

# *Effect Of Tax Avoidance, Size Of The Company, Leverage, Age Of The Company On Cost Of Debt In Manufacturing Companies Listed In Indonesia Stock Exchange*

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**Abstract** - Tax management is the right, appropriate, and efficient application of tax rules in order to achieve income and liquidity accordingly. The tax is twofold: tax avoidance and tax evasion. This research is a purpose to know the effect of tax avoidance towards the cost of debt in manufacturing companies and find about the tax avoidance which includes illegal, but can lead to the injustice that would harm the state. The samples used in this research are 30 manufacture companies listed in Indonesia stock exchange (BEI). Type of data is secondary data from each for manufacture companies listed in Indonesia stock exchange (BEI) five years from 2011 until 2015. The samples were taken by purposive sampling technics. Analysis of data used with panel data regression with Fixed Effect Model (FEM) estimation and Eviews 9 SV programming. A hypothesis test used are coefficient determination test (R Square), F test, and t-test. The result of the research shows that Tax Avoidance (TAX) has positive and significant effect on the cost of debt on manufacture companies. For independent variable others, manufacture companies size and firms age have negative and significant. However, Leverage has positive and significant effect on cost of debt in companies. Therefore should add another variable closely related to tax avoidance and cost of debt.

**Keywords:** *management of the tax; tax avoidance; cost of debt*

## I. INTRODUCTION

Indonesia as a developing country has one of the income countries, namely income from taxes. By the Law on KUP Article 1 of Law no. 28 of 2007, which states that taxes and other charges that are forcing for state purposes was regulated in legislation for the welfare of the people. The state revenue in the largest tax source comes from the company. Companies usually want to minimize tax payments because taxes are a significant burden on company. The owner of the company will encourage tax management. Tax management aims to apply the right tax rules and efficiency efforts to achieve the desired profit and liquidity. Tax management there are two types, namely legal nature called tax avoidance and namely illegal called tax evasion. Tax avoidance is a legal income manipulation that is still by the provisions of tax laws to reduce the amount of tax payable, while it is illegal manipulation to

minimize the amount of tax payable [1]. By this it in Indonesia in 2010, there were 750 Foreign Investment firms suspected of that by reporting the loss in 5 consecutive years without paying taxes [2]. Another it phenomenon that occurred in Indonesia has been published in the online news in August 2013. Former Financing Minister Agus Martowardojo before releasing his tenure said, there are thousands of multinational companies that do not perform their obligations to the State. Agus Marto mentioned nearly companies did not pay taxes for seven years [3].

The cost of debt of a company is determined by the characteristic of a debt issuing company because it effect the risk of bankruptcy, agency cost and information [4]. The cost of debt problem is more appropriate to assess the risks and benefits of tax avoidance because the bank usually becomes long-term relationship with the borrowing company and has access to the company's exclusive information. So it can be seen there is a relationship between tax avoidance and cost of debt at company. The larger the company understakes tax avoidance.

## II. LITERATURE REVIEW AND HYPOTHESIS

### A. Agency Theory

The agency theory is a conflict of interest between the manager and the shareholder where each party is concerned only with his/ her own. For investors as principals who have placed their funds to the company will make a weak assessment when known to avoid taxes by withdrawing funds already. But for the management, tax avoidance activities are expected to increase the value of the company.

### B. Picking Order Theory

Corporate financing comes from three sources, internal funds, debt and new equity. Companies prioritize their sources, namely internal funds, debt and new equity. Companies prioritize their sources of the Financing, first selecting internal,

and then debt. This theory argues that businesses. This according to the rule is legal but it is unfair if viewed from the tax side for the State source of income and will be able to cause the country to lose until militant rupiah. The bigger the company to avoid taxes then the company will tend to reduce the amount of debt that will cause the cost of debt. Comply with the hierarchy (Myres and Majluf, 1984). Pecking order theory said debt financing is an external source of funding. The company's external decision will choose the use of debt rather than funding by adding capital from new shareholders [5]

**C. Tax Avoidance**

The tax avoidance is an important strategy for the company. Is one way to avoid taxes legally that does not violate tax regulations [1]. That is part of tax management. Tax avoidance is not an unlawful activity, but looks like something negative because the company is trying to reduce the amount of tax payable.

**D. Debt of Cost**

To maintain and grow its business, the company also needs an external source of funding from creditors in the form of debt. Return for creditors is on interest. For the company that owes, the interest is the return the company must give to the creditors until the debt will have been repaid. This rate of return will be the cost of debt to the it [6].

**E. Company Size**

Company size is a grouping of corporate into major and small based on the total assets of the company. Company size is calculated by on the logarithm of total assets. The greater time the asset, the sale, the market capitalization, the larger the size of it. The asset is the most stable value, so it is used by as a reference in determining that size [7].

**F. Leverage**

Leverage is the ratio that compares the total liabilities with total equity owned by the company at the end of the year. It is associated by positively with debt cost [8]. It that have high leverage means the source of funding used by the company is debt. The high use of debt in the fund source will increase the risk that the it will have.

**G. Age of Company**

The company's life is calculated based on the first year the company conducts an IPO (go public). The age of the company may affect the ability of the company to obtain credit at a lower cost level. The age of it indicates that is on the Indonesia Stock Exchange.

**H. Hypotheses**

According to previous research that tax avoidance has a positive effect on the cost of debt, so it can be concluded that the greater the it rate made by the company, then the it cost of debt to be small. With the governance issuing law no. 28 of 2007 on KUP, reforming taxation, and increasing corruption eradication, creditors assess tax avoidance as a risky. With regression equation in this research is:

- H1: Tax Avoidance has a positive effect on Cost Of Debt on Manufacturing Companies listed on Indonesia Stock Exchange during the 2011-2015 period.
- H2: Size of the company has a positive effect on Cost Of Debt on Manufacturing Companies listed on Indonesia Stock Exchange during the 2011-2015 period.
- H3: Leverage has a positive effect on Cost Of Debt on Manufacturing Companies listed on Indonesia Stock Exchange during the 2011-2015 period.
- H4: Age of the company has a positive effect on Cost Of Debt on Manufacturing Companies listed on Indonesia Stock Exchange during the 2011-2015 period.

**III. RESEARCH METHODS**

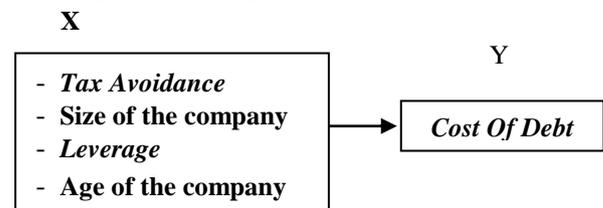
**A. Sample**

The population of this study used all manufacturing companies listed on the Indonesia Stock Exchange. Samples obtained by 30 manufacturing companies listed on the Indonesia Stock Exchange. Sampling using purposive sampling, namely:

1. Manufacturing companies was listed on the Stock Exchange in 2011-2015 and not delisted during the observation period of the study.
2. Companies have a fiscal year 31 December.
3. Data in the form of financial statements or annual reports are available on the Indonesia Stock Exchange consistently and complete throughout the year of study.
4. Report publication using Rupiah currency unit.
5. Sampled companies have positive income, and there is no tax compensation due to the loss in previous years.

**B. Conceptual Research Framework**

Figure 1. Conceptual Research Framework



The research model uses panel data series data. With regression equation in this research is:

$$COD = \alpha + \beta_1 TA + \beta_2 SIZE + \beta_3 LEV + \beta_4 AGE + \varepsilon$$

Where:

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COD = Cost Of Debt / debt cost

TA = Tax Avoidance

SIZE = Company Size

LEV = Leverage

AGE = Age Company

E = Error Term

### C. Variable Operational Definition

*Cost Of Debt* (Y) = **Error! Reference source not found.**

*Tax Avoidance* ( $X_1$ ) = **Error! Reference source not found.**

*Company size* ( $X_2$ ) = *log (total asset)*

*Leverage* ( $X_3$ ) = **Error! Reference source not found.**

*Company age* ( $X_4$ ) is based by on the first year of IPO public until then.

### D. Data Processing and Hypothesis Testing

To test the hypothesis which will have been seen by the influence of the independent variables tested against a dependent variable, this research will use the test by using panel data model by using Eviews 9 program. After the right model acquisition then proceed with hypothesis test. A hypothesis test is performed to determine the goodness of a model through the coefficient of determination test (R<sup>2</sup>), jointly test the regression coefficient (F test) and partial test (t-test), to determine the acceptance or rejection of the hypothesis.

## IV. RESULT

### A. Descriptive Statistics

Descriptive statistics was conducted with regression where it combines cross section and the aim of recognizing patterns of data, summarizing the information in the data, and presenting the information in the desired form. Table 4.1 describes the descriptive statistics of all the variables used in this study.

**Table 4.1**  
Descriptive Statistics

Variabel	Mean	Median	Maksimum	Minimum	Std. Deviasi
COD	0.186324	0.117890	0.967010	0.000320	0.177296
TAX	0.331439	0.251395	2.992080	0.000600	0.318555
SIZE	6.212700	6.122825	7.775970	3.695390	0.792812
LEVERAGE	1.450387	0.826545	5.713540	0.031830	1.369647
AGE	18.77333	21.00000	28.00000	1.000000	6.024722

Source :Processed Data Eviews

### B. Hausman Test

This test is performed to select panel data model between Fixed Effect Model and Random Effect Model. The results of this appropriate study model is Fixed Effect Model can be seen in table.

**Table 4.2**  
Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	80.069328	4	0.0000

Sumber :HasilOlahan Data Eviews

### C. Result of Research Model Regression

**Table 4.3**  
Result of research model regression

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
C	1.906483	0.069971	27.24662	0.0000
TAX?	0.074204	0.006571	11.29235	0.0000
UKURAN?	-0.263628	0.011646	-22.63748	0.0000
LEVERAGE?	0.018785	0.002976	6.311128	0.0000
UMUR?	-0.005826	0.001345	-4.333385	0.0000
R-Squared				0.529236
N				150
n bank				30
F-statistic				152.1426
Prob (F-statistic)				0.000000

Sumber :HasilOlahan Data Eview

$$COD = 1,906483 + 0,074204Tax + (-0,263628)Size + 0,018785Lev + (-0,005826)Age$$

### D. Test Coefficient of Determination (R Square)

Based on the result of estimation obtained by using Eviews 9 SV program, obtained coefficient of determination (R Square) equal to 0,529236 which means that overall independent variable exist in research model able to explain its influence to dependent variable (COD) equal to 53%, and the rest 47 % Described other variables that are not included in the model of the equation.

### E. Test of t-statistics

Test t (Partial Test) is used to how the influence of each independent variable partially to a dependent variable. This test can have been done by looking at the column of significance by comparing the significance level of 5% ( $\alpha = 0.05$ ).

Based on Table 4.3 previously can be seen the effect of independent variables on a control dependent variable that can was explained as follows:

1. Tax Avoidance (TAX) has a positive and significant on Debt Cost (COD) of manufacturing companies listed on Indonesia Stock Exchange in 2011-2015.
2. Size of the company has a negative and significant on Debt Cost (COD) of manufacturing companies listed on Indonesia Stock Exchange in 2011-2015, the more

assets owned by the company then the profitability of the company will be high resulting in the risk of default to be low and cost of debt will also below.

3. Leverage (LEV) has a positive and significant on Debt Cost (COD) of manufacturing companies listed on Indonesia Stock Exchange in 2011-2015, the higher in leverage then the risk level of the company will also be high, one of the risk of default will lead to high cost of debt.
4. Age of the company (AGE) has a negative and significant on the Debt Cost (COD) of manufacturing companies listed on the Indonesia Stock Exchange in 2011-2015, the longer the company is in the Indonesian stock exchange predicted will cause debt decreased and the longer the company go public then the cost of corporate risks is lower than the new company go public so the cost of debt will be low.

#### F. Test f-statistics

F test is done to know the influence of independent variable on together to the dependent variable. From Table 4.3 can be seen from the results of the estimation, then obtained the value of Prob (F-statistic) of 152,1426. This value is greater than the value of significance of 0,05, it can be concluded that the independent variables that exist in the model of Tax Avoidance (TAX), Company Size (SIZE), Leverage (LEV), and Age of Company (AGE) together (Simultaneously) have a significant effect on Debt Cost (COD) of manufacturing company in this research.

## V. CONCLUSIONS AND RECOMMENDATIONS

### A. Conclusions

Based on the results of data testing, indicating that the variable tax avoidance have a significant positive effect on the cost of debt. By the initial hypothesis that has been described earlier, that tax avoidance positive effect on the cost of debt. The results of this study are consistent with research conducted by Masri and Martani (2012), Novianti (2014), and Marcelliana and Purwaningsih (2014). The results of this study are inconsistent with the findings of Dian Francis and Dahlia Sari (2012) and Ika Erniawati (2014) indicating that tax avoidance is substitute to debt costs, companies using less debt cost when tax evasion. The results of a positive study between tax avoidance and debt costs occur because firms consider tax avoidance a risk, so they tend to increase the cost of debt. With the government issued Law No. 16 of 2009 on General Provisions and Procedures of Taxation and Income Tax Act 18 on the Tax Regulations of the Company. Consideration of tax avoidance behavior as this risk will make creditor tend to charge bigger interest so that cost of debt borne by company also become higher. Thus, the purpose of this study is have been achieved.

### B. Recommendation

The inspector needs to supervise the company's financial statements in order for the that to make tax payments in accordance with the Income Tax Law of article 18 concerning the tax payment rules of that, especially to that do not pay taxes but still operate, Companies should choose internal funding (profits earned/owner's capital) to finance the company's operations, Tax auditors can group companies by looking at the age of the company and the size of that so it will facilitate the examination of management.

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