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FISCAL LOSS COMPENSATION, PROFITABILITY, LEVERAGE, AND TAX AVOIDANCE: EVIDENCE FROM INDONESIA

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ABSTRACT

The purpose of this research was to examine the effects of fiscal loss compensation profitability and leverage on tax avoidance practices by manufacturing companies listed on the Indonesia Stock Exchange between 2011-2015. The research population of this work are manufacturing companies that were listed on the Indonesia Stock Exchange between 2011-2015. In this work, study samples were selecting using purposive sampling. Study samples that met acceptance criteria consisted of 50 firms. The unit of analysis in this study was 250, which was based on the 50 firms that met acceptance criteria multiplied by the the observation period of five years. The developed hypothesis of this work was analyzed using panel regression analysis with fixed effect method. The results from this research demonstrated that fiscal loss compensation and profitability had a positive impact on tax avoidance whereas leverage had no significant effect on the manufacturing companies analyzed in this work.

INTRODUCTION

In order to increase tax revenues, the government of Indonesia expects taxpayers to meet their voluntary tax obligations according to the self-assessment system. In Indonesia, the potential of taxes to support government revenues is high (Soewardi, Ananda, & Khusaini, 2017), which can be seen in Table 1.

Table 1. : *Summary of 2011-2015 State Revenue and Expenditures (In Trillion Rupiah)*

Details	2011	2012	2013	2014	2015
Tax revenue	850,2	1.032,5	1.192,9	1.280,3	1.379,9
Non Tax Revenue	250,9	277,9	332,1	385,3	410,3
Grant	3,7	0,8	4,4	1,3	3,2
Total Revenue	1.104,9	1.311,3	1.529,6	1.667,1	1.793,5

Total Expenditure	1.229,5	1.435,4	1.683,0	1.842,4	2.039,4
Surplus/Deficit	-124,6	-124,0	-153,3	-175,3	-245,8

source : Statistic Indonesia (2016)

Although tax revenues have increased in the last five years, the amounts collected have not yet been maximized, based on targets set in the state budget (Table 2).

Table 2.
Target and Realization of 2011-2015 National Tax Revenues (In Trillion Rupiah)

Years	Target Revenue	Realization of Revenues	Percentage Revenue
2011	850,2	743,20	99,30%
2012	885,8	835,83	94,40%
2013	995,2	921,40	92,10%
2014	1.072,4	985,13	91,86%
2015	1.294,26	1055,61	81,60%

source: Directorate General of Taxes (2016)

Sub-optimal realization of tax revenue may be caused by taxpayers not fulfilling their required tax obligations, which may be due to Indonesia’s self-assessment system. In this system, taxpayers calculate, pay, and report tax obligations by themselves; thus, there is an inevitable risk that individuals or a business may intentionally avoid paying their full tax burden.

According to Darussalam and Septriadi (2009), tax planning, tax avoidance, and tax evasion are the three main ways to avoid paying taxes. Tax avoidance is often equated with tax planning, as both use legal means to reduce or even eliminate tax obligations. Although no laws are violated, all parties agree that tax avoidance is unacceptable, since it directly impedes the ability of the state to collect the required amount of tax revenue needed by the state (Wijaya, 2014).

In Indonesia in the year 2005, there were 750 foreign capital companies that practiced tax avoidance, according to Jusuf Anwar who served as Minister of Finance (Detik Finance, 2005). In 2016, the Directorate General of Taxes stated that 2.000 multinational companies operating in Indonesia did not pay Income Tax Agency Article 25 and Article 29 for reasons of loss (Ariyanti, 2016).

In 2015, the UNCTAD (United Nations Conference on Trade and Development) reported that developing countries lost more than $100 billion per year (Tax Forum, 2015); thus, it can be concluded companies that engage in tax avoidance is significant, especially in developing countries.

According to Ngadiman and Puspitasari (2013), several factors can influence tax avoidance, including leverage and institutional ownership. Additionally, Kurniasih and Sari (2013) stated that tax avoidance can be affected by asset returns, leverage, firm size, and fiscal loss compensation. Previous research focused on three variables that have inconsistent results, namely fiscal loss compensation, profitability, and leverage.

Our research reported in this work should be useful to governments for developing anti-avoidance policies, especially in relation to manufacturing companies that contribute heavily to tax revenues (according to Finance Minister Sri Mulyani, the manufacturing sector contributes the most to tax revenues (Rachman, 2017)). Anti-avoidance policies may be able to prevent companies from evading taxes, which would help countries like Indonesia increase tax revenue realization.

LITERATURE REVIEW

Agency Theory

Jensen dan Meckling (1976) defined an agency relationship as "a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent". Jensen dan Meckling (1976) stated "If both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal".

The relationship between agent and principal is not just limited to the relationship between manager and owner. According to Purwandari and Purwanto (2012), there are three kinds of agency relationships: 1) manager and owner, 2) manager and creditor, and 3) manager and government. Thus, it can be concluded that there is a tendency for managers to report information in a way that maximizes its utility, in this case relating to the government. There is a possibility for managers to be more concerned with the interests of their company as compared to correctly meeting tax obligations. This is because the manager, acting as an agent, wants his/her company to maximize profits by paying a small amount of taxes. This is in contrast to the government acting as a principal that wants a company to fulfill its tax obligations in accordance with the applicable tax laws in Indonesia.

Stakeholder Theory

Stakeholder theory is managerial-based in that it reflects how managers actually operate rather than primarily addressing management theorists and economists (Freeman, Andrew, and Bidhan 2004). Furthermore, Freeman et al. (2004) explains that the focus of stakeholder theory is based on two questions: (1) what is the purpose of the firm? (2) what responsibility does management have to stakeholders?

Freeman, Jeffrey, Andrew, Bidhan, and Simone (2010) defined stakeholders as: "any group or individual who can affect or is affected, by the achievement of the organization's objective". According to Freeman et al. (2010), individuals or groups can be divided into two segments: (1) primary stakeholders: employees, customers, communicaties, financiers, and suppliers; (2) secondary stakeholders: government, competitors, consumer advocate groups, special interest groups, and media.

Based on stakeholder theory, it can be concluded that in addition to being concerned with its own well-being, a company must also meet the interests of stakeholders (in this case, the Directorate General of Tax (the government)). The interest of the Directorate General of Taxes is to ensure that the company has performed its tax obligations correctly; i.e., calculating, paying, and reporting corporate taxes. in this case more emphasis on tax payments.

Tax Avoidance

The purpose of tax avoidance is to reduce tax burden and increase shareholders' wealth (Huseynov & Klamm, 2012). Pohan (2013) stated that legal tax avoidance is safe for the taxpayer because it is not contrary to the provisions of taxation in which the methods and techniques tend to take advantage of weaknesses in tax laws and regulations to minimize tax burden. Chen et al. (2010) stated that tax avoidance can occur in the pursuit of offshore tax havens or in the creation of complicated structures involving tax-indifferent related parties. These types of transaction are often very complex and are designed to obscure the underlying intent, and avoid detection by the IRS.

There are several formulas to measure tax avoidance (~~Hanlon and Heitzman, 2010~~), including GAAP Effective Tax Rate, Current Effective Tax Rate, Cash Effective Tax Rate, Long-Run Cash Effective Tax Rate, ETR Differential, DTAX, Total Book Tax Different, Temporary Book Tax Different, Abnormal Total Book Tax Different, Unrecognized Tax Benefit, Tax Shelter Activity, and Marginal Tax Rate.

In this study, tax avoidance is measured by the Cash Effective Tax Rate (CETR). According to Chen et al. (2010), CETR uses fixed and temporary differences to identify the level of aggressiveness of corporate tax planning. When the CETR of a company becomes smaller, it can be concluded that the company is engaging in tax avoidance.

The Effective Tax Rate for corporate taxpayers is 25% in Indonesia, but companies that meet the criteria published in Law Number 36 of 2008 Article 17 paragraph 2b receive a tariff reduction facility of 5%. Thus, it is possible that a company may engage in tax avoidance if 1) it has less than 20% CETR and meets the criteria in Law Number 36 of 2008 Article 17 paragraph 2b or 2) has a CETR of less than 25% and does not meet the criteria in Law Number 36 of 2008 Article 17 paragraph 2b. CETR can be calculated by the formula:

$$CETR_{i,t} = \frac{\text{Cash tax paid}_{i,t}}{\text{Pre-tax income}_{i,t}}$$

Cash tax paid is obtained from the company's cash flow statement that ended on December 31 and pre-tax income was obtained from the income statement that also ended on December 31. It can be concluded that a company may be engaging in tax avoidance if 1) the CETR is less than 20% and the company meets the criteria in Law Number 36 of 2008 Article 17 paragraph 2b or 2) the CETR is less than 25% and the company does not meet the criteria in Law Number 36 of 2008 Article 17 paragraph 2b.

Tax of Compensation for Fiscal Losses

In Law Number 36 Year 2008 regarding Income Tax of Compensation for fiscal losses arises if in the previous tax year there are fiscal losses. Fiscal losses arise when gross income deducted by deductions permitted by law loses. This fiscal loss can be compensated for up to five years. In this study, fiscal losses using dummy, if an enterprise (i) in year (t) receives compensation for a fiscal loss, then there is a possibility that the fiscal loss is an act of tax avoidance. This act takes advantage of a regulatory gap in which fiscal losses can be compensated for up to five years such that the enterprise (i) may minimize or even not have to pay any taxes in (t) for five years.

Profitability

Profitability is important in maintaining a company in an operational state, because profitability indicates whether the company has favorable prospects for the future. Hermuningsih (2012) stated that every company will always try to improve profitability, because the higher the level of profitability, the more secure the company will be.

In this study, profitability is measured using Return On Assets (ROA), which is an indicator of what management has accomplished with the given resources (Gaur, Bathula, & Singh, 2015). According to Chen et al. (2010), highly profitable companies have the opportunity to practice tax planning, which reduces the amount of tax burden liabilities. Thus, it can be concluded that companies with high profitability have more opportunities to avoid taxes.

Leverage

Leverage describes the proportion of total debt to total assets owned by the company in order to know the funding decision made by the company (Darmawan & Sukartha, 2014). In this study, leverage is measured using Debt to Total Asset Ratio (DAR). The higher the leverage of a company, the higher the possibility of the company engaging in tax avoidance activities, because the debt will result in a fixed rate (fixed rate of return). called the interest Suyanto (2012) where in Law Number 36 of 2008 Article 6 paragraph 1a states that interest can be used as a deduction to the amount of taxable income. Chen et al. (2010) stated that leverage can reduces the effective tax rates of highly geared companies because loan interest is tax deductible.

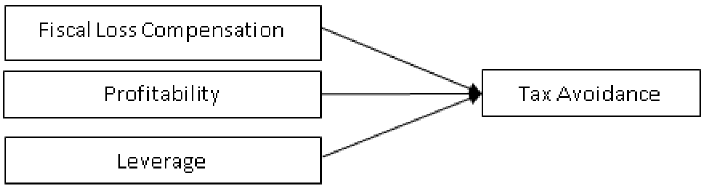

Figure 1. Conceptual Framework

MATERIALS AND METHODS

Population, Sample, and Data

The population in this study consisted of manufacturing companies (up to 143 companies) listed on the stock exchange between 2011 to 2015. The sample was chosen using the purposive sampling method in which 143 companies were selected and as many as 50 companies met acceptance criteria. This study used secondary data and documentation methods to collect the required data from annual financial statements from manufacturing companies listed on the Indonesia Stock Exchange between 2011-2015. Collected data had to meet the following criteria for the respective company to be included in the study:

1. Consecutive submission of complete annual reports by manufacturing companies on the Indonesia Stock Exchange in 2011 – 2015,

2. Companies that submitted annual reports in Rupiah for the same currency rate criteria,
3. Companies that earned a profit to avoid distorting the value of the CETR (Richardson & Lanis, 2007),
4. Companies with a CETR score of less than 1, since a score greater than 1 cause problems in model estimations (Richardson & Lanis, 2007).

Panel Data Regression Analysis

In this study, data analysis techniques were based on panel data regression analysis. There are several models commonly used in estimating panel data regression, including the Common Effect, Fixed Effect, and Random Effect (Widarjono, 2013). Given that similar research is typically conducted with more than one independent variable (X > 1), then the appropriate statistical analysis test to use is multiple regression, as shown in the following equation:

$$\boxed{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e}$$

Explanation : Y = Tax Avoidance
X_1 = Fiscal Loss Compensation (dummy variable)
X_2 = Profitability
X_3 = Leverage
β_0 = Constanta
β_1 = Coefficient each variable (I =1,2,3)
e = Error

RESULTS AND DISCUSSIONS

Descriptive statistical analyses are shown in Table 3.

Table 3
Descriptive Test Results

DESCRIPTIVE STATISTICS				
	FLC	**PROF**	**LEV**	**TAX AVOIDANCE**
Mean		0,13	0,42	0,28
Minimum	0	0,01	0,10	0,03
Maximum	1	0,70	0,96	0,80
Std. Deviation		0,12	0,18	0,11
Observations	250	250	250	250

source: Output Panel Data, Eviews 9

The mean and standard deviation of fiscal loss compensation (FLC) is not counted because it is a dummy variable.

Hypothesis Testing

The effect of one independent variable on the dependent variable can be identified by partial testing, in which it assumed that another variable is constant. The results of data processing are presented in Table 4.

Table 4
t-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.384216	0.037223	10.32187	0.0000
FLC	-0.171503	0.058424	-2.935503	0.0037
PROF	-0.430770	0.114956	-3.747275	0.0002
LEV	-0.044864	0.076091	-0.589610	0.5561

source: Output Panel Data, Eviews 9

Simultaneous Effect Testing

The Simultaneous Test is used to test the regression coefficient as a whole to determine the effect between variables X and Y simultaneously. A summary of hypothesis test results are presented in Table 5:

Table 5
F-Test Result

Model	Prob (F Statistic)
Fixed Effect	0.000100

source: Output Panel Data Eviews 9

Profitability, leverage, and fiscal loss compensation have a significant effect on tax avoidance as measured by the CETR, either simultaneously or together. This can be seen in Table 5 where the probability value (i.e., F-statistic) is 0.000100 <0,05; thus, H0 is rejected.

Coefficient of Determination Analysis

The coefficient of determination can be used to determine the magnitude of the relationship between independent variables and the dependent variable. The coefficient of determination or value of R Square is 0.36 or 36% (Table 6).

Table 6
Results of Coefficient of Determination

Model	R Square	Adjusted R Square	Prob (F statistik)
Fixed Effect	0.360807	0.192086	0.000100

Source : output panel data, Eviews 9

Based on these results, it can be concluded that the combined independent variables affect the dependent variable by 36%, while the remaining 64% can be explained by other variables external to this study.

The Effect of Fiscal Loss Compensation on Tax Avoidance

Statistical test results show that fiscal loss compensation has a positive and significant effect on tax evasion as measured by CETR. The negative β sign (coefficient) of fiscal loss compensation in Table 4 shows a positive effect, because CETR has assumption the smaller value CETR have meaning firm is assumed to practice tax avoidance. This study concludes that if a company receives fiscal loss compensation, then there is a possibility that the company is engaging in tax avoidance.

Tax avoidance could be occurring because fiscal loss compensation minimizes the company's tax payments. This Statement is supported by Law Number 36 of 2008 Article 6 paragraph 2 where fiscal losses can be compensated with income the following year for up to 5 years. Thus, companies that experience losses will automatically avoid next year's tax burden if the taxable income in the coming year is less than the fiscal losses of the previous year. The results of this study are consistent with Kurniasih and Sari (2013) which concluded that fiscal loss compensation has a significant effect on tax avoidance.

The Effect of Profitability on Tax Avoidance

Statistical test results show that profitability has a positive and significant effect on tax avoidance as measured by CETR. The negative β mark (coefficient) on profitability in Table 4 shows a positive effect, because smaller CETR values indicate tax evasion. Therefore, we can conclude that the greater the value of profitability then the more likely companies are to engage in tax avoidance.

Chen et al. (2010) stated that high profitability provides companies with an opportunity to reduce the amount of tax burden liabilities. This is because the company wants to maintain operations, thereby making the company more secure and providing favorable prospects for the future. Thus, it can be concluded that companies with increasing profitability will practice tax avoidance. This conclusion is supported by this study that revealed that profitability has a positive and significant effect on tax avoidance. The results of this study are consistent with Kurniasih and Sari (2013), Darmawan and Sukartha (2014), and Dewinta and Setiawan (2016), which showed that profitability has a significant effect on tax avoidance.

Effect of Leverage on Tax Avoidance

Statistical test results showed that leverage did not have a positive effect on tax avoidance as measured by CETR. The negative β sign (coefficient) on leverage on Table 4 shows a positive effect, since a smaller CETR suggests that the respective company is practicing tax avoidance. This conclusion is supported by results from this study that indicated that 33 companies have below average leverage values.

This can occur because increases and decreases in leverage values are not only caused by increased debt, but can also be caused by decreases or increases in the assets of a company that impact leverage (based on Debt to asset ratio (DAR)) but do not reflect actual debt of the company. The results of this study are consistent with Kurniasih and Sari (2013), Ngadiman and Puspitasari (2013), Darmawan and Sukartha (2014), and Dewinta and Setiawan (2016), which showed that leverage has no significant effect on tax avoidance.

CONCLUSIONS

Based on the result of this work, it can be concluded that fiscal loss compensation and profitability have a positive and significant influence on the practice of tax avoidance conducted by manufacturing companies listed on the Indonesia Stock Exchange between 2011-2015. Fiscal loss is used by companies to avoid taxes because the company can be free of taxes for the upcoming year (within five years). Also, companies that have large profits avoid taxes because the company wants to maintain operations that makes the company more secure and provides favorable prospects for the future. Leverage has no positive effect on tax avoidance in manufacturing companies listed on the Indonesia Stock Exchange from 2011-2015, because leverage (based on DAR) does not reflect actual debt of the company.

Suggestion

This study has a few limitations. Suggestions that may improve subsequent studies are as follows:

1. Tax avoidance in this study was measured using CETR. According to theory, there are twelve measuring tools to measure tax avoidance, so it is advisable to use other tax avoidance tool along with Current Effective Tax Rate or Abnormal Book Tax Difference in subsequent studies.
2. Fiscal loss compensation variable has a positive and significant impact on tax avoidance, so it is recommended that the Directorate General of Taxation establish a mechanism that addresses tax avoidance via fiscal loss compensation.
3. Profitability variables have a positive and significant impact on tax avoidance, so it is recommended that the Directorate General of Taxation uses profitability indicators as an inspection indicator during the next Inspection Policy.

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