The Effect of Tax Planning on Financial Performance of Manufacturing Companies in Indonesia

Elisabeth Cindy Laurencia, Diah Amalia
Jurusan Manajemen Bisnis, Akuntansi Manajerial, Politeknik Negeri Batam,, Batam, Indonesia

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Abstract: This study aims to examine the effect of tax planning on the financial performance of manufacturing companies in Indonesia. This study uses secondary data obtained from the financial statements of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2014-2018 period. By using a purposive sampling method, 245 samples were obtained. Data analysis conducted in this study is panel data using Ordinary Least Square (OLS). The proxy of tax planning in this study uses Cash ETR & ETR and ROA as a proxy for financial performance. The results of this study indicate the influence of tax planning on the performance of manufacturing companies in Indonesia.

1 INTRODUCTION

Sustainable development in Indonesia is carried out to support and improve the prosperity of the people. State development relies on the State Budget (APBN) as the main source of financing. In order to achieve this goal, issues concerning financing of state development need to be solved. Tax revenue is the main income from domestic revenue in state financing for state expenditure and development. According to the state budget data for the previous 5 years[1], in 2014 tax revenues accounted for 76%, 85% in 2015,2016, 2018, and 86% in 2017.

Taxes, for companies, are considered as expenses or costs that affect the income received by the company in carrying out operational activities. Assumptions of tax as expenses will affect earnings, while taxes as profit distribution will affect the rate of return on investment (Suandy, 2011). Taxes that affect profits can be minimized through tax management, and a reduction in corporate tax burden can be done with tax management.

Tax planning in tax management refers to the process of planning business and taxpayer transactions so that tax debt becomes less but still within tax regulations. Companies are able to minimize many tax burdens and increase company profits with ideal planning. Hoffman (1961), taxation, is largely based on business or accounting concepts, so companies can modify activities such as towards achieving tax liability reduction (Ogundajo & Onakoya, 2016).

Research from Ogundajo & Onakoya (2016) conducted in Nigeria with a sample of 10 of the 28 manufacturing companies in the annual consumer goods sector showed that increasing ETR has a reduction in ROA. Feng, Habib, & Tian's research (2019) conducted in China found a positive and significant relationship between aggressive tax planning variables and share price synchrony variables.

In contrast to previous research, Kristianto, Andini, & Santoso (2018) explained that tax planning has no direct effect on firm value. Yuliem (2018) also states that tax planning does not affect firm value, which means high or low company value does not affect the high or low influence of tax planning

This research is a development of previous research conducted by Ogundajo & Onakoya (2016). The Ogundajo & Onakoya study (2016) took place in Nigeria with a population of 28 research companies manufacturing the annual consumer goods sector and only previous studies used ETR as a measurement of tax planning. This study took a research population of 166 companies listed on the Indonesia Stock

[1] Can be accessed at https://www.kemenkeu.go.id/apbn2018

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Exchange. Another difference lies in the measurement of tax planning using ETR & CETR.

2 THEORY BASIS

2.1 EMH (Efficient Market Hypothesis)

Fama (1970) in Sujana (2017) defines an efficient market is a security market said to be efficient if the prices of securities fully reflect the available information. The information classification concludes that there are three forms of efficient capital markets, namely (1) a weak form of efficiency, which is a situation where the stock price reflects all the information in the past price record; (2) a half-strong form of efficiency, i.e. prices also reflect all information published not just past prices; and (3) strong form of efficiency, i.e. all relevant information available is reflected in the stock price.

2.2 UU No. 36 of 2008

UU No. 36 of 2008 is the fourth amendment to UU No. 7 of 1983 concerning income tax. Article 2 of UU No. 36 of 2008 states that the subject of taxation is (a (1)) a person; (2) inheritance which has not been divided as a unit replaces the entitled; (b) institution, and; (c) permanent establishment. Article 2 paragraph 5 explains a permanent establishment is a form of business that is used by individuals who do not reside in Indonesia, individuals who are in Indonesia no more than 183 (one hundred eighty-three) days within 12 (twelve) months, and an institution or agency that is not established and is not domiciled in Indonesia to run a business or conduct activities in Indonesia, which may be in the form of (a) a place of management; (b) company branches; (c) representative office; (c) office building; (d) factory; (e) workshop; (f) warehouse; (g) space for promotion and sale; etc[2]

2.3 Capital Structure

Modigliani & Miller (1958) was the first researcher to develop the theory of capital structure. They developed two propositions, namely the first claim that the level of corporate leverage does not affect market value. The second explains that the weighted average cost of a company as not affected by corporate leverage (Acaravci, 2015).

2.4 Agency Theory

Agency theory is a theory that explains that in a company two parties interact with each other. An agency relationship is defined as a contract in which one or several shareholders and company management carry out certain activities that involve the delegation of decision making authority to the company's management. Companies that separate management and ownership functions will be vulnerable to agency conflict because each party has conflicting interests, which is trying to achieve their own (Jensen & Meckling, 1976).

2.5 Positive Accounting Theory

This theory was first coined by Watts & Zimmerman (1986) at the William E. Simon School of Business Administration at the University of Rochester. One of these theories explains the political cost theory which assumes that companies tend to show lower profits using accounting methods and procedures so that companies do not attract the attention of those who oversee high-profit industries. Large companies effectively utilize economic and political power to reduce tax liability and are involved in tax planning due to extensive resources (Ogundajo & Onakoya, 2016).

2.6 Tax Planning

Crumbley, Friedman, & Anders (1994) say that tax planning is a systematic analysis aimed at minimizing tax liabilities in the current and future periods (Suandy, 2011). Tax planning is the first step in tax management to minimize the company's tax burden. Suandy (2011) divides tax planning into two, namely, national tax planning which is carried out based on domestic law and international tax planning which is carried out based on domestic law and takes into account international tax treaties and the laws of the countries involved.

[2] Can be accessed at https://www.pajak.go.id/id/undang-undang-nomor-36-tahun-2008

2.7 Financial Performance

Financial performance is the company's ability to manage and control company resources. Financial performance is measured using the financial ratio method (Ikatan Akuntan Indonesia, 2015).

Financial Ratio Analysis can be divided into (1) profitability ratio analysis, used to measure a company's ability to generate profits. For example, ROA (Return on Asset) and ROE (Return on Equity); (2) solvency ratio analysis, measuring the company's ability to meet long-term obligations, payment of the final principal of debt and other fixed obligations, for example, debt ratio; (3) analysis of liquidity ratios, to measure a company's ability to meet short-term debt obligations, for example, cash ratio; (4) and activity ratio analysis, used to measure how effectively a company utilizes assets to generate revenue, for example, fixed asset turnover ratios (Agnatia & Amalia, 2018).

3 RESEARCH METHODOLOGY

This research uses descriptive quantitative because the data used are secondary data taken from the financial statements of manufacturing companies on the official website of the Indonesia Stock Exchange for the period 2014-2018. Sampling is done by a purposive sampling method and processed using Eviews 10.0 application. Data were then analyzed by panel data regression using Generalized Least Square.

4 ANALYSIS AND DISCUSSION

4.1 Data Analysis

Data analysis was performed on all manufacturing companies listed on www.idx.co.id for the 2014-2018 period. The number of companies listed as the study population still has to go through the elimination stage through established sampling criteria. The results of the withdrawal criteria can be seen as follows:

Table 1: Research Sample

Company Indication	Total
Manufacturing companies listed on the Indonesia Stock Exchange in 2014-2018, experienced Initial Public Offering (IPO), delisted, and moved to the non-manufacturing sector during the research period.	149
Companies that do not use Rupiah units.	-13
Companies that do not have an Effective Tax Rate (ETR) and Cash Effective Tax Rate (CETR) value	-78
Data on all company components needed in the study are incomplete	-9
Companies engaged in the property and mining sector.	0
Selected companies become samples per year	49
Total samples for the 2014-2018 period	245

Source: Data processed by the researcher, 2020

The first analysis conducted in this study was a descriptive statistical analysis. Descriptive statistics are statistical methods that describe the nature of the results of research data in answering the problem formulation and overall that is presented in tabular form. Descriptive statistics are performed to determine the min, max, mean, and standard deviation of the dependent variable (financial performance), independent variables (tax planning), and control variables (leverage, size, age, and firm growth). The results of the descriptive statistical analysis test are in the following table:

Table 2: Analysis Descriptive Statistic Result

Variable	Mean	Maximum	Minimum	Std. Dev.
ROA	0.088	0.467	0.000	0.079
Tax Payment*	0,149	4,426	0,000	0,440
Current Tax Expense*	0,481	7,623	0,000	1,088
Leverage	0.378	0.839	0.056	0.179
Firm Size	28.723	33.474	25.619	1.729
Firm Age	39.490	87	5	16.607
Firm Growth*	4,190	57,733	0,028	9,120
Sampel (N)	245	245	245	245

Note: This table presents the statistical test results. Independent Variables: Current Tax Expense and Tax Payment. Control Variables: Size, Leverage, Age, Firm growth. Dependent Variable: ROA (Return on Asset). * = in trillion rupiah

Source: Data processed with Eviews 10, 2020

Several testing stages need to be performed before conducting the panel data regression analysis, in determining the appropriate panel data estimation model. The testing phase carried out in this study refers to Basuki & Prawoto (2016), to choose the most appropriate model among common effects, fixed effects, and random effects in managing panel data, it is necessary to carry out several tests including the chow test and the haussman test:

Table 3: Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	13,207	-48,190	0,000

Source: Data processed with Eviews 10, 2020

Table 3 shows the value of the probability of cross-section F that is equal to 0,000. The probability value is smaller than alpha 5% (0,000 <0.05) and shows that the best estimation model is the fixed effect. The panel data test is then continued with the haussman test to find out the best panel data method between the fixed effect model and the random effect model.

Table 4 : Chi-Square Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	44,877	6	4,950

Source: Data processed with Eviews 10, 2020

Table 4 shows that the chi-square cross-section probability value needed in selecting the panel data estimation model is 4.9. The probability value is greater than the significance level of alpha 5% (4.9> 0.05). Haussman test results are in accordance with predetermined criteria if the chi-square probability value> 0.05, then the random effect is the most appropriate model.

The random effect method estimates panel data where interruption variables may be interconnected between time and between individuals. When using the random effect model, the benefit is eliminating heteroscedasticity. This model is also called the Error Component Model (ECM) or the Generalized Least Square (GLS) technique (Basuki & Prawoto, 2016).

Table 5: Random Effect Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Roa	0.154	0.127	1.212	0.227
Tax Payment	-5.294	1.556	-3.402	0.001
Current Tax Expense	6.681	9.262	7.214	7.214
Leverage	-0.047	0.021	-2.212	0.028
Firm Size	-0.004	0.004	-0.883	0.378
Firm Age	0.001	0.000	3.746	0.000
BV of Total Asset	-3.951	8.761	-4.510	1.020
R-squared				0.244
Adjusted R-squared				0.225
Prob(F-statistic)				1.504

Source: Data processed with Eviews 10, 2020

The results of the random effects panel data regression model in table 5 show a constant value of 0.154, while the coefficient value of the tax payment variable shows a value of -5.294, the current tax expense variable shows a value of 6.681, the variable leverage indicates a value of -0.047, firm size indicates the value of -0.004, firm age variable shows a value of 0.001 and a book value of total assets variable shows a value of -3,951. Based on the coefficients of these variables, the panel data equation model is as follows:

$$ROA = 0{,}154 - 5{,}294TP_{it} + 6{,}681CTE_{it} - 0{,}047LEV_{it} - 0{,}004SIZE_{it} + 0{,}001AGE_{it} - 3{,}951BV_{ite}$$

The equation above shows the effect between tax payment and current tax expense as independent variables and firm size, leverage, firm age, and the book value of total assets as control variables on the dependent variable (ROA). The description of the equation is the average financial performance through ROA of 0.154 will decrease by 5.294 if the tax payment variable increases by 1 unit, increases by 6.681 if the current tax expense variable increases by 1 unit, decreases by 0.047 if the variable leverage decreases by 1 unit, decreases by 0.004 if the variable size decreases by 1 unit, increases by 0.001 if the age variable increases by 1 unit, and decreases by 3.951 if the book value of total assets variable increases by 1 unit.

H_0: Tax planning affects the financial performance of manufacturing companies in Indonesia.

Table 6 shows the results of hypothesis testing using the Generalized Least Square method

Table 6: Hypothesis Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Roa	0.001	0.000	3.309	0.001
Tax Payment	-4.516	2.301	-1.963	0.051
Current Tax Expense	4.336	1.026	4.227	0.000
F-Statistic				20.524
Prob (F-Statistic)				5.841

Source: Data processed with Eviews 10, 2020

The probability value of the independent variable on the dependent variable with the control variable to reduce the error rate is 5.841. The test results in Table 4.6, show that it can be stated that hypothesis 0 is accepted with the probability value > alpha significance level (5.841> 0.05).

4.2 Discussion & Results

4.2.1 Effect of Tax Planning on Financial Performance of Manufacturing Companies in Indonesia

Based on the statistical values in Table 4.3, the hypothesis testing results with a prob value of 5.841> 0.05, it can be stated that the variable influence of tax (X1) affects the financial performance (Y) of manufacturing companies in Indonesia.

This research is supported by research conducted by Ogundajo & Onakoya (2016). The results of this study indicate that with increasing ETR there is a reduction in ROA of 6.9%. This result is not following the research of Kurawa & Saidu (2018) who found an insignificant impact of corporate tax on financial performance.

This is reinforced by Positive accounting theory, where political costs specifically describe the relationship of political costs or tax burdens faced by a company. When the tax burden faced by companies shows large numbers, then companies tend to use accounting methods that can minimize the political costs incurred. This illustrates the ability of a company's performance as measured through the financial solvency ratio, namely by measuring the company's ability to meet long-term obligations, the final principal payment of debt and other fixed obligations.

5 CONCLUSIONS

This study used a descriptive quantitative method approach with a total sample size of 245 samples which were then analyzed by regression panel data using ordinary least square. This study was conducted with the aim of examining the effect of tax planning on the financial performance of manufacturing companies in Indonesia. The results of the research conducted indicate the influence of tax planning on the financial performance of manufacturing companies in Indonesia which are listed on the IDX for the 2014-2018 period.

This is reinforced by positive accounting theory, namely political costs that specifically describe the relationship between political costs or tax burdens faced by a company. When the tax burden faced by the company shows a large number, the company tends to use an accounting method that is able to minimize the political costs incurred. This illustrates the ability of company performance as measured by financial solvency ratios, namely by measuring the company's ability to meet long-term obligations, final principal payments on debt and other fixed liabilities.

Research sample data that focuses on the manufacturing sector listed on the Indonesia Stock Exchange so that it does not represent all companies in other listed sectors, limitations on the dependent variable studied, namely ROA, along with limitations of the analysis tools used in this research are the Eviews program version 10. Furthermore, future research should add other additional variables that can affect the dependent variable, use or add other analysis tools to find out whether there are differences in the research results, expand the sector of companies listed on the Indonesia Stock Exchange as the research population, and add other criteria in selecting research samples.

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