

The Effect of Tax Risk, Hedging, Income Smoothing, and Volatility Cash Flows on Firm Value

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Abstract:

This study aims to examine the effect of tax risk, hedging, income smoothing, and the volatility of cash flows on firm value. By the objectives of management, examining the influence of several variables in this study is needed to detect the firm value.

This study uses a quantitative method, and the analysis uses multiple linear regression models. The type of data used is secondary data in the form of financial statements of companies listed on the Indonesia Stock Exchange from 2014 to 2016. The samples used in this study are non-financial companies. By using purposive sampling, the selected sample amounted to 68 non-financial companies so that the total sample amounted to 204 companies-years. The testing method in this study is multiple regression analysis with panel data.

The results of this study suggest that tax risk and cash volatility have a negative effect on firm value. Meanwhile, hedging and income smoothing do not affect firm value.

Keywords: tax risk, hedging, income smoothing, cash flow volatility, firm value.

1. INTRODUCTION

The Indonesian capital market has been established since 1977 (Indonesia Stock Exchange, 2017). Capital market opportunities would be even greater in the future in line with its strategic role in supporting investment facilities for the community (The Indonesia of Act Number 85 of 1995). For companies that have gone public, the capital market is a means for companies to get funds from the public (Indonesia Stock Exchange, 2017). Funds obtained from the capital market could be used for business development, expansion, additional working capital, and others. Publicly listed companies would trade their shares on the stock market which is part of the capital market. By the theory of the firm (Jensen and Meckling, 1976), the management has the aim of maximizing the wealth of its shareholders.

Shareholder prosperity may be achieved by increasing the firm value so that the shareholders would invest their capital in the company (Mackey et al., 2007). Therefore, to maximize it in the long run, managers are required to make decisions that take into account the interests of all shareholders, so that managers would be judged on their performance based on the ability to achieve the goal of maximizing company value (Jansen, 2002).

The investor's response to the firm value refers to the company's stock market price. It is relevant to Gitman (2006), who equated the concept of firm value with the actual value per share that would be received if all company assets are sold at market prices. The higher the market price per share of the company, the higher the firm value. Therefore, examining the determinants in this study is needed to capture the firm value.

The first determinants of the firm value in this study are tax risk. It could be managed but could be harmful to the company (Hidayat, 2015). It also has the potential to harm the reputation of the company if it is not managed properly (Wilson, 2009). Research in the United States by Drake et al. (2017) suggested that the higher the tax risk, investors would judge the company is getting worse because taxes are part of the risk that investors avoid. Drake (2017), McGuire, et al. (2013), and Saavedra (2017) stated that tax avoidance conducted by the companies might not be sustainable, so there is a variance in cash saving called a tax risk. Drake (2017) also stated that investors in the United States pay more attention to tax avoidance strategies but very few associate tax avoidance cash savings with investor judgment.

Conversely, Koester (2011) and Danielle (2012) concluded that there was a positive relationship between tax risk and investor judgment, which is related to the assumption that management who could manage tax risk is assumed as a good in managing the company resources. Koester (2011) stated that investors might value companies that have managers who could demonstrate expertise in tax evasion. Research in examining the effect of tax risk related to investor appraisal is interesting to be conducted because of the inconsistency of results. The examining of the effect of tax risk on the firm value in Indonesia has also not been conducted in Indonesia so that it could be used to supplement management literature.

The second determinant related to risk is the decision to hedge existing derivatives. Hedging is related to the risk of instability in cash flows, fair value, and net investment faced by the company (Indonesia Statement Financial Accounting Standard No. 55). Hedging is used to offset risks from the fair value or cash flow of a company that has a negative impact on market forces (Kieso et al., 2015). As supporting information, several studies in Indonesia have been carried out to prove that hedging could increase the firm value (Suriawinata, 2004; Nur, 2014). However, other studies suggested the opposite results (Caprisiana, 2015). Thus, the inconsistency of results could

encourage to re-research with different methods so that more representative result may be obtained.

Furthermore, other management policies in increasing firm value could be conducted income smoothing. The company conducts income smoothing due to the investor awareness of the company's income information (Koch, 1981). Other evidence also suggested that the act of income smoothing is an opportunistic trait that may provide benefits to management by maximizing bonuses (Cohen and Zarowin, 2010). Several studies to examine the effect of income smoothing on the firm value using the Indonesia context still have different results. Suranta and Merdistusi (2009) and Oktavia (2011) suggested that income smoothing has a positive effect on firm value. Conversely, Purwanto (2009) found that there is no association between firm value and income smoothing and vice versa.

Also, the information in financial statements that could be used as an indicator of the amount, time, and certainty of a company's future cash flows is a cash flow statement (Indonesia Statement of Financial Accounting Standard No. 2). It is in line with the cash flow function that could improve the comparability of performance reporting. Several studies in the United States show that investors like stable cash flows rather than cash flows that have high volatility each year (Altuntas et al. 2017). The research was proven by examining the effect of cash flow volatility on the firm value conducted by Rountree et al. (2008), who concluded that every one percent (1%) of the increase in cash flow volatility results in a 0.15% decrease in the firm value. Relevant to this result, the research is consistent with stock market choices that are more likely to choose companies with low cash flow volatility. Research by Rountree et al. (2008) is also consistent with the research of Altuntas et al. (2017) and Froot et al. (1993) which concluded that the volatility of cash flows could reduce a company's investment due to the instability of cash used to make various types of investments. This result occurred because investors underestimate companies that have high cash flow volatility.

Contrary to the above research, some studies conclude differently that the volatility of cash flows has a positive effect on firm value. Chi and Su (2017) concluded that the volatility of cash flows has a positive effect on firm value. As explained earlier, the examining of the volatility of cash flows is important to be raised in the study. First, the volatility of cash flows is an important component of company information that must be conveyed to the public (Lev and Zarowin, 1999). As part of the cash flow statement, operating cash flows are considered more informative than the income statement. Operating cash flow is also the main producer of company activities, which is an indicator in determining financing decisions and investment decisions of a company, and determining future cash flow forecasts (Indonesia Statement of Financial Accounting Standard No. 2). Second, the examining of the effect of cash flow volatility on firm value has never been conducted in Indonesia, so that it will be interesting to discuss this association. Therefore, examining the effect of cash flow volatility on firm value could help investors in making investment decisions.

2. LITERATURE REVIEW

2.1 Signaling Theory

Signaling theory is essential for describing the behavior of two parties who have different access to information (Connelly et al., 2011). The signaling theory would encourage those who have a lot of access to information to give signals to those who lack access to information. Signaling theory is often associated with the stock market because, in the stock market, there would always be a problem of asymmetric information between management and investors (Morris, 1987). Asymmetric information problems occur because management has a lot of information and the condition of the company compared to investors. However, the problem of asymmetric information could be reduced by giving signals from management to investors. The signal in question is the action taken by company management that guides investors on how

management views the company's prospects (Brigham and Houston, 2011).

Morris (1987) explained that the higher the asymmetric information between management and investors, the higher the information that is known by management and the less information that is known by investors. Reducing the existence of asymmetric information, the company would provide and account for the company's annual financial statements as a form of signaling all company financial information. Investors would use the information and analyze information in the financial statements either explicitly or implicitly (Harahap, 2009).

Providing signals provided by voluntary management would be given to investors to assist investors in decision making (Godfrey et al., 2015). However, the problem that occurs in the provision of information by management to investors is that each company would only attempt to provide a good signal to investors. It is related to manager incentives that are obtained if company management provides bad news. Therefore, according to Harahap (2009), investors have a distrust of the financial statements presented by management. It makes investors not easy to analyze financial statements.

2.2 Hypothesis Development

As an unsystematic risk, tax risk is a risk that could be managed by a company but could harm the company if it is not managed properly (Hidayat, 2015). Management recognizes more the condition of corporate tax risk than the investors. Tax risk is one of the risks that must be avoided by the company so that tax risk could cause investor distrust of the company's performance in complying with tax regulations and implementing tax obligations so that investor perception would decrease.

Drake et al. (2017) argued that tax risk is volatility in tax payments. Drake et al. (2017) concluded that the volatility of cash flows was considered negatively by investors so that the volatility of the tax rate with the proxy volatility of Cash ETR

would also be considered negatively by investors. It is relevant to the uncertainty for the future of the company. Therefore, the first hypothesis in this study is:

H1: Tax risk has a negative effect on the value of the company.

Based on the signaling theory, to reduce asymmetric information between management and investors, management would provide information, including information related to hedging policies taken by the company. Investors might recognize what risks the company experiences so that a hedging policy is needed. The information signal provided would determine the company's valuation by investors. Hedging is a tool to minimize risk. With the use of hedging, companies that experience cash flow risk due to loan interest payments could use hedging to protect interest rate fluctuations. Hedging becomes insurance for the company. If the company has a hedge, cash flow due to fluctuations in loan interest rates would be maintained. The company's cash flow would be controlled so that cash flow could be used for other company's plans. Investors would assume that the company could improve the company's performance using hedging. Thus, the investor's perception of the company becomes increased which leads to the value of the company.

Several prior studies examined the impact of hedging on firm value, for example, Allayannis and Weston (2001), Carter et al. (2006), and Altuntas et al. (2017). The study examined the impact of hedging on firm value and found that hedging increases firm value. However, Jin and Jorion (2006) found the different results that hedging does not affect the market firm value in the oil and gas industries. There are important differences between the nature of risk exposures of oil and gas producer commodities when compared to foreign currency risk exposures such as Allayannis and Weston (2001), who took a sample of multinational companies. Thus, the second hypothesis is as follows.

H2: Hedging has a positive effect on the value of the company.

According to Huang (2009), managers are more likely to use artificial income smoothing for cosmetic accounting purposes. Income smoothing tested in this study is artificial income smoothing, which is a management action to make the company's income look stable in front of investors. With the complexity of corporate financial statements, income smoothing by companies could reduce the value of the company. The company's financial statements would not be easy to smooth because the effects must also be considered so that the income smoothing of the company could be a mess of financial statements. Investors perceive badly towards the company so that the firm value leads down.

Huang (2009) also stated that the greater the abnormal accruals made by managers, *ceteris paribus*, negatively affects the value of the company. The negative influence concluded by Huang (2009) was due to the weak corporate governance system in the company, starting from the board of commissioners, the audit committee, and financial experts who were less precise.

In Indonesia, testing the effect of income smoothing on company value has experienced inconsistencies in test results. Suranta and Merdistusi (2009) concluded that income smoothing has a positive effect on firm value. Another study, Purwanto (2009), concluded that there is no causal relationship between firm value and income smoothing. Oktavia (2011) concludes that the greater the abnormal accruals made by managers, the value of the company is also increasing.

In line with Huang (2009), income smoothing made by companies in the United States could reduce the firm value allegedly due to weak corporate governance in the company. A similar condition occurs in Indonesia, as well. The Booz Allen Survey evidenced that Indonesia had a low corporate governance index in 1988 (Kaihatu, 2006). Thus, the third used is as follows:

H3: Income smoothing has a negative effect on firm value.

Shareholders tend to see companies that keep their flows stable. Investors certainly prefer stable cash flow compared to unstable cash flows. If cash flow is stable, investors assume that the company has run the company's operations properly so that cash generated from operating activities is also stable. If cash generated from operating activities is not stable, investors would assume that the company is unable to run the company's operations effectively and efficiently. The instability of operating cash flows could have an impact on increasing loans for funding and reducing the investment that the company would make because the cash needed by the company is insufficient. It resulted in the management of the company becoming deeper because it involved creditors.

Research by Rountree et al. (2008) concluded that every one percent (1%) of the increase in cash flow volatility had a 0.15% decrease in the value of the company. Research on cash flow volatility was also carried out by Jayaraman (2008). Jayaraman (2008) explained that from a corporate executive survey by Graham et al. (2005), it was explained that 97% of respondents chose to report stable earnings and constant cash flow. Furthermore, Jayaraman (2008) explains that there has been no agreement in the literature regarding whether profits that are more volatile than cash flows provide or disrupt information provided to investors. Altuntas et al. (2017) concluded that the volatility of cash flows could reduce investment so that it reduces the value of the company. It is due to the instability of the cash used to make various types of investments. It has caused investors to underestimate companies that have high cash flow volatility. Based on the previous description, the fourth hypothesis is as follows.

H4: Volatility of cash flow has a negative effect on firm value.**3. METHODOLOGY****3.1 Data and Research Samples**

The type of research used in this study is a quantitative method. The analysis in this study was carried out using multiple linear regression models. The type of data to be processed in this study is secondary data in the form of financial statements of companies listed on the Indonesia Stock Exchange (ISE) from 2014 to 2016, which could be obtained at the address <http://www.idx.co.id>. Also, financial report data from 2010 to 2013 are needed to support the measurement of variables that require that data.

This study uses panel data with purposive sampling. The population in this study are companies listed on the Indonesia Stock Exchange in the period from 2014 to 2016. The selected criteria to gain the final sample, as follows:

1. The company has been listed on the ISE before January 1, 2010. Calculation of tax risk variables requires financial statement data from year t-4 to t year so that if the company's financial statements used in the sample are 2014-2016, then additional data is needed in the form of financial statements for 2010-2013.
2. The company does not include companies engaged in the financial, property, real estate, and building construction sectors because the company has different tax provisions (subject to final tax).
3. Companies that have positive nominees and denominators to calculate Cash ETR because companies that experience losses could distort the tax burden in the financial statements.
4. Companies that have Cash ETR of less than 100%. In calculating Cash ETR, corporate tax payments in cash would be compared to profit before tax so that the payment of taxes paid by the company may not be greater than the profit before tax.
5. The company uses the rupiah currency to avoid errors in currency differences.
6. Companies that have annual financial reports with complete information during 2010-2016.

3.2. Research Variable**3.2.1 Dependent Variable**

The dependent variable in this study is firm value. The proxy used in this study follows the proxy used by Altuntas et al. (2017):

$$TOBINQ = \frac{\text{Market value of equity} + D}{\text{book value asset}} \dots \dots \dots (1)$$

3.2.2 Independent Variables

1. Tax Risk

The measurement of tax risk in this study would use the standard deviation of the Annual Cash ETR by Drake et al. (2017). Measurement of tax risk as follows.

TAX RISK_{i,t} = annual standard deviation of Cash ETR of the company i in year t (1)

Where:

Cash ETR = the amount of tax payment in cash for the last five years divided by the amount of income before tax for the last five years of the company i

2. Hedging

The proxy follows Allayannis and Weston (2001), Carter et al. Simkins (2006), and Jin and Jorion (2006) using a dummy variable that is 1 for a company that reports the existence of hedging while 0 for the company does not report hedging.

3. Income Smoothing

The company follows Tucker and Zarowin (2006). Income smoothing is measured by using a negative correlation between changes in discretionary accrual (ΔDAP) and changes in pre-discretionary income (ΔPDI) with the following calculations:

a) Conduct regression to produce a residual value to obtain Discretionary Accrual:

$$\left(\frac{\text{Accruals}_t}{\text{Total Asset}_{t-1}} \right) = a \left(\frac{1}{\text{Total Asset}_{t-1}} \right) + b \frac{\Delta \text{Sales}_t}{\text{Total Asset}_{t-1}} + c \frac{\text{PPE}_t}{\text{Total Asset}_{t-1}} + d \text{ROA}_t + \epsilon_t \quad (2)$$

b) Calculating the value of Pre-discretionary income (ΔPDI).

$$\text{PDI} = \text{NI} - \text{DAP} \dots \dots \dots (3)$$

c) Calculating the value of income smoothing, which is conducted by the correlation between the change in discretionary accruals and the change in pre-discretionary income using the current year's and past four years' observations.

$$\text{INC_SMOOTH}_{i,t} = \text{Corr}(\Delta \text{DAP}, \Delta \text{PDI}) \dots \dots \dots (4)$$

4. Cash Flow Volatility

This study follows Altuntaset al. (2017) and Jayaraman (2008) as follows:

$$\text{CF_VOLT}_{i,t} = \frac{\text{variants of operating cash flow the company i in year t}}{\text{total asset the company i in year t}} \quad (5)$$

3.2.3 Control Variables

The control variables in this study are capital expenditure and company size. In this study, capital expenditure is measured by how the company's capital expenditure would be divided by total assets. Furthermore, Company size control variables are measured using the logarithm of the company's total assets by Altuntaset al. (2017).

3.3 Model

The main research model in this study is as follows.

$$\text{TOBINQ}_{i,t} = \alpha_0 + \alpha_1 \text{TAXRISK}_{i,t} + \alpha_2 \text{HEDGING}_{i,t} + \alpha_3 \text{INC_SMOOTH}_{i,t} + \alpha_4 \text{CF_VOLT}_{i,t} + \alpha_5 \text{XCAPEX}_{i,t} + \alpha_6 \text{XFIRMSIZE}_{i,t} + \epsilon_{i,t} \dots \dots \dots (6)$$

Where:

α_0	=	constants
$\text{TOBINQ}_{i,t}$	=	Firm value the company i in year t
$\text{INC_SMOOTH}_{i,t}$	=	Income smoothing the company i in year t
$\text{HEDGING}_{i,t}$	=	Hedging value the company i in year t
$\text{CF_VOLT}_{i,t}$	=	Cash flow volatility the company i in year t
$\text{CAPEX}_{i,t}$	=	Capital Expenditure/total assets

$FIRMSIZE_{i,t}$ = of the company i in year t
Natural logarithm of total assets of the i in year t
 $\epsilon_{i,t}$ = The residual value of the regression equation

4. RESULTS AND DISCUSSION

Table 1 presents the sample selection with purposive sampling criteria in this study:

Table 1: Research Sample Selection Process

Criteria	Total	Size
Companies listed on the IDX as of September 30, 2017	560	Firms
Companies listed on the IDX in 2017	- 28	Firms
Companies listed on the IDX after January 1, 2010	-	Firms
Companies listed on the IDX before January 1, 2010	157	Firms
Financial sector companies	365	Firms
The property, real estate, and building construction companies	- 58	Firms
Financial statements use currencies other than rupiah	- 36	Firms
The company has a pretax income that is positive from year t-4 to year t	- 39	Firms
Elements and/or information in the Financial Report are incomplete	- 88	Firms
Outlier data	- 17	Firms
	- 18	Firms
Total Sample	68	Firms
Year	3	Years
Total Observation	204	Firm-Years

Source: Processed from www.idx.com.

The sample selected in this study amounted to 68 companies. Observations made on the sample were within three years, from 2014 to 2016. Therefore, the number of observations that became the sample in this study was 204 observations.

Table 2 presents the descriptive statistical analysis in this study.

Table 2: Descriptive Statistics

Tobinq	Taxrisk	Inc_Smooth	Hedging	CF_Volt	Cape_x	Firm_Size
--------	---------	------------	---------	---------	--------	-----------

Mean	0.351085	0.143414	0.747174	0.186275	0.05099	0.049144	12.58894
Median	0.294415	0.088035	0.948742	0	0.046377	0.038583	12.57401
Max.	1.961654	0.964824	0.99997	1	0.130885	0.291238	14.41806
Min.	0.79913	0.012209	-	0	0.011652	0.00129	11.0014
Std. Dev.	0.565402	0.158226	0.457811	0.390286	0.027622	0.043309	0.685033

Source: Processed from the financial statements of companies listed on the Indonesia Stock Exchange in 2014-2016.

Based on the examining of the regression model selection, the regression model, which is used in this study, is the Fixed Effect Method. Furthermore, the regression model would be tested using the coefficient of determination to measure the extent of the ability of the regression model in explaining variations in the dependent variable (Ghozali, 2013). Assessment interpretation in this test is conducted by looking at the value of adjusted R-Squared instead of R-Squared. The adjusted R-Squared generated in this study was 0.983209 (98.32%). Other factors outside the research model explain the remaining amount of 1.68%.

The F test is used to show whether all independent variables have a joint or simultaneous effect on the dependent variable. Based on the test results, it is known that the probability value (F-statistic) of 0.000000 is smaller than the value of α (0.05), so it could be stated that simultaneously, the variables in this study have a significant effect on firm value. Furthermore, the t-test is used to show how far the independent variables influence individually on the dependent variable assuming other variables are constant. The results of the t-test are shown as follows:

Table 3: T-Test

Variable	Sig n	Coefficient	t-Statistic	Prob.	Hypothesis
TAXRISK	-	0.335529	3.793536	0.0001	** Supported
INC_SMOOTH	+	0.067353	3.211679	0.0008	** Not Supported
HEDGING	-	-	-	0.000	** Not

	0.152770	5.6886	0	*	Supporte
		90			d
-		-	0.001	**	Supporte
		3.0219	5	*	d
CF_VOLT	1.168185	05			
		4.9682	0.000	**	
CAPEX	0.705787	31	0	*	
		-	0.000	**	
		12.064	0	*	
FIRM_SIZE	1.060123	79			
		12.352	0.000	**	
C	13.74804	84	0	*	
R-squared	0.989247				
Adjusted R-squared	0.983209				
F-statistic	163.8332				
Prob(F-statistic)	0.000000				

4.1 Effect of tax risk on firm's value

The result suggests that the tax risk is negatively associated with the firm's value. The results are in line with Drake et al. (2017) because, in principle, tax risk is the same volatility in tax payments as the volatility of cash flows, which is considered negative by investors so that investors would assess the negative tax risk. The reasons that could explain investors' negative response to corporate tax risk are first because of concerns about tax audits by the tax authorities in the future. If the corporate tax risk is higher, the company is more likely to be examined by the tax authority in the future. Tax audits by the tax authorities are also carried out because of indications of tax evasion.

The uncertainty of tax payments each year could make investors assume that the greater the tax avoidance carried out by the company, the more likely the tax authority would audit the company. If the tax authorities conduct audits on companies for the avoidance of corporate tax payments, investors will become worried about the sustainability of the company in the future. Investors could assume that the company would have difficulties in continuing the company's operations so that investors assess that the company's tax risk is high. In the end, the security of the investment is prioritized over the high return on tax avoidance by the company.

As the risk in the field of taxation, tax evasion carried out by the company could increase the corporate tax risk. Hidayat (2015) also explained that corporate tax risk is a risk that could potentially harm the company. Several cases in

Indonesia prove that investors reduce their value when the company carries out tax evasion. When the company proved tax evasion, investors responded quickly to the situation so that the stock price dropped dramatically. Investors' concerns attract their capital because investors are hesitant about the sustainability of the company after a tax audit by the tax authorities.

The second reason that could explain investors' negative response to corporate tax risk is the alleged concern of stock return volatility that investors would get in the future. The existence of cash tax-saving companies carried out for other projects does benefit the company so that tax avoidance is increasingly carried out by the company. Not only companies, but the impact of tax evasion also increases the value of the company (Drake et al., 2017). Stock returns obtained by investors would increase because investment returns obtained from cash tax saving also increase without having to obtain loans from outside the company. It is relevant to several previous studies namely Drake et al. (2017), which concluded that corporate tax avoidance was able to increase the value of the company. However, what needs to be emphasized is that one-day corporate tax evasion would be revealed. Moreover, the tax audit policy is increasing after the tax amnesty is enacted. When the tax authority checks, the payment of company fines could be greater than the tax avoidance by the company. Taxation regulations in Indonesia require companies in Indonesia that violate and do not fulfill their tax obligations would be subject to sanctions and fines that must be paid by the company within a certain period by the KUP. As a result, the company could become a loss or even go bankrupt just because the company fines payment. The stock return desired by investors becomes uncertain. It leads to the value of shares falling. In conclusion, tax risk is a risk that could harm the company (Hidayat 2015).

4.2 Effect of hedging on the firm's value

The results of testing hypotheses indicate that hedging does not affect the value of the company. The results of this test are not in line with the

researches of Allayannis and Weston (2001) and Carter et al. (2006), which state that hedging has a positive effect on firm value in the United States. Related to research in Indonesia, Suriawinata (2004) and Nur (2014) stated that hedging has a positive effect on firm value. Hedging that does not affect the firm value proves that the hedging policy used by the company is unable to provide a positive signal to investors. It indicates that when investors invest, maintain and sell their investments in the stock market, investors in Indonesia do not consider information regarding whether the company uses a hedging policy or not. From the results of this test, investors in Indonesia have proven not to respond to the efforts made by the company in minimizing risk by using hedges.

As a company capital owner, investors have various considerations in their investment decisions in the company. Regarding the company's hedging policy that investors should respond to as a positive thing from the company's performance, investors did not respond. Hedging users could explain it, hedging policies in Indonesia do not have many interesting ones. Non-financial companies in this study sample did not use hedging as a means of minimizing risk. It was viewed that 68 samples of companies taken in this study; only 14 companies used hedging activities.

In Indonesia, there is very little interest in hedging on derivatives, so it is suspected that investors do not regard the hedging policy in assessing the company. Eventually. The company's hedging policy is thought not to make investors interested in increasing its value to the company so that the results of this test indicate that hedging does not affect the value of the company. Hedging is expected to minimize risks. If risk could be minimized, hedging should be endeavored to be able to increase the value of the company by providing information signals in the financial statements. However, the results of this study show otherwise that hedging in Indonesia could even minimize risks but not related to investor perceptions.

4.3 Effect of income smoothing on firm value

The results of hypothesis testing indicate that income smoothing does not affect the value of the company. This study suggests that in assessing a company, investors do not view artificial income smoothing by the company. The results of this test are not in harmony with Huang's (2009) study, which concluded that income smoothing has a negative effect on firm value. In Huang's (2009) study, this negative influence was caused by the existence of a bad leadership system in the company starting from the board of commissioners, audit committee, and financial experts so that the income smoothing generated could not increase the value of the company.

The first reason that causes income smoothing does not affect investor valuation is first, closely related to the results of hedging testing. Referring to the testing of the previous hypothesis of hedging, the result that could be concluded is that hedging does not affect the value of the company. This proves that real smoothing through derivatives is not responded to by investors. Real smoothing through derivatives should be able to respond positively by investors. In theory, real smoothing by a company could increase the value of a company. Real smoothing is not responded to. Artificial, which is an abnormal accrual policy, would also not be responded to because artificial smoothing would obscure and confusing information to investors. It is supported by Jayaraman's (2008) statement that artificial smoothing obscures information to investors so that investors do not respond to the smoothing carried out by the company.

The second reason that causes income smoothing does not affect the valuation of investors is that investors have assumed that the profit presented by management is the profit that has poor quality due to abnormal accruals made. In the end, investors care more about cash flow statements. It is in line with the research of Rountree et al. (2008), which states that investors focus more on the volatility of cash flows and ignore the smoothing done by management.

4.4 Effect of cash flow volatility on firm value

The results of testing the hypothesis in this study indicate that the volume of cash flow has a negative effect on firm value. The results of this test are in line with the research of Altuntas et al. (2017), which concluded that the volatility of cash flows would be responded negatively by investors. Cash flow volatility could reduce a firm's value because volatility is uncertainty about the company's opportunity to develop so that investors would be judged negatively. It is also supported by Pastor and Veronesi (2003). Investors certainly prefer stable cash flow compared to unstable cash flows. If cash flow is stable, investors assume that the company has run the company's operations properly so that cash generated from operating activities is also stable. If cash generated from operating activities is not stable, investors would assume that the company is unable to run the company's operations effectively and efficiently. Another cause is explained by Minton and Schrand (1999) that the volatility of cash flows could cause underinvestment problems. Minton and Schrand (1999) also found that the more volatile cash flows, the lower the level of investment expenditure, research and development and advertising costs. The instability of operating cash flows could have an impact on increasing loans for funding and reducing the investment that the company would make because the cash needed by the company is insufficient. This resulted in the management of the company becoming deeper because it involved creditors. Furthermore, if cash is insufficient, the company is unable to invest and expand to increase company revenue.

5. CONCLUSION

The more companies make unstable tax payments over the past five years, the more investor's perception of the company becomes decreasing. Investors could assume that the company has a wrong tendency to make tax payments, tax evasion, or, indeed, the company's finance is considered to be unstable. For companies, the tax expense is a payment that could reduce the amount of the company's net cash flow. If tax risk

management is not carried out, taxes could make companies more unstable and could disrupt the company's finances. Thus, investor perceptions of companies that have high tax risk would further reduce investor perception.

Companies use hedging to minimize risk. The test results indicate that hedging was not responded to by investors. Some of the reasons that could be the cause of hedging not responded by investors are from hedging users. The hedging used by non-financial companies in this sample was only 23% in 2014 and 26% in 2015 and 2016. It caused the hedging policy not to be too much of an investor's focus in conducting decision-making analysis.

The reason that causes income smoothing does not affect the value of the company could be viewed from the investor's perception and the effect of hedging on the previous test. Considering the perception of investors, they have understood the quality of earnings provided by bad management so that investors do not react to the income smoothing by the company. Furthermore, hedging as an effort to make real smoothing, did not get a response from investors, including artificial smoothing which is a management effort to stabilize income.

Furthermore, companies that have increasingly volatile operating cash flows could make investors underestimate the company. It is in line with operating cash flows, which are cash flows generated during the company's operations. If the resulting cash flow is unstable, investors could assume that the company's operations are being weak, thus reducing the value of the company. Companies need good management so that investor perceptions of the company are better. In Indonesia, tax risk management needs to be encouraged because not many have tax risk management. Tax risk management could be used as the internal control in taxation because with economic uncertainty and uncertainty in tax regulations, corporate tax risk could be anticipated.

Suggestions for future research are the use of other proxies. Each independent variable, the dependent variable, and the control variable in this

study have many proxies that could be used in subsequent studies. Future studies could use fair value proxies for hedging so that the results obtained are representative and could complement each other.

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