possible even though the risk to be borne is also greater. In the field of accounting, tax is a cost component that can reduce corporate profits. The amount of tax that must be deposited in the state treasury depends on the amount of profit the company gets for one year. Paying taxes in accordance with the provisions will of course contradict the main objective of the company, namely maximizing profits or profits, so the company tries to minimize the tax costs it bears (Ardyansyah, 2014 in Indradi 2018).

Companies that have a profit orientation have the possibility to always maximize profits and reduce all costs, including reducing tax burdens and even eliminating tax obligations. Taxpayers often take advantage of the weaknesses of the government in committing tax fraud. Lack of special attention from the government on tax collection policies can be an opportunity for companies to commit tax fraud. One of the opportunities carried out by taxpayers is through tax avoidance, tax planning and tax aggressiveness. (Savitri et al 2017)

There are several factors that can affect the level of tax aggressiveness, including leverage, profitability, capital intensity ratio, inventory intensity and many more. The development of the property and real estate sector in Indonesia is currently experiencing rapid growth of around 10% compared to other sectors, however the growth in this sector has not made state revenue from property and real estate taxes increase. Based on the background and the phenomena that occur, in the preparation of this study the author is interested in taking the title "Analysis of Factors Affecting Tax Aggressiveness in Property and Real Estate Companies Listed on the Indonesia Stock Exchange 2017-2019".

THEORETICAL BASIS

Agency Theory

Agency theory explains the conflict that will arise between company owners and management (Jensen & Meckling, 1976). The separation between owner and company management can cause problems. Tax aggressiveness is influenced by the existence of a conflict of interest between the agent (management) and the interests that arise when each party tries to achieve or maintain the level of prosperity it wants. Companies that carry out tax aggressiveness, of course, also through policies taken by company management to build a good image of the company and achieve maximum profit. Meanwhile, company owners (investors) do not want tax aggressiveness because they are considered to be manipulating financial statement data.

In the contemporary view, tax aggressiveness has two purposes, namely not only to cover up income from the tax authorities, but also to cover up hidden activities that can harm owners or shareholders. As an agent, the manager is morally responsible for optimizing the profits of the owners (principal), but on the other hand, the manager has an interest in maximizing their welfare (Jensen and Meckling, 1976) Agents as those who know better about the management of the company will apply accounting policies that can support his interests. To see a company doing tax avoidance or not, it can be seen from the application of inventory valuation, the method applied is in accordance with tax regulations, namely the FIFO method if outside these rules the resulting profit will decrease, with a decrease in profit, it shows that the accounting policy chosen by management has a purpose. for certain as well as tax aggressiveness. In addition, this study also measures the application of the depreciation method for fixed assets in accordance with the straight-line method applied for tax reporting.

Given that tax is a burden (which will reduce the company's net profit), the company will make every effort to pay the smallest possible tax and try to avoid taxes. However, tax avoidance must be carried out in legal ways so as not to harm the company in the future. Plesko (2002) and Phillips et al. (2003) revealed that the greater the difference between taxable income and accounting profit, the greater the management's discretion. The amount of management discretion will be reflected in the deferred tax expense and can be used to detect earnings management practices in the company.

Associated with positive accounting theory, Watts and Zimmerman (1990) state that human behavior can be explained by behavior in the form of a desire to improve one's own welfare, and an instinct to lead to understanding and predictions in determining the choice of corporate accounting policies expressed as part of the company's need to minimize contract costs. Accounting policies are largely determined by the company's organizational structure according to environmental conditions and the choice of

accounting policies is part of the company's management. The bigger the company environment, the accounting policies chosen to meet the interests of management and stakeholders are getting bigger and wider.

In practice, the accrual accounting policy is applied through the treatment of transactions related to earnings to be closer to the firm's expected value. This is because management has the competence to control the quantification of events that affect earnings. Accounting policies have the potential to influence real management decisions, including the decision to intervene in an accounting standard. Zeff (1978) defines economic consequences as the impact of accounting reporting on the behavior of business, government (in determining tax amounts) and creditors.

The essence of this definition is that accounting reports can influence real decisions made by managers and reflect their desires. So that the more companies are likely to carry out higher tax aggressiveness. According to political economy, accounting explicitly states that alternative financial reporting systems (for example between regulated versus unregulated) have social consequences, that is, in a system some people will feel better when others feel the opposite, so the system is politicized as an economic behavior.

Tax Aggressiveness

Tax aggressiveness is an activity or action that has the aim of reducing the company's taxable income either actively or illegally in order to reduce the tax burden so that the company's profits are optimal. (Novitasari et al 2017 in Maulana 2020). Tax aggressiveness is measured by using the effective tax rate (ETR) proxy, namely the tax burden divided by the profit before tax.

$$\text{ETR} = \frac{\text{Income Tax Expense}}{\text{Profit Before Tax}}$$

Leverage

The leverage ratio is a ratio used to measure the extent to which a company is financed by debt. So it can be said that the leverage ratio is the ratio used to measure how much debt the company must bear. Hery (2017: 162). Leverage can be measured using the ratio of total debt to equity ratio. The formula for calculating leverage is as follows: Bambang Riyanto (2016: 375)

$$\text{Debt To Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

Profitability

Profitability is the company's ability to earn profits in relation to sales, total assets and own capital. Sartono in Fatmawati (2017: 19). ROA can be calculated with the following formula: Brigham and Houston in Satriana (2017: 15)

$$\text{Return On Assets} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

Capital Intensity Ratio

The capital intensity ratio can show the level of efficiency of a company in using its assets to generate profits from sales made by the company (Lestari et al., 2016).

$$\text{CIR} = \frac{\text{Total Fixed Assets}}{\text{Total Assets}}$$

Inventory Intensity

Inventory intensity is a part of assets, which is proxied by comparing the total inventory with the total assets owned by the company (Andhari and Sukartha, 2017).

$$\text{INVINT} = \frac{\text{Total Inventory}}{\text{Total Assets}}$$

RESEARCH METHODS

This research is a type of quantitative research. This research is a causal research, namely research that aims to obtain information about the relationship and influence between two or more variables. This study discusses the analysis of the factors that influence tax aggressiveness. The independent variable in this study consists of leverage, profitability, capital intensity ratio, and inventory intensity, while the dependent variable is tax aggressiveness. This research includes property and real estate companies listed on the IDX from 2017 to 2019. Tax aggressiveness is proxied using the ratio of effective tax rates (ETR). Leverage is proxied by using the ratio of debt to equity ratio (DER) and profitability is proxied by using the ratio of Return On Assets (ROA).

RESEARCH RESULT**A. Description of Research Object****Tabel 4.1 Descriptive Statistical Analysis**

	N	ETR	DER	ROA	CIR	INVINT
Mean	53	0,146666038	0,884452201	0,044867296	0,402657233	0,226305031
Maximum	53	1,2748	9,9433	0,2892	1	0,8033
Minimum	53	0.000000	0.000000	0.000000	0.000000	0.000000
Std. Dev.	53	0,28459006	1,207262647	0,045983618	0,258012791	0,215116024

Source : Data processed with *EViews* 9.0

Based on the descriptive results in Table 4.1, it can be seen that the data to be used in this study varies widely with a very wide range. The highest ETR value for property and real estate companies listed on the IDX in 2017-2019 is 1.2748, namely at PT. Duta Anggada Realty Tbk (DART). Then the mean or average ETR value is 0.146666038 or 14.66% and the standard deviation is 0.28459006.

The issuer with the highest DER value is Pollux Investasi International Tbk (POLI) with a value of 9.9433 in 2017. Then the mean or average DER value is 0.884452201 and the standard deviation is 1.207262647.

The results of the descriptive statistical analysis of the ROA variable show a maximum value of 0.2892 owned by the company Capri Nusa Satu Property Tbk (CPRI). The mean or average ROA value is 0.044867296 and the standard deviation value is 0.045983618.

The Capital Intensity Ratio variable has a maximum value of 1 owned by the companies Capri Nusa Satu Property Tbk (CPRI) and Urban Jakarta Propertindo Tbk (URBN). Then the mean or average Capital Intensity Ratio is 0.402657233 and the standard deviation value is 0.258012791.

The results of the descriptive statistical analysis of the Inventory Intensity variable showed a maximum value of 0.8033, namely the Metropolitan Kentjana Tbk (MKPI) company. And the mean or average value is 0.226305031 and the standard deviation value is 0.215116024.

Issuers that have the lowest ETR, DER, CIR, and INVINT are Bumi Citra Permai Tbk (BCIP), Sentul City Tbk (BKSL), Cowel Development Tbk (COWL), Marga Abhinaya Abadi Tbk (MABA), Hanson International Tbk (MYRX), Rimo International Lestari Tbk (RIMO), Sitara Propertindo Tbk (TARA), Urban Jakarta Propertindo Tbk (URBN), which is 0.000000 or 0% for the 2018-2019 period.

B. Assumption Test**1) Panel Data Regression Analysis****a) Chow Test**

The Chow Test or Chow Test is a test to determine whether the Common Effect Model (CEM) or Fixed Effect Model (FEM) is more appropriate. In Table 4.2, it can be seen that the chi-square cross-section probability value is 0.0000. Value $0.0000 < 0.05$, it can be concluded that H_0 is rejected, meaning that the Fixed Effect Model (FEM) model is more appropriate to use in this study. The following is a table of results from the chow test :

Tabel 4.2 Chow Test

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

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.156817	(52,102)	0.0005
Cross-section Chi-square	117.934262	52	0.0000

Cross-section fixed effects test equation:
Dependent Variable: ETR
Method: Panel Least Squares
Date: 01/12/21 Time: 17:10
Sample: 2017 2019
Periods included: 3
Cross-sections included: 53
Total panel (balanced) observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3119.423	1901.585	1.640433	0.1030
DER	-0.006232	0.077230	-0.080701	0.9358
ROA	-5.009568	2.000656	-2.503963	0.0133
CIR	0.650453	0.545277	1.192886	0.2347
INVINT	0.005448	0.637730	0.008543	0.9932
R-squared	0.053209	Mean dependent var		3325.352
Adjusted R-squared	0.028617	S.D. dependent var		11647.34
S.E. of regression	11479.47	Akaike info criterion		21.56545
Sum squared resid	2.03E+10	Schwarz criterion		21.66196
Log likelihood	-1709.453	Hannan-Quinn criter.		21.60464
F-statistic	2.163673	Durbin-Watson stat		0.857378
Prob(F-statistic)	0.075664			

Source : Data processed with *EViews* 9.0

b) Hausman Test

The Hausman test is a test to determine whether the Fixed Effect Model (FEM) or the Random Effect Model (REM) is most appropriate to use. The following is a table of results from the Hausman test :

Tabel 4.3 Hausman Test

Correlated Random Effects - Hausman Test
Equation: REM
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.006590	4	0.9088

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
DER	-0.044927	-0.015051	0.006705	0.7152
ROA	-2.415238	-4.221229	4.068141	0.3706
CIR	0.605934	0.676765	0.535565	0.9229
INVINT	-0.205133	-0.046073	1.178237	0.8835

Cross-section random effects test equation:

Dependent Variable: ETR

Method: Panel Least Squares

Date: 01/12/21 Time: 17:11

Sample: 2017 2019

Periods included: 3

Cross-sections included: 53

Total panel (balanced) observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2945.070	4469.221	0.658967	0.5114
DER	-0.044927	0.116739	-0.384853	0.7011
ROA	-2.415238	2.940996	-0.821231	0.4134
CIR	0.605934	0.941826	0.643361	0.5214
INVINT	-0.205133	1.293767	-0.158555	0.8743

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.549051	Mean dependent var	3325.352
Adjusted R-squared	0.301472	S.D. dependent var	11647.34
S.E. of regression	9734.615	Akaike info criterion	21.47781
Sum squared resid	9.67E+09	Schwarz criterion	22.57799
Log likelihood	-1650.486	Hannan-Quinn criter.	21.92458
F-statistic	2.217676	Durbin-Watson stat	1.765037
Prob(F-statistic)	0.000243		

Source : Data processed with *EViews 9.0*

Based on table 4.3, it can be seen that the random cross-section probability value is 0.9088. Value $0.9088 > 0.05$, it can be concluded that H_0 is accepted, so the method chosen is the Random Effect Model (REM). Then we continue with the Lagrange Multiplier test to determine whether we still choose Random effect or Common effect.

c) **Lagrange Multiplier (LM) Test**

The Lagrange Multiplier (LM) test is a test to determine whether the random effect model or the common effect model is more appropriate. The following is a table of results from the Lagrange Multiplier (LM) Test :

Tabel 4.4 Lagrange Multiplier (LM) Test

Lagrange Multiplier Tests for Random Effects

Null hypotheses: No effects

Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	12.36770 (0.0004)	0.128016 (0.7205)	12.49572 (0.0004)
Honda	3.516774 (0.0002)	-0.357793 --	2.233737 (0.0128)
King-Wu	3.516774 (0.0002)	-0.357793 --	0.325699 (0.3723)
Standardized Honda	3.840706 (0.0001)	0.045420 (0.4819)	-2.994227 --

Standardized King-Wu	3.840706 (0.0001)	0.045420 (0.4819)	-2.019400 --
Gourierioux, et al.*	--	--	12.36770 (< 0.01)

*Mixed chi-square asymptotic critical values:

1%	7.289
5%	4.321
10%	2.952

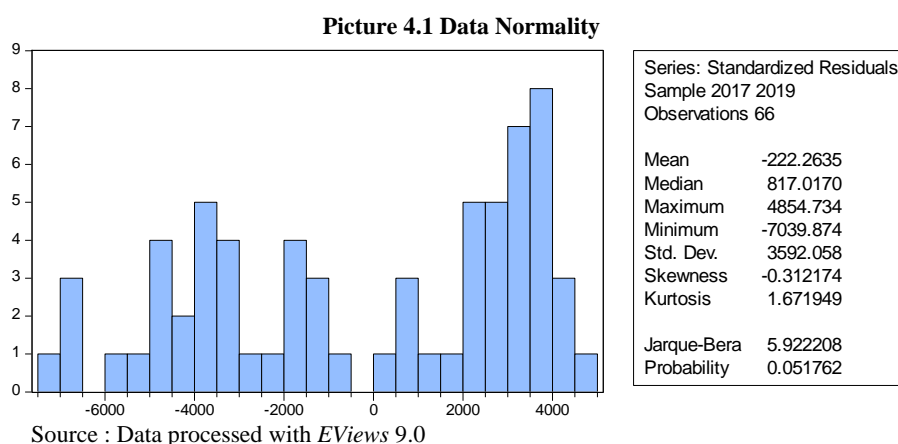
Source : Data processed with *EViews 9.0*

Based on table 4.4, it can be seen that the value of Both in Breusch-Pagan is 0.0004. The value of 0.0004 < 0.05 , therefore it can be concluded that H_0 is accepted, meaning that the Random Effect Model (REM) is more appropriate to use in this study.

2) Classic Assumption Test

a) Data Normality Test

The result of normality test of dependent variable value relevance is not normal, so it is necessary to do data transformation. The results of data transformation using the Log on the Value Relevance variable resulted in normally distributed data with the sample data being 66, so that there were outliers or extreme data that had to be removed, namely as many as 93 outliers. The following are the results of the normality test that is normally distributed :



Based on the results of the normality test in Figure 4.1, it can be seen that the JB probability value is 0.051762. Value 0.051762 > 0.05 , the residual data is normally distributed.

b) Multicollinearity Test

In a good multicollinearity regression model test, there should be no correlation between the independent variables if the correlation coefficient between each independent variable is less than 0.80. The results in table 4.5 show that the correlation coefficient value of all independent variables is < 0.80 , so there is no multicollinearity problem in the multiple regression equation. The following are the results of the multicollinearity test :

Tabel 4.5 Multicollinearity Test

	DER	ROA	CIR	INVINT
DER	1.000000	-0.184129	0.120093	0.097835
ROA	-0.184129	1.000000	0.097969	0.024988
CIR	0.120093	0.097969	1.000000	0.738155
INVINT	0.097835	0.024988	0.738155	1.000000

Source : Data processed with *EViews 9.0*

c) Heteroscedastisity Test

In the heteroscedasticity test, good data is homoscedasticity, that is, the regression model has the same or constant value. If the value of Obs * R-Squared is greater than the significance value $\alpha = 0.05$, then there is no heteroscedasticity. The following are the results of the Heteroscedasticity test :

Tabel 4.6 Heteroscedastisity Test

Dependent Variable: RESABS
 Method: Panel Least Squares
 Date: 01/12/21 Time: 16:49
 Sample: 2017 2019
 Periods included: 3
 Cross-sections included: 32
 Total panel (unbalanced) observations: 66

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3151.398	2200.684	1.432009	0.1625
DER	-0.007507	0.031835	-0.235800	0.8152
ROA	-0.292741	0.784844	-0.372993	0.7118
CIR	-0.002657	0.337139	-0.007882	0.9938
INVINT	-0.027725	0.573677	-0.048329	0.9618

Effects Specification

Cross-section fixed (dummy variables)			
R-squared	0.802288	Mean dependent var	2921.463
Adjusted R-squared	0.571624	S.D. dependent var	1594.177
S.E. of regression	1043.395	Akaike info criterion	17.04080
Sum squared resid	32660218	Schwarz criterion	18.23516
Log likelihood	-526.3464	Hannan-Quinn criter.	17.51275
F-statistic	3.478170	Durbin-Watson stat	2.915477
Prob(F-statistic)	0.000399		

Source : Data processed with *EViews 9.0*

Based on table 4.6, it shows that DER has a probability value of $0.8152 > 0.05$, then H_0 is accepted, meaning that there is no heteroscedasticity, ROA has a probability value of $0.7118 > 0.05$, then H_0 is accepted, meaning that there is no heteroscedasticity, CIR has a probability value of $0.9938 > 0.05$ then H_0 is accepted, meaning heteroscedasticity does not occur, and INVINT has a probability value of $0.9618 > 0.05$, so H_0 is accepted, meaning that there is no heteroscedasticity.

d) Autocorrelation Test

The autocorrelation test in this study was carried out by performing the Durbin-Watson test (DW test). The following is a table that shows the results of the Autocorrelation Test :

Tabel 4.7 Autocorrelation Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4598.246	1057.966	4.346310	0.0001
DER	0.014562	0.020825	0.699231	0.4871
ROA	-0.602635	0.515802	-1.168347	0.2472
CIR	1.110889	0.189498	5.862274	0.0000
INVINT	-1.352815	0.261034	-5.182520	0.0000

Effects Specification		S.D.	Rho
Cross-section random		3515.424	0.9611
Idiosyncratic random		707.3655	0.0389

Weighted Statistics			
R-squared	0.483341	Mean dependent var	759.2270
Adjusted R-squared	0.449462	S.D. dependent var	1001.525
S.E. of regression	723.5975	Sum squared resid	31939193
F-statistic	14.26656	Durbin-Watson stat	1.245421
Prob(F-statistic)	0.000000		

Source : Data processed with *EViews* 9.0

Based on table 4.7, it shows that the Durbin-Watson Satt (d) value is 1.245421, where the number of samples (n) is 66 and the number of independent variables (k) is 4. So the Durbin-Watson table shows the value of $dL = 1.4758$, the value of $dU = 1.7319$ and the $4-dU$ value = 2.2681 results from the Durbin-Watson table above, the DW value of 1.245421 is smaller than the dU value of 1.7319 and the $4-dU$ value of 2.2681 is greater than the dU value of 1.7319 which means that in this study there is positive autocorrelation. Therefore, autocorrelation improvement is done with first level differentiation. See in the table below :

Tabel 4.8 Uji Autokorelasi

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	441.4756	164.0912	2.690428	0.0121
D(DER)	-0.023974	0.014080	-1.702672	0.1001
D(ROA)	-1.006376	0.329570	-3.053600	0.0050
D(CIR)	1.150522	0.159863	7.196947	0.0000
D(INVINT)	-1.242714	0.257330	-4.829253	0.0000

Effects Specification		S.D.	Rho
Cross-section random		604.6686	0.6557
Idiosyncratic random		438.1516	0.3443

Weighted Statistics			
R-squared	0.750311	Mean dependent var	236.8674
Adjusted R-squared	0.713320	S.D. dependent var	871.0435
S.E. of regression	465.0068	Sum squared resid	5838246.
F-statistic	20.28361	Durbin-Watson stat	1.965037
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.686221	Mean dependent var	479.1875
Sum squared resid	15858182	Durbin-Watson stat	0.723435

Source : Data processed with *EViews* 9.0

Based on table 4.8, it shows that the Durbin-Watson Satt (d) value is 1.965037. Which means that the Durbin-Watson Satt value of 1.965037 lies between the value of $dU = 1.7319$ and the value of $4-dU = 2.2681$, which means that in this study there was no autocorrelation.

3) Pengujian Hipotesis

a. Correlation coefficient

Used to determine how closely the relationship between all independent variables X1 (DER), X2 (ROA), X3 (CIR) and X4 (INVINT) with the dependent variable Y (ETR).

Table 4.9 Results of Random Effect Model Regression

Dependent Variable: ETR
Method: Panel EGLS (Cross-section random effects)
Date: 01/12/21 Time: 17:24
Sample: 2017 2019
Periods included: 3
Cross-sections included: 32
Total panel (unbalanced) observations: 66
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4598.246	1057.966	4.346310	0.0001
DER	0.014562	0.020825	0.699231	0.4871
ROA	-0.602635	0.515802	-1.168347	0.2472
CIR	1.110889	0.189498	5.862274	0.0000
INVINT	-1.352815	0.261034	-5.182520	0.0000

Effects Specification		S.D.	Rho
Cross-section random		3515.424	0.9611
Idiosyncratic random		707.3655	0.0389

Weighted Statistics			
R-squared	0.483341	Mean dependent var	759.2270
Adjusted R-squared	0.449462	S.D. dependent var	1001.525
S.E. of regression	723.5975	Sum squared resid	31939193
F-statistic	14.26656	Durbin-Watson stat	1.245421
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.063784	Mean dependent var	5520.348
Sum squared resid	8.42E+08	Durbin-Watson stat	0.047245

Source : Data processed with *EViews 9.0*

This Random Effect model approach can be seen that the R Square value is 0.483341, which means that the relationship between the predictor variables is strong in explaining the response variable because it is below 50%. Or it shows that there is a strong relationship between the four independent variables, namely DER, ROA, CIR, and INVINT with the dependent variable, namely ETR.

b) F Test

The F test is used to test whether the independent variables jointly (simultaneously) affect the dependent variable.

Tabel 4.10 F Test Result (Simultaneous Test)

Dependent Variable: ETR
 Method: Panel EGLS (Cross-section random effects)
 Date: 01/12/21 Time: 17:24
 Sample: 2017 2019
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Effects Specification		S.D.	Rho
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F-statistic	14.26656	Durbin-Watson stat	1.245421
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.063784	Mean dependent var	5520.348
Sum squared resid	8.42E+08	Durbin-Watson stat	0.047245

Source : Data processed with *EViews 9.0*

Based on table 4.10, it can be seen that the Prob (F-statistic) value is 0.000000. Which means $0.000000 < 0.05$, then H_0 is accepted, which means that the independent variables (DER, ROA, CIR, and INVINT) together do not significantly affect the dependent variable.

c) Adjusted R-squared

Based on the table 4.10 above, it can be seen that the Adjusted R-squared value is 0.449462. So the Adjusted R-squared value of 0.44 (44%) means that the ETR variation can be explained by DER, ROA, CIR, and INVINT by 44%, while the rest (100% - 44% = 56%) is explained by other variables. outside the model or other variables that are not included in this study.

d) T Test

Based on the results of the t test (partial test), it can be seen that the effect of the dependent variable on the independent variable partially is as follows:

- 1) The first hypothesis in this study is that leverage has an effect on tax aggressiveness. Based on the table above, it is known that the leverage regression coefficient projected with a debt to equity ratio is positive at 0.014562, a tstatistic value of 0.699231, and a probability value of $0.4871 > 0.05$, then H_1 is rejected, meaning that the debt to equity ratio does not affect tax aggressiveness.

- 2) The second hypothesis in this study is that profitability has an effect on tax aggressiveness. Based on the table above, it is known that the profitability regression coefficient projected with return on assets is negative at -0.602635, the t-statistic value is -1.168347, and the t-statistic probability value is $0.2472 > 0.05$, then H2 is rejected, meaning that return on assets does not affect tax aggressiveness.
- 3) The third hypothesis in this study is that the capital intensity ratio has an effect on tax aggressiveness. Based on the table above, it is known that the capital intensity ratio regression coefficient is positive at 1.110889, the t-statistic value is 5.862274, and the t-statistic probability value is $0.0000 < 0.05$, then H3 is accepted, meaning that the capital intensity ratio affects tax aggressiveness.
- 4) The fourth hypothesis in this study is that inventory intensity affects tax aggressiveness. Based on the table above, it is known that the inventory intensity regression coefficient is negative at -1.352815, the t-statistic value is -5.182520, and the t-statistic probability value is $0.0000 < 0.05$, then H4 is accepted, meaning that the inventory intensity affects tax aggressiveness.

DISCUSSION

Based on the tests that have been carried out, the following research results were obtained :

1. The Effect of Leverage on Tax Aggressiveness

Based on the results of the T test on the variable debt to equity ratio on tax aggressiveness, it can be seen that the probability value is $0.4871 > 0.05$, so H1 is rejected, meaning that the debt to equity ratio has no significant effect on tax aggressiveness. From the results obtained, it can be seen that leverage has no effect on tax aggressiveness. This indicates that leverage is not a determining factor for companies to take tax aggressiveness. This reflects that the size of the debt does not trigger management to practice tax aggressiveness. Another possibility is that the company does not have a relatively large debt so that the interest expense does not have an impact on reducing the effective tax rate.

2. The Effect of Profitability on Tax Aggressiveness

Based on the results of the T test on the variable return on assets to tax aggressiveness, it can be seen that the probability value is $0.2472 < 0.05$, then H2 is rejected, meaning that return on assets has no significant effect on tax aggressiveness. From these results it can be seen that profitability has no effect on tax aggressiveness. This indicates that profitability is not a determining factor for companies to take tax aggressiveness. An increase in ROA will result in an increase in ETR, so that ROA has a positive relationship with ETR. However, along with the impact of tax reforms which lowered statutory tax rates, the ROA and ETR relationship became negative. Which means, if the profitability value of the company is high, the tax aggressiveness of the company is also low.

3. The Effect of Capital Intensity Ratio on Tax Aggressiveness

Based on the results of the T test on the variable capital intensity ratio, it can be seen that the probability value is $0.0000 < 0.05$, then H3 is accepted, meaning that the capital intensity ratio has a significant positive effect on tax aggressiveness. The results of this study indicate that intensity capital has an effect on tax aggressiveness. This shows that the higher the Based on the results of the T test on the variable capital intensity ratio, it can be seen that the probability value is $0.0000 < 0.05$, then H3 is accepted, meaning that the capital intensity ratio has a significant positive effect on tax aggressiveness. These results mean that the higher the capital intensity ratio, the higher the ETR, the higher the ETR, the lower the tax aggressiveness.

4. The Effect of Inventory Intensity on Tax Aggressiveness

Based on the results of the T test on the inventory intensity variable, it can be seen that the probability value is $0.0000 < 0.05$, then H4 is accepted, meaning that inventory intensity affects tax aggressiveness. The results of this study indicate that inventory intensity has an effect on tax aggressiveness. This shows that the higher the inventory intensity ratio owned by the company, the lower ETR will be. The results of this study are supported by Norfadzilah (2015) which states that the inventory intensity ratio has a significant negative effect on ETR. This is because inventory intensity is not included in the tax deductible in the tax system. However, managers need more effort to manage the company's inventory intensity to reduce the level of the company's tax burden. In other words, an inefficient inventory evaluation method will result in high operating costs and will affect the company's revenue level.

CONCLUSION

Based on the results of research that has been conducted regarding the Analysis of Factors Affecting Tax Aggressiveness in Property and Real Estate Companies Listed on the Indonesia Stock Exchange 2017-2019, conclusions can be drawn, namely :

1. Leverage (Debt to equity ratio) has no significant effect on Tax Aggressiveness. This reflects that the size of the debt does not trigger management to practice tax aggressiveness. Another possibility is that the company does not have a relatively large debt so that the interest expense does not have an impact on reducing the effective tax rate.

2. Profitability (Return on assets) has no significant effect on Tax Aggressiveness. These results explain that the company's ability to generate profits does not directly affect the company's effective rate of paying taxes. Whether the profit is large or small, there is no influence on ETR so that the tax that must be paid must also be in accordance with the predetermined rate. This reflects that the amount of profit does not trigger management to practice tax aggressiveness.
3. Capital intensity ratio (CIR) has a significant positive effect on tax aggressiveness. These results mean that the higher the capital intensity ratio, the higher the ETR, the higher the ETR, the lower the tax aggressiveness.
4. Inventory intensity has a significant negative effect on tax aggressiveness. These results indicate that high inventory intensity will reduce ETR, and consequently reduce the level of tax aggressiveness. This is because inventory intensity is not included in the tax deductible in the tax system. However, managers need more effort to manage the company's inventory intensity to reduce the level of the company's tax burden. In other words, an inefficient inventory evaluation method will result in high operating costs and will affect the company's revenue level.

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Anisa Alfarisi Rambe,
Graduate students Dept. Accounting
Universitas Mercu Buana, Jakarta, Indonesia

Wiwik Utami,
Lecture accounting at Program Doctoral S3 Dept. Accounting
Universitas Mercu Buana, Jakarta, Indonesia