International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 2, 2020
ISSN: 1475-7192

THE INFLUENCE OF PROFITABILITY AND LEVERAGE TOWARDS TAX AGGRESSIVENESS

(Empirical Study of Manufacturing Corporates in the Sector of Consumer Goods Listed on the IDX in the Period of 2016-2018)

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ABSTRACT---*This research points to dictate the effect of profitability and leverage on tax aggressiveness in the consumer goods manufacturing corporates listed on the IDX in the 2016-2018 period. The research method used in this study is the experimental method. The population in this study consisted of 56 manufacturing corporates in the consumer goods sector and corporates that were sampled in this study were 16 corporates. The results showed that profitability and leverage had a partial and simultaneous effect on tax aggressiveness in the consumer goods manufacturing corporates listed on the IDX for the period of 2016-2018. The magnitude of the effect of simultaneous profitability and leverage on tax aggressiveness is 80.5678%.*

Keywords---*Tax Aggressivity, Profitability (ROA), Leverage (DAR).*

I. INTRODUCTION

Taxes are a source of state revenue that has a large contribution in revenue from the State Budget (APBN) used by the government to implement and enhance national development. In carrying out its function as a source of state revenue, taxation activities in Indonesia often encounter many obstacles including the amount of tax revenue that does not reach the target. This is proven based on the target data and the realization of tax revenues published on the www.kemenkeu.go.id website, which are presented in the table below:

Table 1: Target and Realization of Tax Revenue

(Trillions of Rupiah)

Year	Target	Realization	% Achievements
2014	1.072,37	981,83	91,56%
2015	1.294,26	1.060,83	81,96%
2016	1.355,20	1.105,81	81,60%
2017	1.283,60	1.147,50	89,39%
2018	1.424,00	1.315,93	92,41%

Source: www.kemenkeu.go.id (data reprocessed)

Based on table 1.1 (Tax Revenue Targets and Realizations) it can be interpreted that during the last five years from 2014 to 2018, the realization of tax revenue never reached its target. The best achievement of tax revenue for the last five years is in 2018 which reached 92.41% with the realization of Rp1.315.93 trillion. Whereas the realization of tax revenue in the first quarter of 2019 only reached Rp 603.34 trillion or grew 3.74 percent compared to the same period last year. Even so,

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the growth of the tax realization has slowed because in the first semester of 2018 tax revenue was able to grow by 13.99 percent (money.kompas.com). Ministry of Finance Tax Director General Robert Pakpahan revealed, the manufacturing or manufacturing industry accounted for 31.8 percent of total tax revenue in 2017. The next position was occupied by the trade sector which contributed 19.3 percent and followed by the financial services sector by 14 percent (magazine taxation. net).

The Ministry of Finance noted 2018 tax revenue from the four main sectors to grow lower than the previous year. The intended sectors are manufacturing, trade, construction and real estate, and agriculture. Based on preliminary data, tax revenue from the processing industry amounted to Rp 363.6 trillion or grew 11.12% on an annual basis, lower than 2017 which amounted to 18.28% (katadata.co.id). The contribution of the processing or manufacturing industry to tax revenue in January 2019 was recorded at Rp 20.50 trillion. Compared with the same period the year before which grew 8.8 percent, the growth of manufacturing tax in January 2019 dropped to 16.2 percent (tirto.id). Revenue performance from the manufacturing sector has not yet shown improvement until September 2019. With the total contribution of tax revenue approaching 29.2%, manufacturing performance actually contracted to minus 3.2%. Whereas last year, revenue from the manufacturing sector was able to grow at 11.17% (economy.bisnis.com).

In general, the corporate has a goal to get the maximum profit. But on the one hand, corporates registered as taxpayers have an obligation to pay taxes. As a taxpayer, a corporate has an obligation to carry out tax payments as stipulated in the Law on General Provisions and Tax Procedures (KUP) article 1 paragraph (28) concerning the Tax Insurer is an individual or entity responsible for tax payments, including representatives exercise the rights and fulfill the obligations of the Taxpayer in accordance with the provisions of the taxation legislation. PT Bentoel Internasional Investama, cigarette producer PT Wismilak Inti Makmur Tbk (WIIM) recorded a decrease in net profit of 13.42 percent to Rp 79.04 billion in the first 2016 nine months compared to Rp 91.30 billion in the same period the previous year. Meanwhile, operating expenses rose to Rp 286.99 billion from Rp 272.36 billion. That cut the operating profit to Rp 108.22 billion from Rp 131.86 billion in January-september last year (cnnindonesia.com). PT Wismilak Inti Makmur Tbk (WIIM) still recorded a decline in sales last year. Based on the 2017 WIIM performance report released at the IDX (IDX), sales fell 12.4% to Rp 1.47 trillion from Rp 1.68 trillion a year earlier. Operating profit slumped 67.11 to Rp 44.2 billion last year from 2016's operating profit which reached 134.4 billion. WIIM only posted current year profit of IDR 40.6 billion, down 61.8% from the achievement in 2016 which reached IDR 106.3 billion (investment.kontan.co.id).

The act of tax aggressiveness is certainly detrimental to the state, as citizens who must become taxpayers must meet their tax obligations properly, both individual taxpayers and corporate taxpayers. As stated in Article 23A of Law 23A Amendment III which states that taxes and other levies that are coercive for the purposes of the country are regulated by law. Based on some examples of cases, tax aggressiveness is very detrimental to the state, because the tax revenue that should be received by the state does not match the amount of tax paid by the taxpayer. According to Rodriguez and Arias (in Nugraha and Meiranto, 2015), profitability is a critical factor to the tax burden, because corporates with greater profits will pay greater taxes as well. Conversely, corporates with low profit levels will pay lower taxes or not even pay taxes if they suffer losses. Profitability is a ratio that shows a corporate's ability to generate profits. In general, it can be said that the greater the ratio rate, the more profitable the corporate is, and the smaller this ratio number indicates that the corporate is less profitable (Anwar. 2019: 176). According to Prasista and Setiawan (2016), the greater the profits earned by the corporate, the amount of tax paid by the corporate will also be even greater. This can be a motivation for profit-oriented corporates to take tax planning actions to minimize the number of tax paid by the corporate, thus making the corporate aggressive towards taxes.

Profitability is not the only thing that can affect the corporate in carrying out tax aggressiveness, one of the financial ratios of corporates that also influence the leverage (debt ratio). According to Kasmir (2017: 112) leverage shows the extent of corporate assets financed by debt. This means that the large amount of debt used by corporates to finance their business activities when compared with using their own capital. According to Setyoningrum and Zulaikha (2019) a high level of leverage originates with high debt, accompanied by an increase in interest expense on debt. Interest expense from debt is categorized as a fixed expense that can be a deduction from PFM. When the leverage ratio is high, it tends to have a low ETR value, this can be indicated by the entity intentionally making use of the interest expense to be aggressive in taxes. The consumer goods manufacturing sector corporates were chosen by researchers because the consumer goods manufacturing corporates in Indonesia have sufficient quantities to be used as a source of data so that the data taken will get quite varied results, besides that the consumer goods manufacturing sector corporates have the complexity of operating activities that have there are many loopholes to carry out tax aggressive actions, and based on information submitted on the background of tax revenue from the manufacturing sector, the growth is slowing. Based on the background above, the authors intend to conduct research and then the results will be set forth in the final project report entitled: "The Effect of Profitability and Leverage on Tax Aggressiveness (Empirical Study on Consumers' Goods Manufacturing Manufacturing Corporates Listed on the IDX in the 2016-2018 Period).

II. THEORETICAL FRAMEWORK

Profitability Effect on Tax Aggressiveness

According to Anwar (2019: 176) profitability is a ratio that shows a corporate's capability to generate profits. In general, it can be said that the greater the ratio number, the more profitable the corporate is, and the smaller this ratio number indicates that the corporate is less profitable. Rodriguez and Arias (in Nugraha and Meiranto, 2015) stated that profitability is a critical factor for the tax burden, because corporates with larger revenues will pay more taxes as well. Conversely corporates with low profit levels will pay lower taxes or not even pay taxes if they suffer losses. The greater the profits derived by the corporate, the amount of taxes paid by the corporate will also be even greater. This can be a motivation for profit-oriented corporates to take tax planning actions to reduce the amount of tax paid by the corporate, thus making the corporate aggressive towards taxes (Prasista and Setiawan, 2016). According to Dharmayanti (2019), the greater the level of profitability obtained by the corporate, the larger the corporate's tax aggressiveness.

Leverage Effect on Tax Aggressiveness

Understanding leverage according to Anwar (2019: 175) is a ratio that shows the use of debt and the ability of corporates to pay debts. Debt is considered as leverage (leverage) which can increase the corporate's ability to generate profits. The higher the leverage in the corporate, the higher the obligations that must be fulfilled, which results in an increased level of corporate tax aggressiveness (Fadli, 2018). According to Setyoningrum and Zulaikha (2019) a high level of leverage originates with high debt, accompanied by an increase in interest expense on debt. Interest expense from debt is categorized as a fixed expense that can be a deduction from PFM. When the leverage ratio is high, it tends to have a low ETR value, this can be indicated by the entity intentionally making use of the interest expense to be aggressive in taxes. Manufacturing corporates in the consumer goods industry prefer to use capital from outside sources, namely debt. In this case, identifying that the corporate utilizes the interest arising from the debt to reduce the amount of tax that must be paid so that the corporate is considered to be more aggressive towards its taxes (Hidayat and Fitria, 2018).

Profitability Effect and Leverage on Tax Aggressiveness

According to Anwar (2019: 176) profitability is a ratio that shows a corporate's ability to generate profits. In general, it can be said that the greater the ratio number, the more profitable the corporate is, and the smaller this ratio number indicates that the corporate is less profitable.

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III. RESEARCH HYPOTHESIS

Based on the above framework, in this study the authors propose the following hypothesis:

Effect of profitability on tax aggressiveness.

$H0_1$: Profitability has no effect on tax aggressiveness.

Ha_1: Profitability affects Tax Aggressiveness.

Effect of leverage on tax aggressiveness.

$H0_1$: Leverage has no effect on tax aggressiveness.

Ha_1: Leverage affects the Tax Aggressiveness.

Effect of Profitability and Leverage on Tax Aggressiveness.

$H0_1$: Profitability and Leverage have no effect on Tax Aggressiveness.

Ha_1: Profitability and Leverage affect Tax Aggressiveness

IV. RESEARCH METHODOLOGY

Type of Research

This kind of study used by the author in this study is explanatory research. Explanatory research according to Zulganef (2018: 9) is a study that aims to examine causality between variables that explain a particular phenomenon. The explanatory method in this research was used to test the Profitability and Leverage effect on Tax Aggressiveness, and to test whether the hypothesis could be accepted or rejected.

Unit of Analysis

In this study the research unit is a Manufacturing Corporate. The unit of analysis in this study is the manufacturing corporates in the consumer goods sector which are listed on the IDX (IDX) for the period of 2016-2018.

According to Nuryaman and Veronica (2015: 5) the unit of analysis can be a person (human), organization, event, and various other things that are of concern in research activities.

Data and Data Sources

The data used in this study are secondary secondary data, in the form of annual financial statement data of manufacturing corporates in the consumer goods sector which are listed on the IDX (IDX), which is published on the website www.idx.co.id 2016-2018.

Research Population

According to Sekaran and Bougie (2017: 53) the population is a group of people, events, or interesting things in which the researcher wants to make an opinion (based on sample statistics).

The population in this study is the whole manufacturing corporates in the consumption goods sector registered on the IDX (IDX) for the period of 2016-2018. Manufacturing corporates in the consumer goods sector listed on the IDX (IDX) for the period of 2016-2018 amounted to 56 corporates.

Research Samples

According to Nuryaman and Veronica (2015: 101) the sample is part of the population, the sample contains several members selected from the population. In other words, only a few elements of the population form the sample, not the whole element. Sampling in this study using purposive sampling method. According to Nuryaman and Veronica (2015: 110) purposive sampling is someone or something taken as a sample because researchers assume that someone or something has information or characteristics that are in accordance with the needs of his research. In general, the characteristics used to select samples are as follows:

1) Manufacturing corporates in the consumer goods sector that are on the main listing board. The selection of the main registration board is based on the consideration that the corporate which is on the main registration board is a corporate that has a total asset of more than 200 billion. The number of corporate assets affects the calculation of profitability and leverage variables which are independent variables in this study.
2) Consumer goods manufacturing corporates which publish annual financial statements for 3 consecutive years (2016-2018) through the site www.idx.co.id.
3) Manufacturing corporates in the consumer goods sector that did not experience a loss during 2016-2018. This is because corporates that suffer losses do not have tax obligations.
4) Manufacturing corporates in the consumer goods sector that have an ETR value between 0-1, if the ETR value is close to 0, the corporate is considered to be more aggressive towards taxes.

V. RESULT AND DISCUSSION

Descriptive Statistics of Data Analysis

The results of research conducted on sixteen consumer goods manufacturing corporates listed on the IDX in 2016-2018, obtained descriptive statistical data that include mean, median, maximum, minimum and standard deviation of the calculation variables.

a. Descriptive Profitability Statistical Analysis

Based on profitability data (ROA) in the manufacturing corporates in the consumer goods sector which are listed on the IDX in the 2016-2018 period, it can be seen the development of ROA values as follows:

Table 2: Profitability Data (ROA) in consumer goods manufacturing corporates listed on the IDX in the 2016-2018 period.

No	Corporate Code	Profitability (ROA)		
		2016	2017	2018
1	BUDI	0.01317	0.01554	0.01487
2	CEKA	0.17511	0.07713	0.07926
3	DLTA	0.21248	0.20865	0.22194
4	DVLA	0.09931	0.09888	0.11924
5	GGRM	0.10600	0.11617	0.11278
6	HMSP	0.30023	0.29370	0.29051
7	INDF	0.05905	0.05851	0.05140
8	KAEF	0.05888	0.05441	0.04247
9	KLBF	0.15440	0.14764	0.13762
10	MLBI	0.43170	0.52670	0.42388
11	ROTI	0.09583	0.02969	0.02894
12	TCID	0.07417	0.07584	0.07077
13	TSPC	0.08283	0.07496	0.06866
14	ULTJ	0.16744	0.13721	0.12628
15	UNVR	0.38163	0.37049	0.46660
16	WIIM	0.07852	0.03312	0.04173
Average		0.15567	0.14492	0.14356
Max		0.43170	0.52670	0.46660
Min		0.01317	0.01554	0.01487
Median		0.10266	0.08801	0.09602
Standard Deviation		0.12056	0.14102	0.13817

Source: Corporate Financial Report (reprocessed data)

The average value of profitability (ROA) in consumer goods manufacturing corporates listed on the IDX in the 2016-2018 period as a whole tended to decline.

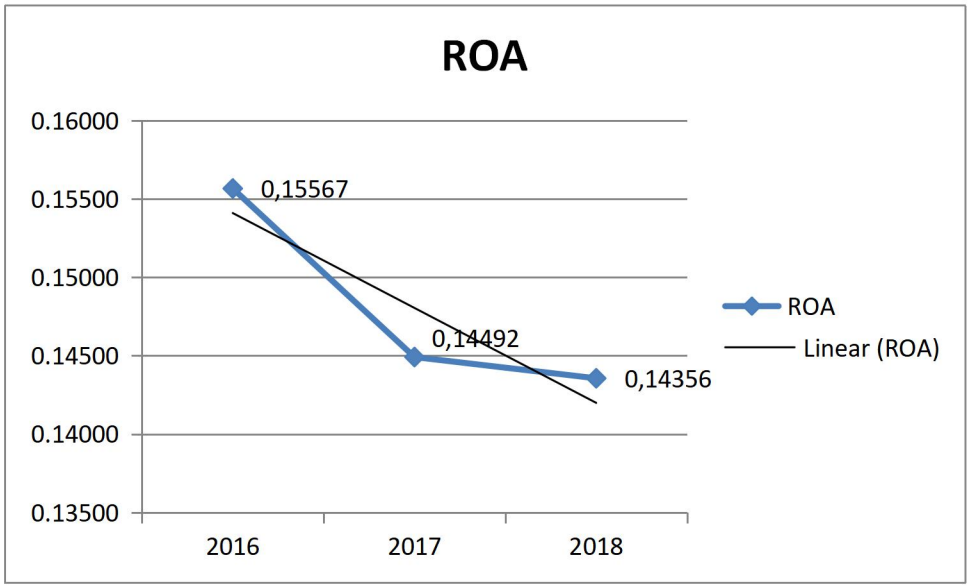

Figure 1: Average Profitability Data (ROA) of consumer goods manufacturing corporates listed on the IDX in the 2016-2018 period

Table 1.2 shows the development of profitability achieved by manufacturing corporates in the consumer goods sector in 2016-2018. All of the corporates in the consumer goods manufacturing sector in 2016-2018 that became the study sample never experienced losses, so it can be indicated that the corporate has tax obligations and is able to pay taxes. The highest value from 2016-2018 is 0.52670 in Multi Bintang Indonesia Tbk corporate, which means the corporate has a good profit, but the corporate with high profitability has the motivation to carry out tax aggressiveness, because the tax that must be paid by the corporate will be in accordance with the fairness of profits obtained by the corporate so that it is considered burdensome to the corporate. The lowest value of 0.01317 at the corporate Budi Starch & Sweetener Tbk, which means the corporate has a small profit, and still has the obligation to pay taxes. The average profitability produced by manufacturing corporates in the consumer goods sector in 2016-2018 overall declined and overall was in the range of 0.11 or 11% of the total assets owned by the corporate, but the decline in profitability could trigger corporates to take action in tax aggressiveness and as an indication that the decline in profits at the corporate occurred as a result of aggressive tax actions by the corporate.

b. Statistical Analysis of Leverage

Based on the leverage data (DAR) of manufacturing corporates in the consumer goods sector listed on the IDX in 2016-2018, it can be seen the development of Debt to Asset Ratio (DAR) values as follows:

Table 3: Leverage Data (DAR) in manufacturing corporates in the consumer goods sector which are listed on the IDX in the 2016-2018 period.

No	Corporate Code	*Leverage* (DAR)		
		2016	2017	2018
1	BUDI	0.60264	0.59356	0.63852
2	CEKA	0.37732	0.35182	0.16451
3	DLTA	0.15480	0.14632	0.15711
4	DVLA	0.29502	0.31970	0.28676

5	GGRM	0.37151	0.36807	0.34681
6	HMSP	0.19604	0.20927	0.24128
7	INDF	0.46527	0.46831	0.48293
8	KAEF	0.50756	0.57801	0.64521

No	Corporate Code	*Leverage* (DAR)		
		2016	2017	2018
9	KLBF	0.18141	0.16383	0.15715
10	MLBI	0.63929	0.57575	0.59594
11	ROTI	0.50585	0.38150	0.33613
12	TCID	0.18395	0.21318	0.19331
13	TSPC	0.29617	0.31647	0.30967
14	ULTJ	0.17691	0.18859	0.14056
15	UNVR	0.71908	0.72637	0.61184
16	WIIM	0.26783	0.20202	0.19938
Average		0.37129	0.36267	0.34419
Max		0.71908	0.72637	0.64521
Min		0.15480	0.14632	0.14056
Median		0.33384	0.33576	0.29822
Standard Deviation		0.18267	0.17914	0.18870

Source: Corporate Financial Report

The average value of Leverage (DAR) in manufacturing corporates in the consumer goods sector listed on the IDX in the 2016-2018 period as a whole tends to decrease. Based on the data available in table 5.3 the average value in 2016 of 0.31729 then an increase in 2017 which has an average value of 0.36267 then a decline in 2018 with an average of 0.34419. Then it can be concluded that there is a fluctuation in the average leverage using the DAR proxy (Debt to Asset Ratio). Then the average leverage data on manufacturing corporates in the consumer goods sector listed on the IDX for the period of 2016-2018 can be illustrated through Figure 5.2 as follows:

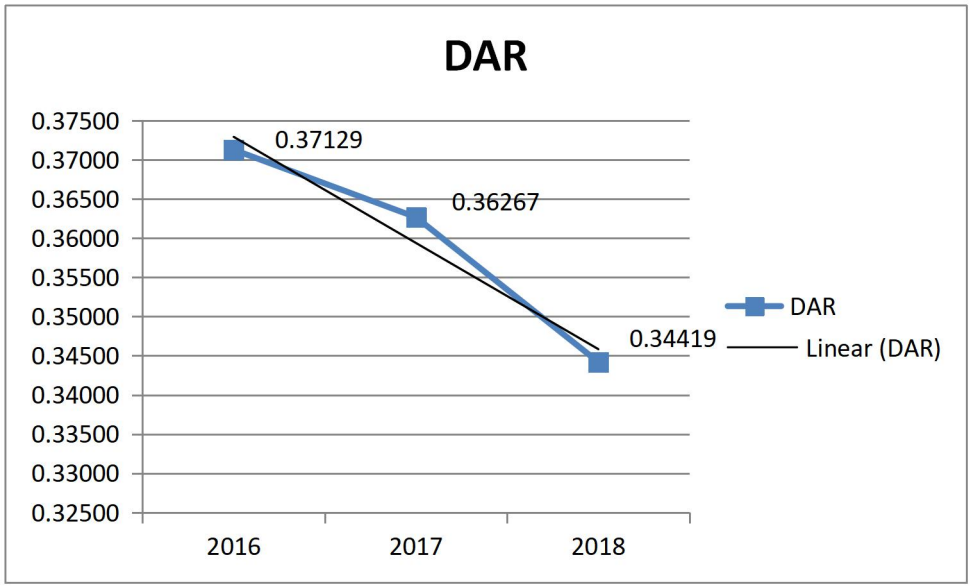

Figure 2: Average Data Leverage (DAR) of consumer goods manufacturing corporates listed on the IDX in the 2016-2018 period

From the data in table 5.3 shows the development of leverage achieved by manufacturing corporates in the consumer goods sector in 2016-2018. The highest value from 2016-2017 was 0.72637 in the Unilever Indonesia Tbk corporate, which means that the corporate has a high leverage indicating that the entity uses debt interest expense to be aggressive in taxes. The lowest value of 0.14056 at Ultra Jaya Milk Industry Tbk corporate which means a low level of leverage comes from low debt. The average leverage generated by manufacturing corporates in the consumer goods sector in 2016-2018 overall declined and overall was in the range of 0.34 or 34% of total debt held by the corporate.

c. Descriptive Statistical Analysis of Tax Aggressiveness

Based on the tax aggressiveness data on manufacturing corporates in the consumer goods sector which are listed on the IDX in the 2016-2018 period, it can be seen the development of the Tax Aggressiveness value as follows:

Table 4: Tax Aggressiveness Data on manufacturing corporates that consume consumer goods listed on the IDX for the period of 2016-2018

No	Corporate Code	Tax Aggressiveness		
		2016	2017	2018
1	BUDI	0.26893	0.25116	0.29693
2	CEKA	0.12641	0.24983	0.24916
3	DLTA	0.22180	0.24183	0.23370
4	DVLA	0.29071	0.28255	0.26459
5	GGRM	0.25287	0.25690	0.25633
6	HMSP	0.24979	0.25003	0.24624
7	INDF	0.34295	0.32819	0.33371
8	KAEF	0.29091	0.26240	0.30453
9	KLBF	0.23949	0.24310	0.24472
10	MLBI	0.25607	0.25727	0.26742

11	ROTI	0.24265	0.27281	0.31971
12	TCID	0.26827	0.26311	0.26245
13	TSPC	0.24127	0.25098	0.25742
14	ULTJ	0.23878	0.30651	0.26070
15	UNVR	0.25446	0.25258	0.25245
16	WIIM	0.22225	0.25511	0.27693
Average		0.25048	0.26402	0.27044
Max		0.34295	0.32819	0.33371
Min		0.12641	0.24183	0.23370
Median		0.25133	0.25601	0.26157
Standard Deviation		0.04467	0.02355	0.02861

Source: Corporate Financial Report (reprocessed data)

The average value of tax aggressiveness in manufacturing corporates in the consumer goods sector listed on the IDX in 2016-2018 as a whole fluctuates but tends to increase.

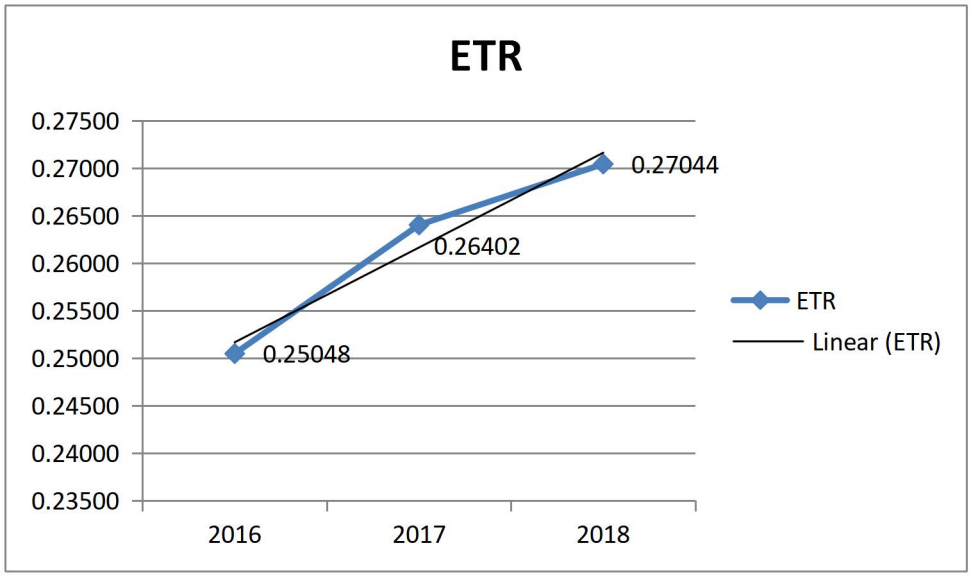

Figure 3: Average Tax Aggressiveness Data (ETR) of manufacturing and consumption sectors listed on the IDX for the period of 2016-2018

Table 4 shows the development of the value of tax aggressiveness carried out by manufacturing corporates in the consumer goods sector in 2016-2018. There are 16 (sixteen) corporates in the consumption goods sector that are the object of observation which have an indication that the corporate has carried out tax aggressiveness during 2016-2018, the corporate has carried out tax aggressiveness because its ETR value is below 0.25. if the corporate's ETR is close to zero then the corporate is said to be aggressive towards taxes. The highest value in 2016-2018 is 0.34295 in the corporate Indofood Sukses Makmur Tbk, which means the corporate tends to be lower in carrying out tax aggressiveness because it is increasingly aggressive towards taxes if the value of ETR 0.25 to 0. The lowest value of 0.12641 is obtained by the Wilmar Cahaya Indonesia corporate Tbk, which means the corporate is doing tax aggressiveness. This can be a problem

for corporates because corporates that do not pay taxes tend to have a bad image in the eyes of the public, which will hamper the development of corporates in doing business.

Analysis of Profitability Regression (ROA) and Leverage (DAR) on Tax Aggressiveness.

This study uses regression analysis with panel data. The data used in forming the regression model in this study is panel data that is a combination of 3 periods of time series data and 16 cross-sectional data.

Selection of Panel Data Regression Estimation Model

1. Chow Test

A Chow test is performed to determine the regression estimation model chosen between pool or common effects (ordinary regression) or panel models (Fixed Effect Model) (FEM). The hypothesis in the chow test is as follows:

H0: Pooled Least Square (PLS)

H1: Fixed Effect Model (FEM)

Chow test results and decisions made based on the chow test by processing Eviews ver 10 can be explained as follows:

Table 5: Chow Test Results

Redundant Fixed Effects Tests

Equation: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	6.380631	(15,30)	0.0000
Cross-section Chi-square	68.773251	15	0.0000

Source: Output Eviews 10

The F value of the chow-test result is 6.380631 with probability = 0.0000. The value of the F test table with degrees of freedom (db): 15 and 30 is obtained at 2.25 The test results show the calculated f value is greater than the f table value and can also be seen from the significant (prob) = 0.0000 less than 0.05 then the test results reject H0 so that it can be concluded that the panel data regression model with the Fixed Effect Model (FEM) approach is better than the Random Effect Model (REM) or Common Effect Model (CEM).

2. Langrange Multiplier (LM) Test

Langrange Multiplier (LM) test is performed to determine the regression estimation model chosen between the pool or common effect model (CEM) or random effect model (REM). The Langrange Multiplier (LM) test hypothesis is as follows:

H0: Pooled Least Square (PLS)

H1: Random Effect Model (REM)

The results and decisions made based on the Langrange Multiplier (LM) test by processing Eviews ver 10 can be explained as follows:

Table 6: Langrange Multiplier (LM) Test Results

Lagrange multiplier (LM) test for panel data

Date: 01/14/20 Time: 15:01

Sample: 2016 2018

Total panel observations: 48

Probability in ()

Null (no rand. effect) Alternative	Cross-section One-sided	Period One-sided	Both
Breusch-Pagan	5.043056	0.105416	5.148472
	(0.0247)	(0.7454)	(0.0233)
Honda	2.245675	0.324678	1.817514
	(0.0124)	(0.3727)	(0.0346)
King-Wu	2.245675	0.324678	1.075242
	(0.0124)	(0.3727)	(0.1411)
GHM	--	--	5.148472
	--	--	(0.0307)

Source: Output Eviews 10

For the regression model used the prob (p-value) obtained for the Breusch-Pagan-Cross-section test of 0.0247 is smaller than 0.05, the test results reject H0 so the model follows the Random Effect Model (REM) panel data.

Obtained Breusch-Pagan-Both value of 5.148472 with probability = 0.0233. The significance value (prob) = 0.0233 is smaller than 0.05, so the results of the H0 test are rejected so that it can be concluded that the panel data regression model with the Fix Effect Model (FEM) approach is better than the pool model or the common effect model (CEM).

3. Hausman Test

The results of the chow test stage and the Langrange multiplier (LM) test show that the panel model is better than the pool (common model) for the data used. Furthermore, to determine the Fixed Effect Model (FEM) or the Random Effect Model (REM) method that is more appropriate in the panel data used to do a statistical test using the hausman test.

The hypothesis in the Hausman test is as follows:

H0: Random Effect Model

H1: Fixed Effect Model

Table 7: Hausman Test Results

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.060181	2	0.0000

Source: Output Eviews 10

Chi-Sq test statistic calculation results. Statistics (x2 (chi-square) in the table above is obtained at 24.060181 with probability = 0.0000) the results show that f count is greater than f table and can also be seen from the significant (prob) = 0.0000 smaller than 0.05, the results The test rejects H0 so that it can be concluded that the panel data regression model uses the Fixed Effect Model (FEM).

Results of Panel Data Regression Model

Based on the results of the tests that have been described consisting of the chow test, the Langrange multiplier test, and the Hausman test, the panel data regression equation used in this study uses the Fixed Effect Model (FEM) model. The results of the panel data regression model with the Fixed Effect Model approach obtained for Profitability (ROA) and Leverage (DAR) data on Tax Aggressiveness are as follows:

Table 8: Panel Data Regression Model Results

Dependent Variable: ETR
Method: Panel Least Squares
Date: 12/14/19 Time: 09:53
Sample: 2016 2018
Periods included: 3
Cross-sections included: 16
Total panel (balanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.400633	0.029213	13.71431	0.0000
ROA	-0.507214	0.120952	-4.193505	0.0002
DAR	-0.177796	0.070756	-2.512796	0.0176

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.805678	Mean dependent var	0.261645
Adjusted R-squared	0.695562	S.D. dependent var	0.033849
S.E. of regression	0.018677	Akaike info criterion	-4.843099
Sum squared resid	0.010464	Schwarz criterion	-4.141398
Log likelihood	134.2344	Hannan-Quinn criter.	-4.577925
F-statistic	7.316636	Durbin-Watson stat	3.582114
Prob(F-statistic)	0.000001		

Partial Hypothesis Testing

Partial hypothesis testing is used to infer estimation results by conducting statistical analysis in order to prove the effect of the independent variables using the t-statistic test. This t-statistic test is a partial test conducted to test the regression

coefficients by looking at the significance of the effect of each independent variable on the dependent variable by assuming the other variables are constant. T-statistic test results for all independent variables are presented in the following table 5.11:

Table 9: T-Statistics Test Results

Variabel	t-Statistik	Prob (Sig)	H0	H1	Keterangan
X1_ROA	-4,193505	0,0002	Ditolak	Diterima	Signifikansi pada α = 0,05
X2_DAR	-2,512796	0,0176	Ditolak	Diterima	Signifikansi pada α = 0,05

Source: Output Eviews 10 (Data reprocessed)

The t-statistic value obtained from the next calculation results is compared with the value of the table used as a krits value in the partial test (t test) of 1.67493 obtained from the t table for α = 0.05 and degrees of freedom 48-2-1 = 45 in two-way testing.

The results of the t-statistic test as presented in table 5.12, can be explained as follows:

Effect of Profitability (ROA)

The hypotheses tested are:

H0: β_1 = 0 Profitability (ROA) partially has no effect on tax aggressiveness

H1: β_1 ≠ 0 Profitability (ROA) partially affects the Tax Aggressiveness

The calculation results obtained by t-statistics on the profitability variable (ROA) (X1) has a value of -4.193505 with a significance (prob) of 0.0002. Can be known t-statistic value when compared with t-table with a significance level of 5% obtained that the t-statistic value is greater than t-table value (-4,193505> -1,67493) thus H0 is rejected at the α = level 0.05. P-value in the test (prob) is obtained at 0.0002. smaller than α = 0.05 so that the conclusions of the H1 significance test are accepted.

Effect of Leverage (DAR)

The hypotheses tested are:

H0: β_2 = 0 Leverage (DAR) partially has no effect on tax aggressiveness

H1: β_2 ≠ 0 Leverage (DAR) partially affects the Tax Aggressiveness

Calculation results obtained t-statistics on the variable leverage (DAR) (X2) has a value of -2.512796 with a significance (prob) of 0.0176. Can be known t-statistic value when compared with t-table with a significance level of 5% t-statistic value is greater than t-table value at 5% significance (-2,512796> -1,67493) thus H0 is rejected at level α = 0.05. P-value in the test (prob) is obtained at 0.0176 smaller than α = 0.05 so that the conclusion of the H1 significance test is accepted.

Simultaneous Hypothesis Testing

Simultaneous hypothesis testing is a test to see the effect of the independent variables together on the dependent variable carried out by the f-statistic test. The f-statistic test basically shows whether all independent variables included in the regression model have an influence together or simultaneously on the dependent variable. If the f-statistic value is greater than the f-calculated value, then the independent variables together or simultaneously have an influence on the dependent variable.

The hypothesis in testing the regression model with the f-statistic test is as follows:

H0: β_i = 0 There is no effect of Profitability (ROA) and Leverage (DAR) on tax aggressiveness

H1: β_i ≠ 0 There is an effect of Profitability (ROA) and Leverage (DAR) on tax aggressiveness

Testing the hypothesis set is done by comparing the f-count with the f-table value. For n = 48, k = the number of variables X = 2 and α = 0.05 from table f obtained the value of f-table with db_1 = 2 and db_2 = 48-2-1 = 45 of 3.204.

The results of the calculation of the statistical value of the f-statistic test of the regression model tested using Eviews 10, obtained the following results:

Table 10: F-Statistics Test Results

Cross-section fixed (dummy variables)			
R-squared	0.805678	Mean dependent var	0.261645
Adjusted R-squared	0.695562	S.D. dependent var	0.033849
S.E. of regression	0.018677	Akaike info criterion	-4.843099
Sum squared resid	0.010464	Schwarz criterion	-4.141398
Log likelihood	134.2344	Hannan-Quinn criter.	-4.577925
F-statistic	7.316636	Durbin-Watson stat	3.582114
Prob(F-statistic)	0.000001		

Source: Output Eviews 10

Based on table 5.13, it can be explained that the f-statistic value for the regression model used is 7.316636 with a significance value or Prob (f-statistic) of 0.000001.

The magnitude of the F-statistics when compared to the F-table in the regression equation obtained shows the F-statistic is greater than the F-table (7.316636> 3.204) thus the F-statistic has a hypothesis rejecting H0. The results obtained are true with a significance value (0.000001) smaller than α = 0.05 which means the significance test (H0 is rejected). Simultaneous model test results show Profitability (ROA) and Leverage (DAR) simultaneously influence the Tax Aggressiveness of the consumer goods manufacturing corporates listed on the IDX for the period of 2016-2018.

Adjusted R Square (R ^ 2) Determination Coefficient

The coefficient of determination is used to indicate the accuracy of the regression model. The coefficient of determination is a number that indicates the degree of ability of the independent variable in explaining the dependent variable of the model. The coefficient of determination ranges between 0 and 1, where the closer to 1, the independent variables in the regression model are increasingly able to explain the dependent variable in the model.

Table 11: The coefficient of determination results

Cross-section fixed (dummy variables)

R-squared	0.805678	Mean dependent var	0.261645
Adjusted R-squared	0.695562	S.D. dependent var	0.033849
S.E. of regression	0.018677	Akaike info criterion	-4.843099
Sum squared resid	0.010464	Schwarz criterion	-4.141398
Log likelihood	134.2344	Hannan-Quinn criter.	-4.577925
F-statistic	7.316636	Durbin-Watson stat	3.582114
Prob(F-statistic)	0.000001		

Source: Output Eviews 10

The results of the panel data regression model with the estimated approach using the Fixed Effect Model (FEM) which has been calculated, the coefficient of determination (R ^ 2) obtained is 0.695562. This means that the independent variable in this model is able to explain the dependent variable at 69.55%. So that simultaneously Profitability (ROA) and Leverage (DAR) have an effect of 69.55% on Tax Aggressiveness in manufacturing corporates in the consumer goods sector which are listed on the IDX for the 2016-2018 period.

VI. DISCUSSION

Effect of Profitability (ROA) on the Aggressiveness of Taxes in Manufacturing Corporates in the Consumer Goods Sector in 2016-2018.

Based on the t test in table 5.12, it states that profitability measured using the Return On Asset (ROA) ratio has a significant effect on tax aggressiveness as measured using the Effective Tax Rate (ETR) on manufacturing corporates in the consumer goods sector listed on the IDX year 2016-2018. All manufacturing corporates in the consumer goods sector that are used as research samples have never experienced a loss during the 2016-2018 period, meaning that the corporate has an obligation to pay taxes because on the basis of not experiencing these losses the corporate is subject to tax. In this study, there were 7 of the total 16 corporates that were sampled as having a profitability of more than 15%, meaning that taxes to be paid by the corporate were high as a result of the high profitability obtained by the corporate, therefore it can provide or trigger the growth of motivation on the corporate to conduct tax aggressiveness both done with tax avoidance or with tax evasion. Corporates that obtain high profitability but low ETR value means the corporate is doing tax aggressiveness because the higher the ETR value (near zero), the corporate is considered to be more aggressive towards taxes. This is evident in this study from 16 corporates, there were 8 corporates that during 2016-2018 ETR values were achieved between 0 to 0.25, which indicates that manufacturing corporates in the consumer goods sector carried out tax aggressiveness. The results of this study are consistent with previous research by Sulistyowati and Ulfah (2018), Leksono, Albertus and Vhalery (2019), Winarsih, Amah and Sudrajat (2019) that profitability has a significant effect on tax aggressiveness in the period of each study.

Effect of Leverage (DAR) on Tax Aggressiveness of Manufacturing Corporates in the Consumer Goods Sector in 2016-2018

Based on the results of the t test in table 5.12, it states that leverage measured by using Debt to Asset Ratio (DAR) has a significant effect on Tax Aggressiveness measured using Effective Tax Rate (ETR) on manufacturing corporates in the

consumer goods sector listed on the IDX in 2016-2018. This shows that the higher the leverage ratio, the corporate is considered to be more aggressive towards taxes because with high leverage raises a high debt interest expense, where the debt interest expense can reduce taxable income. conversely, if the leverage ratio is low, the corporate is not said to be aggressive towards taxes because it does not incur high debt interest costs, so the reduction of taxable income is also low. This result gives an indication that during the observation period, corporates used as samples tend to use debt to minimize the corporate's tax burden through the use of debt interest which can be used as a deduction for taxable income, which means corporates are increasingly aggressive towards taxes. According to Kasmir (2017: 112), leverage is a ratio used to measure the extent to which a corporate's activities are financed with debt, meaning how much debt is borne by the corporate compared to its total assets. The higher the leverage in the corporate, the higher the obligations that must be fulfilled, which results in an increased level of corporate tax aggressiveness (Fadli, 2018). The results of this study are in line with previous studies by Gunawan, Meutia and Yusnaini (2019), Dharmayanti (2019), Hidayat and Fitria (2018), Fitri and Munandar (2018), which stated that leverage affects tax aggressiveness.

Effect of Profitability (ROA) and Leverage (DAR) on the Tax Aggressiveness of Manufacturing Corporates in the Consumer Goods Sector in 2016-2018

Based on the f-statistic test in table 5.13, it states that profitability measured by using the ratio of Return On Assets (ROA) and leverage measured using Debt to Asset Ratio (DAR) simultaneously affects the tax aggressiveness measured by using Effective Tax Rates (DAR) ETR) in consumer goods manufacturing corporates listed on the IDX in 2016-2018. The profitability value of the manufacturing corporates in the consumer goods sector that was sampled in the study never experienced a loss and the high leverage value from 2016-2018 affected the level of tax aggressiveness carried out by the corporate. corporates that have profitability certainly have an obligation to pay taxes but the high tax burden that must be paid by corporates causes the growth of corporate motivation to take aggressive tax actions through increased leverage that can provide opportunities for corporates to reduce tax burden through interest expense leverage that can be used as deduction from taxable income so that, the tax burden to be paid by the corporate can be reduced and result in the corporate getting a low ETR value. It is said that the corporate is indeed aggressive towards taxes. This research proves that there are 8 corporates out of 16 corporates which are used as research samples having ETR values close to zero from the average obtained between 0 - 0.25, therefore the manufacturing goods sector manufacturing corporates used as samples in this study can be said to have high level of tax aggressiveness. The high level of corporate tax aggressiveness can be caused by corporates taking actions such as tax avoidance by managing earnings in the form of minimizing profits or tax evasion. The results of this study are consistent with previous studies of Fitri and Munandar (2018) which state that profitability and leverage affect tax aggressiveness.

VII. CONCLUSION

Based on the research that has been described regarding the effect of Profitability (ROA) and Leverage (DAR) on Tax Aggressiveness in consumer goods manufacturing corporates in 2016-2018, the authors make a conclusion as follows:

1) There is an effect of profitability on tax aggressiveness. The amount of ETR that illustrates the tax aggressiveness in the manufacturing corporates in the consumer goods sector in 2016-2018 is caused by the large level of profits earned by the corporate resulting in the corporate having an obligation to pay a large (reasonable) tax on profits obtained,

this is contrary to the corporate's objectives who want to get the maximum profit so that in practice the corporate will be more aggressive towards taxes on the grounds that the tax burden can reduce the profits earned by the corporate.

2) There is a leverage effect on tax aggressiveness. The high level of leverage in manufacturing corporates in the consumer goods sector listed on the IDX in 2016-2018 indicates an act of tax aggressiveness carried out by corporates through the use of interest expense on debt which is a deduction from taxable income which can ultimately reduce the corporate's tax burden . Because the higher the interest expense on corporate debt, the greater the reduction in tax burden on the corporate.

3) There is a simultaneous effect of profitability and leverage on tax aggressiveness. The increasing level of tax aggressiveness by the corporate is caused by the high profitability of the corporate which causes the high tax burden to be paid by the corporate, so the corporate is doing tax aggressiveness through increasing the level of leverage which is a deduction from the amount of the corporate's tax burden. Tax aggressiveness actions carried out by corporates carried out by way of tax avoidance or by tax evasion.

VIII. SUGGESTION

Based on the results of this study conducted by the author regarding the effect of profitability and leverage on tax aggressiveness in the manufacturing corporates in the consumer goods sector listed on the IDX for the period of 2016-2018, the authors provide suggestions in the hope that they can be useful, as follows:

1) For taxpayers

For all taxpayers, especially corporates in the consumption goods manufacturing sector which are the population in this study, to be more compliant with tax obligations both formal and material compliance by not avoiding tax evasion or tax evasion that is expected by implementing corporate tax compliance free from the risk of sanctions for action taken.

2) For Further Researchers

It is recommended for further researchers to add other variables outside this study that have an influence on tax aggressiveness and the use of other research subjects outside of this research. It is expected that the expansion of variables and the use of different research subjects can add information on the aggressiveness of taxpayers. thus helping in achieving the target of state revenue from the tax sector.

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