

ANALYSIS OF THE INFLUENCE OF AGGRESSIVE TAX BEHAVIOR TO THE COST OF EQUITY IN THE FAMILY COMPANY

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ABSTRACT

The aim of the research is to investigate the effect of tax aggressive behaviour toward the cost of equity, using moderating by family ownership. Examination was conducted for manufacturing firms in Indonesia Stock Exchange for period 2010-2013, there were 224 company-year sample. The analytical method used is fixed panel analysis. Results of study suggest that tax avoidance have negative influence on cost of equity. This result is in contrast to results of previous studies. The results of this study explained that the measurement of tax avoidance which showed aggressive tax behavior based on discretionary on book tax difference (BTD). Discretionary on BTD is regarded as earnings management in taxes or a tax planning so it is seen as a positive by the shareholders. Moderation family ownership on tax avoidance in the relationship with the cost of equity shows positive results. These results show that family ownership tend to behave taxes aggressively and it is viewed negatively by shareholders for management raises their rent extraction.

Keywords: Tax Avoidance, Cost of Equity, and Family Ownership.

I. INTRODUCTION

Tax expense inflicts significant cost and be an aspect which is very concerned by the company. Therefore, taxpayer do some efforts to manage the amount of tax that will be paid. According to the company goal to optimize its profit, the company, both domestic and multinational tries to minimize the tax burden by using existing tax-probation's blind spot. Chen et al. (2010) mentions that the company owner will tend to urge management to do aggressive tax measures.

The agency problem arises because it is triggered by self-interested behavior which is one of human nature on the basis differences of interest between manager and owner. When ownership and management are split, there must be an employment contract and imperfect supervision. This imperfection inflicts an opportunity for the manager to do an opportunist action so it can create corporate governance problem (Desai and Dharmapala, 2007). Incentive escalation for manager tends to decrease tax sheltering (Desai and Dharmapala, 2006). This negative impact occurs more often in company which has lower governance and opportunist manager behavior on managing the company. Lim's research (2011), effort to avoid tax is a replacement of using the debt. Company which avoids tax will decrease the debts so that the financial slack will increase, lower the bankruptcy risk and intensify credit quality, so it will subtract the cost of debt. (Lim, 2001). Beside from the cost of debt, this aggressive tax can impact the shareholders' company valuation. In this case, researchers interested to investigate the influence of aggressive tax behavior from capital point of view to cost of equity. Cost of equity can also be seen from cost of risk which is within the stock price. The relationship between tax avoidance and stock price risk has been examined by several researchers such as Hanlon (2005), Hanlon and Slemrod (2009), Kim, Li, and Zhang (2011), and Masri (2014).

Hanlon (2005) found that large book tax gap influences the negative prediction of abnormal returns, moreover it also shows that company tax activity stimulus is not always lead to shareholders' value. Hanlon and Slemrod (2009) saw stock price reaction to company's tax aggressive news. They also found evidence that indicate stock price derivation with tax avoidance news in the company. Kim, Li, and Zhang (2011) saw the relationship between company tax avoidance and stock price derivation. They also found that company tax avoidance will positively impact with stock price derivation risk. Masri (2014) showed positive influence between book tax difference and cost of equity. This result proves that tax avoidance facilitate managerial rent extraction, which is justification for managers' opportunist behavior. This research indicates that aggressive tax behavior can cause stock price stock price derivation so that cost of equity capital will increase. Tax avoidance can be used as a measure of aggressive tax behavior undertaken by the company.

Family ownership structure may affect the behavior of aggressive tax. There are several researchers related to this subject such as Chen et al (2010) and Sari (2010). Those research show different result because of the differences of the company characteristic. Chen et al (2010) showed that tax aggressive behavior is lower than non-family-owned company because family-owned company tend to pay more tax to avoid tax penalty and keeping their tax audit reputation. On the other hand, Sari (2010) showed that family-owned company in Indonesia tend to have more aggressive tax behavior than non-family-owned. According to empirical result, this phenomenon may be caused by external factors from business culture and tax audit in Indonesia. Based on Sari (2010), family-owned company in Indonesia tend to has more aggressive tax behavior, so that moderated structure of family-owned company with aggressive tax behavior is reinforce the influence of aggressive tax to behavior cost of equity.

According to Masri's research in 2014, book tax difference has positive influence to cost of equity. This research uses cross-section regression model. This research objective is to analyze the influence of aggressive tax behavior to cost of equity and to determine whether family-owned company structure can moderate aggressive tax behavior relationship with cost of equity using balance method fixed effect. By doing this research, we expect that aggressive tax behavior on manufacture company in Indonesia especially family-owned company can be determined.

This research has two main objectives: first to investigate the effect of aggressive tax behavior to cost of equity. Second to determine the role of family-owned company moderation to the relationship of aggressive tax behavior to cost of equity. This study contributes to provide evidence of the role of Moderation family ownership on tax avoidance in the relationship with the cost of equity. The results of this research can add to the literature on the influence of family ownership on tax avoidance in the relationship with the cost of equity. Results of study suggest that tax avoidance have negative influence on cost of equity. This result is in contrast to results of previous studies. Discretionary on BTD is regarded as earnings management in taxes or a tax planning so it is seen as a positive by the shareholders. Moderation family ownership on tax avoidance in the relationship with the cost of equity shows positive results. These results show that family ownership tend to behave taxes aggressively and it is viewed negatively by shareholders for management raises their rent extraction.

II. LITERATURE REVIEW

A. Conceptual Theory and Previous Research

1. Aggressive tax behavior

There are terms such as tax avoidance, tax planning. Frank at all (2009) define tax aggressive is a procedure to decrease tax able income through tax planning. In this case tax aggressive using method which can be classified or not as tax evasion. Although not enemy used procedure is breaking the rules. The method used by company make the company assumed move aggressive. Graham and Tucker (2006) defined tax sheltering according to US congress as effort to avoid tax without loss and economic risk. Based on this definition, tax sheltering can be defined as tax avoidance.

Lim (2011) define tax avoidance as tax saving which legally utilize tax rule weakness to minimize tax liabilities. Tax avoidance is part of tax planning which done to possibilities within tax rules so that company can pay tax less than it should be. Tax avoidance is part of tax planning which done to possibilities within tax rules so that company can pay tax less than it should be. Tax avoidance is not prohibited in tax law although often got negative outlook by tax office. This is different with tax evasion. Tax evasion is a procedure to decrease pay able tax using method which violating tax rules perpetrators of tax evasion. Tax evasion is procedure to decrease pay able tax using method which violating tax rules. Perpetrators of tax evasion will be subject to administrative and criminal penalty.

Tax evasion theory discuss about the relationship between management, share holder, government, and tax institution who founded to utilize tax evasion of a company (Hanlon&Hitzman, 2010). Allingham and Sadmo (1972) state that individual tax obedience determined by tax rate, detected possibilities, punishment, fined, and risk denial. There are many factors which influence tax payer company. Slemrod (2004) show there are agency problem which appear in the company for tax avoidance behavior because of separation of ownership and control. The separation of ownership and control can infect the manage's paymal interest therefore, challenge for shareholder's and directors is seeking combinating from control mechanism and insentive to minimalized agent cast (Jeksen and Meckting, 1976)

2. Cost of equity

Brigham (1983) told that every equity component requires cost which represent the type of capital or equity. The important component in equity are preffered stock and common equity. The equity cost of these component are dividend and cost of these. Component are divided and cost of equity cost of equity is cost which caused by risk on the stock price.

3. Family ownership structure

Generally, companies in developing countries are still controlled by family ownership. Famma & Jansen (1983) stated that monitoring cost of family ownership is lower that public ownership because of management ownership that related to agency theory by Jensen & Meckling (1976).

Family ownership structure can help corporate governance because the shareholders can control management directly. However, family ownership can cause expropriation for shareholders so it can make a negative effect for corporate governance. This negative effect can be avoided if only family ownership of the company is not a part of the business group, it is because family ownership has higher possibility of expropriation for minority shareholders, transaction between companies which are owned by the group. Siregar&Utama (2008) found that family ownership is not part of the group whom has a profit management on lower opportunistic level. And proved that the companies who are controlled by family, but not apart of a group, have better corporate governance so it can reduce opportunistic earning management's problem.

B. Development Hypothesis

1. The Effect of Tax Avoidance to Cost of Equity

This research wants to observe from capital side. It means the effect of tax avoidance to cost of equity. Cost of equity can be seen from cost of risks which sticks on stock price has been observed by some researchers; Hanlon (2005), Hanlon and Slemrod (2009), Kim, Li, and Zhang (2011), and Masri (2014).

Hanlon (2005) found that huge book tax gap can affect the negative prediction of abnormal return. Besides that, it can show that trigger of tax activity which is committed by company doesn't always lead to the value of shareholders. Hanlon & Slemrod (2009) observed by noticing the stock price's reaction to tax aggressive's news on the company and found the evidence that there is an increasing stock price's reaction to tax aggressive's news on the company and found the evidence that there is an increasing stock price related to the involvement of company's news in tax avoidance. Kim, Li&Zhary (2011) found the effect of tax avoidance which was committed by the company to the stock price derivation. They found a strong evidence which provided that tax avoidance on company has positive effect for stock price derivation's risk on company. Masri (2014) showed positive effect of book tax difference for cost of equity. This finding is consistent with perspective that tax avoidance provides managerial rent extraction. This research shows that aggressive tax behavior can cause the decreasing of stock price this situation can make an increasing of cost of equity capital a positive result for it shows the effect of tax avoidance to cost of equity.

Hypothesis 1: Tax avoidance has positive effect to Cost of Equity.

2. The influence of moderated family ownership structure to the relationship between tax avoidance and cost of equity

Family ownership structure can affect aggressive tax behavior. There are several researches about this. Such as Chen et al (2010) and Sari (2010). Both of these research shows a contradiction result. This result is caused by a different company characteristic the research. Chen et al (2010). Show that tax aggressive behavior in family company is lower than non-family company. Because family ownership of the company tends to pay higher tax to avoid penalty and keep the reputation of tax audit.

On the other hand, in research which has been done in Indonesia by Sari at 2010 show that the family ownership. This result caused by externality factor from business culture and tax audit in Indonesia. This research will re-examine whether family ownership company in Indonesia tend to has an aggressive tax behavior, like Sari (2010) did so that, moderated family ownership structure with tax. Avoidance strengthening tax avoidance influence to cost of equity.

Hypothesis 2: Family Company strengthen positive influence of cost of equity to tax avoidance.

III. RESEARCH METHOD

A. Research Population and Sample

This research uses data from yearly financial report and company yearly report from 2010 to 2013 which are published by Indonesia Stock Exchange on their website www.idx.co.id and datastream. Cost of equity uses stock price data which is obtained from datastream an Bank Indonesia interest rate in their wesite www.bi.go.id.

Population in this research are manufacture company which has been listed in Indonesia Stock Exchange. The reasons why this research using manufacture company are to obtain same measurement and report criteria. Moreover, manufacture company has more number than other industries company which listed in Indonesia Stock Exchange. This research chooses sample company according to the criteria below:

1. Listed manufacture company from 2010 to 2013. Financial report is taken from 2010 to 2013. It should be taken from 2010 to 2013 because after that time tax tariff had been changed to be fixed at 25%.
2. Report book which had time frame until December 31st, to get equal fiscal period.
3. Company which has common audit opinion without exception. In this case, it can increase the financial report credibility that used on this research.
4. Company which has tax recently. In this case, as one of proxies to determine tax avoidance and to ensure that company is not fiscally lost.
5. Company which has relevant data according to variable measurement.

B. Variable Measurement and Operational Definition

1. Dependent Variable

Dependent variable is influenced by other variables. In this research, dependent variable is cost of equity. In this research, cost of equity measurement using CAPM approach, which is stock portfolio from stock price as following:

$$CoE_t = R_{ft} + \beta (R_{mt} - R_{ft})$$

Which

R_{ft} = Risk-free return which is showed by Sertifikat Bank Indonesia published by the government.

R_{mt} = Market return which obtain from weekly IHSB. Market return calculated from weekly IHSB return growth accumulation along past year back from published financial report, which is April 1st.

β = Beta market which is in systematic risk for every company stock. Beta market obtained from regression result between weekly company stock return and weekly IHSB stock return along 3 years back from published financial report, which is April 1st.

Cost of equity measurement with CAPM approach is based on published financial report, which is April 1st. This is because investors see company result along past year begin with when company publish financial report to public.

2. Independent Variable

Independent variable is a free variable and can affect dependent variable. Independent variable in this research is tax avoidance as a measurement of aggressive tax behavior. The measurement of tax avoidance which is used in this research is based on some measurements as robustness test to strengthen the result. The measurement that is used is tax avoidance by Lim (2011) who committed measurement by modifying measurement from Desai & Dharmapala (2006).

The procedure to count tax avoidance has two steps.

Frist step, estimating discretionary accrual by counting total accrual for each company each year through the sample of periods. Then from regression result, discretionary accrual is determined. (DA_mod_{i,t}) for each company *i* on each year *t* using formula from Dechow et al. (1995). Discretionary accrual is counted as residual from regression formula.

$$\begin{aligned} \text{Accruals}_{ijt} / \text{Assets}_{ijt-1} = & \alpha_{jt} (1 / \text{Assets}_{ijt-1}) \\ & + \beta_{1jt} \{(\Delta \text{Sale}_{ijt} - \Delta A/R_{ijt}) / \text{Assets}_{ijt-1}\} \\ & + \beta_{2jt} (\text{PPE}_{ijt} / \text{Assets}_{ijt-1}) + e_{ijt} \end{aligned} \quad \text{----- (1)}$$

which:

$$\begin{aligned} \text{Accruals}_{ijt} &= \text{total accrual company } i, \text{ on industry } j, \text{ on year } t, \text{ counted as NIBE reduced operating cash flow.} \\ \text{Assets}_{ijt-1} &= \text{total asset company } i \text{ on industry } j \text{ on year } t-1. \\ \Delta \text{Sale}_{ijt} &= \text{changes in the company's sales } i, \text{ industry } j \text{ on year } t. \\ \Delta A/R_{ijt} &= \text{changes in accounts receivable for the company } i, \text{ on industry } j \text{ on year } t. \\ \text{PPE}_{ijt} &= \text{provides } \textit{plan property and equipment} \text{ (PPE) to company } i, \text{ on industry } j, \text{ on year } t. \end{aligned}$$

Second step is dividing the book tax different component which is caused by profit management for tax purposes and identifying that component as a tax avoidance. Those steps are committed by running the OLS regression like:

$$\text{BTD}_{it} = b_1 \text{DA_mod}_{it} + u_j + e_{it} \quad \text{----- (2)}$$

which:

$$\begin{aligned} \text{BTD}_{it} &= \text{Book tax different for company } i \text{ on year } t \text{ scaled by last total asset.} \\ \text{BTD} &= \text{Commercial profit} - \text{Fiscal profit} \\ & \quad \text{Fiscal profit} = \text{Current income tax expense} / \text{Tax rate.} \\ \text{DA_mod}_{it} &= \text{Discretionary accruals for company } i \text{ on year } t \text{ scaled by last total asset.} \end{aligned}$$

Residual from the second equation is book tax different component which caused by profit management for tax purposes called tax profit management. This value is interpreted as a tax avoidance measurement and expressed in the form:

$$\text{TA_mod} = u_j + e_{it}$$

For testing sensitivity analysis, this research uses tax avoidance measurement based on Desai and Dharmapala (2006) that using total accrual on LTD to get profit management for tax purposes.

3. Moderating Variable on Family Ownership Structure

Definiton of family company which is used on this research follows the family founder concept on literature of Anderson and Reeb (2003), Villalonga and Amit (2006). It says that company is classified as family company when the founder or family member both through blood relations and marriage are pointed as director on management and/or supervisory board or acted as blockholder, both individual and team. Dummy variable is used on this measurement. One point for family company and zero point for others.

C. Research Model and The Formulation of Hypotheses

Research model is developed by Kim, Li, and Zhang (2011) by changing crash price risk variable as cost of equity because crash price risk describes a risk that sticks on stock price and parts of cost equity. On the other hand, it can add moderating variables of family ownership structure.

Model hypothesis 1 and 2	
COE_{it}	$= \alpha_{0t} + \alpha_1 \text{TA_Lim}_{it} + \alpha_2 \text{FamOwn}_{it} + \alpha_3 \text{TA_Lim}_{it} * \text{FamOwn}_{it} + \alpha_4 \text{SIZE}_{it} + \alpha_5 \text{CAPEX}_{it} + \alpha_6 \text{ROA}_{it} + \epsilon_{it}$

Which:

$$\text{COE}_{it} = \text{company Return based on CAPM approach}$$

- α_{0t} = Constanta
- $\alpha_1 - \alpha_6$ = Regression Coefficient
- TA_Lim_{it} = Proxy for measuring *tax avoidance* by using Lim (2011).
- FamOwn_{it} = Dummy variable for family ownership, 1 for family company, and 0 for others.
- Size_{it} = Natural logarithms from company's total assets.
- CAPEX = *Capital expenditure* divided with total aset.
- ROA_{it} = Rasio *return on assets. pre-tax income* scaled with total aset.
- ϵ_{it} = *Error* model

D. Analysis Techniques

Analysis technique which is held in this research is quantitative descriptive analysis technique and regression analysis for data panel to test the impact of aggressive tax behavior on cost of equity.

E. Step Analysis

Analysis is committed by using SPSS software and eviews 8. The steps are:

1. The submission of descriptive statistics
This step is committed to give a description of mean, median, maximum, minimum, and standard deviation.
2. Correlation testing and balance testing
Correlation testing is committed to see the impact of relationship between variables on this research.
3. Hypothesis testing
Hypothesis testing is committed to see thr impact of tax avoidance behavior as independent variable on cost as dependent variable in the company. The testing is held by using fixed panel data model for hypothesis 1 and 2.

IV. RESEARCH RESULT AND DESCRIPTION

A. General Description of the Sample

The sample on this research is all manufacture companies that listed in Indonesia Stock Exchange on 2010-2013 period. Financial data in the form of annual financial statement and annual statement which are obtained from BEI website, www.idx.co.id. Moreover, we use company's financial statement from datastream. Until the end of period 2013, there are 141 manufacture companies that listed in Indonesia. Based on the data we need, the availability of data, and sample outlier, the final samples on this research are 56 companies (224 annual companies) for 2010-2013 period.

B. Descriptive Statistic Analysis

Table 4.1 shows descriptive statistic from all variables which are used in this research. Mean (Median) COE value is 0.119(0.090) which means that more than a half of the samples have higher COE value higher than the averages. Small standard deviation shows that COE value on the samples are not available. Mean (Median) value in TA_Lim and TA_dd 0.000000000045 (0.0040880) and 0.0000000000268 (0.0070380) show that mean value is smaller than median. Tax avoidance shows smaller value. This means that companies are lack of managing tax income.

Table 4.1
Descriptive Statistic

Variabel	Obs	Mean	Median	Standar deviasi	Min	Maks
COE	224	0.1194050000000	0.0909860	0.1171470	-0.1295910	0.5533990
TA LIM	224	0.0000000000045	0.0040880	0.0554810	-0.2095960	0.3066350
TA DD	224	0.0000000000268	0.0070380	0.0556300	-0.2145480	0.3162520
FAMOWN	224	0.5803570000000	1.0000000	0.4946060	0.0000000	1.0000000
SIZE	224	9.3879920000000	9.3584310	0.7528520	7.8860060	11.3253200
CAPINT	224	0.0618030000000	0.0465160	0.0531150	0.0000814	0.2264830
ROA	224	0.1346730000000	0.1150140	0.1212430	-0.1627170	0.6597850

Table 4.2 shows the correlation of all variables. Although main variable doesn't show the significant relationship, but from the prediction of directions correlation shows that TA_Lim and TA_dd indicate the negative correlation which explain that tax avoidance activity can decrease the capital price. In this case, shareholders assume that tax avoidance as a good tax planning.

Whereas correlation for the relationship between *Famown* and COE is positive. This means that family company tends to have higher capital price than non-family company. Family company tends to commit aggressive tax behavior. It is showed on TA_Lim and TA_dd in the positive direction.

Table 4.2
Pearson Correlation Matrix for All Variables

Correlations

	Coe	Famown	Talim	Tadd	Size	Capint	Roa
Coe	1	0.016	-0.037	-0.024	0.057	-0.006	0.081
Famown	0.016	1	0.013	0.040	-0.104	0.140*	0.287**
Talim	-0.037	0.013	1	0.985	-0.239**	-0.049	0.342**
Tadd	-0.024	0.040	0.985	1	-0.219**	-0.016	0.318**
Size	0.057	-0.104	-0.239**	-0.219**	1	0.240**	0.086
Capint	-0.006	0.140*	-0.049	-0.016	0.240**	1	0.276**
Roa	0.081	0.287**	0.342**	0.318**	0.086	0.276**	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

C. Model Testing

Hypothesis testing by using data panel is irrelevant to do classic assumption testing and also normality in the data. However, multicollinearity testing is still needed to identify partial influence between independent variables. From the Pearson correlation matrix in the table 4.2. It shows that tested variable correlation is smaller and less than 0.8, except TA_Lim and TA_dd, because they use the same measurement which is according to residual value from total accrual regression or discretionary accrual with BTD. In this case, TA_Lim and TA_dd in this research model are not committed simultaneously because TA_dd is held to test the analysis sensitivity on research model so it can be concluded that there are no serious multicollinearity problem.

Hypothesis 1 and 2 in this research use fixed effect method approach with balance data panel. According to this research objective to investigate the influence of aggressive tax behavior between companies, every company has their characteristics related with individual factors and time of period so it can't be assumed as common effect. In this research model, error component is not related with any independent variables where in this case is difficult to fulfill so fixed effect method is a better method than random effect method. To make sure the appropriate model, Hausman test has been done which is on views 6. The result shows that fixed effect method is the most appropriate method in this research.

D. Hypothesis Testing and Research Result Discussion

Table 4.3 shows empirical regression result which has been done by using fixed panel analysis. *P*-value *F*-statistic value shows significant result at 1% level. Adjusted *R* Square shows 45%. It means independent variable significantly influence dependent variable. The result on independent variable indicates that TA_Lim value has significant negative influences to COE at level 10%. This means that hypothesis 1 is rejected because of different prediction direction from hypothesis which developed in this research. This research result is not relevant with previous research which has been done by Hanlon (2005), Hanlon and Slemrod (2009), Kim, Li, and Zhang (2011), and Masri (2014). Their research indicates that tax avoidance which show aggressive tax behavior can affect negative abnormal return and drop stock price. So that it will cause higher cost of equity. According to the previous research, shareholders assume that tax avoidance is not giving any benefits to company value. Tax avoidance provides managerial rent extraction which is a justification for managerial opportunistic behavior. Otherwise this research shows a contrast result. Tax avoidance which shows aggressive tax behavior can reduce capital cost. Shareholders' point of views are used in this research. Tax avoidance is a tax planning so that it can have a positive response from the shareholders. This research indicates a different result. This research uses discretionary from BTD of BTD regression with discretionary accrual and total accrual. The previous research only uses BTD or ETR so that, in this case, discretionary BTD indicates tax income planning management.

Table 4.3
The Result of Hypothesis 1 and 2
Method: Fixed Effect Panel Least Squares

$$COE_{it} = \alpha_{0it} + \alpha_1 TA_Lim_{it} + \alpha_2 FamOwn_{it} + \alpha_3 TA_Lim_{it} * FamOwn_{it} + \alpha_4 SIZE_{it} + \alpha_5 CAPEX_{it} + \alpha_6 ROA_{it} + \epsilon_{it}$$

Variable	Prediction	Result	Notes
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		Coefficient	Probability	
Constants		-0.54985	0.59580	
TA_Lim	+	-0.70445	0.0293**	H1 is rejected, doesn't match with the negative relation prediction, significant 5%
FamOwn	+	0.06241	0.42170	
TA_Lim * OwnFam	+>	0.65678	0.0648*	H2, is approved, match with the prediction, significant 10%
SIZE		0.06659	0.55040	
CAPEX		-0.07918	0.70420	
ROA		0.09314	0.44370	
Adj R2	0.45100			
F-Statistik	3.86234			
p value (F-Stat)	0.0000***			

* significant on 10%; ** significant on 5%; *** significant on 1%

The probability showed 2-tailed result.

The hypothesis 2 results the effect of tax avoidance on cost of equity with the moderation over family ownership. Empiric regression's result shows significant positive result at level 10%. Therefore, hypothesis 2 is accepted and similar to hypothesis prediction. This research shows that family company tends to has more aggressive tax behavior than non-family company. This is the same Sari (2010) did. In this research, there are family companies who have an aggressive tax behavior. Shareholders think that management rent extraction as a bad thing because it can make capital price become higher. This can cause a positive relationship between moderated family company of tax avoidance and cost of equity.

E. Sensitivity Analysis

Tax avoidance indicates negative significant influence to cost of equity. So that, sensitivity test is used to change tax avoidance measurement using Desai and Dharmapala (2006)'s model. It uses total accrual to separate component from book tax different caused by income management to tax purposes. Those components are concluded as tax avoidance activity measurement. The measurement is:

$$BT_{i,t} = \beta_1 TA_{i,t} + \mu_i + \epsilon_{i,t}$$

Which:

BT = Book tax gap for company *i* on year *t* scaled with last total asset.

BT = Commercial Profit – Taxable Income

Taxable Income = Current income tax expense / Tax Rate.

TA = Total accruals of the company *i* on year *t* scaled with last total asset.

Residual from the regression is book tax gap component which caused by management for tax purposes to manage tax income. This value is represented as tax sheltering or tax avoidance measurement that formed in:

$$TS_{i,t} = \mu_i + \epsilon_{i,t}$$

Table 4.4 shows sensitivity regression test's result. It indicates that *R* square value is not much different from main test result which is on level 44%. The result of the coefficient shows negative significant direction as well as the influence of tax avoidance to cost of equity and moderated variable. This result indicates that tax avoidance in Lim (2011) and tax avoidance in Desai Dharmapala (2006) have shown a tax income management although they used different method. Lim (2011) used discretionary accruals an Desai Dharmapala (2006) used total accruals.

Table 4.4
The Result of Sensitivity Hypothesis 1 and 2
Method: Fixed Effect Panel Least Squares

$$COE_{it} = \alpha_{0it} + \alpha_1 TA_DD_{it} + \alpha_2 FamOwn_{it} + \alpha_3 TA_DD_{it} * FamOwn_{it} + \alpha_4 SIZE_{it} + \alpha_5 CAPEX_{it} + \alpha_6 ROA_{it} + \epsilon_{it}$$

Variable	Prediction	Result		Notes
		Coefficient	Probability	
Constants		-0.59645	0.56760	

TA_DD	+	-0.62971	0.0601*	H1 is rejected, doesn't match with prediction of significant relationship 10%
FamOwn	+	0.06362	0.41110	
TA_DD * OwnFam	+>	0.61953	0.0902*	H2, is accepted, match with prediction, significant 10%
SIZE		0.07157	0.52370	
CAPEX		-0.06173	0.76760	
ROA		0.07547	0.53350	
Adj R2	0.446898			
F-Statistic	3.815320			
p value (F-Stat)	0.0000***			

* significant on 10%; ** significant on 5%; *** significant on 1%

The probability result shows 2-tailed result.

V. CONCLUSION AND SUGGESTION

A. Conclusions Research

The purpose of this research is to perceive description of company's aggressive tax behavior towards the cost of capital and observes aggressive tax behavior based on family ownership. The testing is conducted on all public companies the category of manufacturing industries that listed in Indonesia Stock Exchange during 2010 to 2013 with total observations 224 companies.

The result showed that the effect of aggressive tax behavior to cost of equity was negative and didn't match with hypothesis 1. This result didn't match with previous research, Hanlon (2005), Hanlon and Slemrod (2009), Kim, Li, and Zhang (2010), and Masri (2014). Previous research showed that shareholders considered aggressive tax behavior didn't have benefit to company value and tended to be regarded as a risk. Otherwise, this result considered from shareholders' perspective that tax avoidance was one of tax planning so that was regarded as a good and positive thing by shareholders. The different result may happen due to measurement of tax avoidance. Discretionary from BTM and BTM regression with discretionary accrual and total accrual was used on this research while BTM or ETR was used on previous research. Discretionary BTM considered to be more representative in profit management planning on tax. Therefore, it was considered as one of a very good and profitable thing for the company by shareholders.

Moderation of tax avoidance with family ownership showed positive significant influence to cost of equity that matched with hypothesis 2. The result showed that family company tended to be more aggressive than non-family company according to Sari (2010). The result showed that there was a family company which committed aggressive tax behavior and be considered as a bad thing, as management rent extraction by shareholders which caused higher capital price. This condition made a positive relation between family company moderation on tax avoidance and cost of equity. Sensitivity testing showed the same direction with primary test. It showed that tax avoidance measurement had reflected the tax income management by model of Lim (2011) or model of Desai Dharmapala (2006).

B. Suggestion for the Next Research

The suggestions for the next research:

- Time frame addition in the research. So, the time effect can be observed by doing a test with data panel.
- This research just using manufacturing industries as samples so the result can't be generalized to other industries.

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