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The Effect of Tax Uncertainty, Stock Market Liquidity, Earnings Management on Indonesian Firm's Investment

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Abstract. *The prosperous economy of the country is closely related to the role of investment, especially private sector investment. This study aims to examine the effect of tax uncertainty, stock market liquidity, and earnings management on firm's investment in Indonesia. Through an associative quantitative approach, this study analyzed firms listed on the Indonesia Stock Exchange from 2014 up to 2016 which is examined using the fixed effect model of panel data. The results of this study suggest that tax uncertainty and stock market liquidity are negatively associated with firm's investment. Meanwhile, earnings management is not associated with firm's investment.*

Keywords: *Firm's investment, tax uncertainty, stock market liquidity, earnings management.*

Abstrak. *Perekonomian suatu negara tidak terlepas dari peran investasi, khususnya investasi sektor swasta. Penelitian ini bertujuan untuk menguji pengaruh ketidakpastian pajak, likuiditas pasar saham, dan manajemen laba terhadap investasi perusahaan di Indonesia. Melalui pendekatan asosiatif kuantitatif, penelitian ini menganalisis perusahaan yang terdaftar pada Bursa Efek Indonesia pada tahun 2014 hingga 2016 yang diuji menggunakan model fixed effect dari data panel. Hasil penelitian ini menunjukkan bahwa ketidakpastian pajak dan likuiditas pasar saham memiliki pengaruh negatif terhadap investasi perusahaan. Sementara itu, manajemen laba tidak mempengaruhi investasi perusahaan.*

Kata kunci: *Investasi perusahaan, ketidakpastian pajak, likuiditas pasar saham, manajemen laba*

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Introduction

The economy of a country could not be separated from the role of investment, especially private sector investment. Private sector investment is believed to have a significant impact on economic growth. Economic growth is an indicator of the success of a country's development. Conversely, the absence of investment would affect the economic slowdown that ultimately disrupts the stability of the country's economy (Indonesian Economic Report, 2016). As a developing country, Indonesia is required to increase private sector investment to improve the economic growth of real sector. Private investment is becoming increasingly important when the government is still unable to meet sufficient needs for the community. The role of the private sector is highly anticipated to give impetus to the development of the country.

Concerning more about the firm's investment, there are three critical decisions for the company to run its business. These three decisions include investment decisions, funding decisions, and dividend decisions (Harmono, 2011). The investment decision is the most critical decision for the private sector in carrying out its business activities. Before making investment-related choices, the company would see from different perspectives, both external and internal. The external viewpoints seen are usually related to environmental circumstances and regulations that may threaten or support investment activities (Gulen and Ion, 2015). Meanwhile, the internal point of view involves management behavior in allocating funds for investment (McNichols and Stubben, 2008).

From an external point of view, the investment may be influenced by the government's policy and market behavior side. Changes in government policy, either directly or indirectly, would affect the private sector in making investment decisions.

Furthermore, tax-related uncertainties often impact the disruption of long-term investment-related decisions (Jacob et al., 2016). Meanwhile, a more specific policy would encourage the private sector to be more active in developing its business through investment.

Some researchers found that tax uncertainty could influence corporate behavior in investing the capital. In the United States, Blouin et al. (2012) found that tax uncertainty would reduce the level of private sector investment. This finding is relevant to Jacob et al. (2014) who found that tax uncertainty negatively affects investment activity. The phenomenon of tax uncertainty leads the companies to tend to delay investment decisions and prefer to withhold cash. Furthermore, Jacob et al. (2016) conducted a similar study focusing on tax uncertainty associated with investment elements taking into account agency issues, corporate governance, and tax avoidance.

Furthermore, based on reviews of literature conducted, research that has been applied in the United States has not been found in Indonesia. Nevertheless, this research could be implemented in Indonesia because of the similarity between the concept of taxation and private sector investment between Indonesia and the United States. Thus, research which discusses tax uncertainty and firm's investment is fundamental. Jacob et al. (2016) used proxy capital investment in their study while this study uses a firm's investment. It is considered that a firm's investment is more comprehensive coverage than capital investment. Firm's investment includes an overall investment which provides for capital investment, research and development costs, acquisition costs, fixed asset sales, and depreciation.

A wide range of investments is believed to capture both investment expenditures for the maintenance of current assets as well as future investment. Meanwhile, capital investment covers only allocations related to the purchase, repair, and replacement of company's assets. Furthermore, this study uses volatility Cash Effective Tax Rate (ETR) to represent tax uncertainty because it is closely related to the behavior of the company in holding its money.

Still, on the external side of the company, the firm's investment is also affected by the state of the stock market, especially stock liquidity. The stock market has a lot of information related to business and corporate finance. Fama and Malkiel (1970) found that in an efficient market, stock prices reflect various kinds of information to influence the actions of economic actors in making their decisions. However, the information that exists on the stock market especially the stock liquidity in developing countries has not been fully explored well (Munoz, 2013). There is still some market behavior-related knowledge that could be attributed to the company's internal decisions.

Regarding to the investment decisions, high stock liquidity leads the companies to become more vulnerable to ownership changes. Bad condition boosts management tends to be conservative in generating a long-term investment. Also, high stock liquidity is also closely related to investor behavior in the pursuit of short-term profits. Therefore, management has been encouraged to provide excellent performances in the short framework at the expense of its investment.

Stock liquidity on the firm's investment has been investigated by Becker-Blease and Paul (2006), Munoz (2013), and Fang et al. (2014). Fang et al. (2014) found that stock liquidity is negatively associated with firm's investment. However, Becker-Blease and Paul (2006) and Munoz (2013) had different arguments with research conducted by Fang et al. (2014).

Becker-Blease and Paul (2006) found that there is a positive correlation between stock liquidity and firm's investment. A similar study was also conducted by Munoz (2013) who found that firms with high share trading rates are associated with increased firm's investment.

In Indonesia (2013), Malinda and Dalimunthe (2013) examined the relationship between stock liquidity and firm's investment in non-financial corporations in Indonesia Stock Exchange (BEI) in 2010. Malinda and Dalimunthe (2013) found that stock liquidity did not affect investment grade. Malinda and Dalimunthe (2013) then suggested further research to use longer periods and more variables. Thus, this study is a follow-up study conducted by Malinda and Dalimunthe (2013).

Based on the above description, there are inconsistencies of research results related to stock liquidity and firm's investment. Also, the study which discusses stock liquidity and firm's investment may be still rarely conducted in Indonesia. The stock market condition in Indonesia is also different from the previous research objects that usually used the developed countries. This study also intends to dig deeper into the relationship between market behavior with internal corporate decisions. Therefore, research related to stock liquidity and firm's investment is essential to be conducted.

Furthermore, from the internal company point of view, investment has a close relationship with the behavior of management, especially earnings management which deals directly with the action of management in managing its financial statements. Every company has the main goal to earn profits that continue to increase every year. Increased earnings are considered as an indicator of the success of management in managing its business activities. However, in reality, the profits earned by the company often fluctuate from one period to the next period. Such fluctuations are considered as unfavorable to investors and other shareholders.

Therefore, management attempts to intervene the information contained in financial statements by taking advantage of concessions on accounting methods. This activity is conducted to set the company's earnings to produce information by the wishes of the users of financial statements.

If it relates to investment decisions, earnings management plays a role in useful financial statements purpose so that companies more easily in collecting investment funds from investors and creditors (McNichols and Stubben, 2008). Also, the firm's investment is closely related to the assets owned by the company (Lenard and Yu, 2012). In this case, earnings management plays a role in manipulating the elements in the company's assets so that investment activities look more expansive. In Indonesia, investment-related research conducted by Baskoro and Wardhani (2014) find that accrual earnings management had a positive effect on firm's investment, while real earnings management was not proven to affect firm's investment. This study is different from previous studies. Previous studies employed a total accrual proxy in measuring earnings management. Meanwhile, this study employs current discretionary accrual for calculating earnings management.

Current discretionary accrual approach has advantages in capturing earnings management on the company's current assets activity because management is more likely to make adjustments to this activity (Jaggi et al., 2009). The selection of current discretionary accrual proxies is expected to capture earnings management on different sides through the current assets approach to the statement of financial position. Also, research related to a firm's investment with capital investment approach, research and development, acquisition, and depreciation to earnings management is interesting to be discussed from Indonesia perspective. With regards to the firm's investment, agency problems occur when management takes investment decisions that do not match the owner's desires.

This condition is reflected in the behavior of management that tends to focus on performance that produces high profits in the short term rather than considering investment projects that have long-term benefits by the wishes of the principal. The management conducts this activity because achieving short-term performance is considered easier to run than by making long-term plans with uncertain factors and assumptions in the future. Also, agency problems also arise because the owner does not have as much information as management related to the company's internal condition called information asymmetry (Jensen and Meckling, 1976). It leads to management more flexible in deciding on investment projects that benefit him.

According to Jacob et al. (2014), tax uncertainty is a combination of various factors including tax policy, corporate tax position, operational risk, and different tax law enforcement. Based on agency theory, management usually tends to save its cash as a form of precaution if in the future there is an unexpected expense. However, the owner usually still wants the company to expand appropriately through investment because the owner does not have the same information as management about the internal state of the company. This asymmetic information would lead differences in views between the management and the owners regarding to the long term goals of the company.

As mentioned earlier, Hanlon et al. (2014) found that firms would tend to be more cautious in their cash usage as a result of the uncertain conditions that it faces. With the development of the study, Jacob et al. (2014) then expanded the research by involving the effects of the real operations of the company and found that tax uncertainty is important as the company's consideration in its investment decision. In general, firms facing tax uncertainty would tend to delay large investment decisions (Jacob et al., 2016).

Based on the description, economic uncertainty related to taxation could threaten the company's long-term plan. An uncertain taxing climate is considered as an obstacle for companies to invest. The environment of uncertain taxation leads the company to reconsider to expand business through investment. Tax uncertainty also affects the fluctuations in the amount of tax paid to the company tends to withhold its money as a precaution in the future. Thus, the first hypothesis of this study is as follows.

*H1: Tax uncertainty is negatively associated with firm's investmen*t

In deciding the investment, there are often view differences between management and the owners of the company. Management typically takes into account various external factors, including the liquidity of the company's stock. According to Fakhruddin (2008), stock liquidity is defined as the level of ease of stock trading on the stock exchange. Management considers stock liquidity to accommodate the desire of small investors with relatively small share ownership. However, the owner intends management to decide on the firm's investment without too much attention to the behavior of the small investor. The owners assume that small investors only use the increase or decrease in prices rather than see the company's performance in the long run.

Related stock liquidity and firm's investment, Fang et al. (2014) stated that stock liquidity is negatively associated with firm's investment. Fang et al. (2014) found that the higher the level of a company's stock ownership, the level of the firm's investment tends to be low. Stock liquidity also provides information about the desire of small investors on the performance of the company.

High stock liquidity is related to the frequent shifting of company ownership. It is considered a bad condition because every stockholder has different thoughts about the company's planning in the long term. Also, high stock liquidity is associated with investor behavior focused on short-term performance. It leads management to be encouraged to improve short-term performance and ignore the firm's investment in the long run. Based on this, high stock liquidity would threaten the company's performance related to investment. Thus, the second hypothesis of this study is as follows.

H2: Stock liquidity is negatively associated with firm's investment

Scott (2015) stated that earnings management is the behavior of managers in reporting business profits to maximize personal interests by using loopholes in accounting policies. Earnings management has a close relationship with agency theory. Agency theory recognizes the concept of principal (owner) and agent (management). To run the company, the owner usually delegates his authority to management. This delegation allows management to choose the policies that they want. The delegation also provides an opportunity for management to choose policies that are not by the wishes of the owner and tend to benefit himself, such as the behavior of earnings management. Also, earnings management behavior also occurs because of the information asymmetry between management and owners. Owners usually do not have as much information as management about the company's internal state. It leads to management could conduct earnings management freely.

McNichols and Stubben (2008) found that companies that make earnings management tend to have high levels of investment. However, sometimes management makes such investments in excess (overinvestment) and thus pose a risk (Shen et al., 2015). Lenard and Yu (2012) linked between earnings management, audit probability, and the firm's investment. From the research found that companies that have a low probability of audit tend to choose earnings management to increase their investment.

Earnings management is usually conducted by providing intervention to the financial statements by utilizing the gap in accounting policies to present financial information more interesting.

Good financial statements would make it easier for companies to raise funds from creditors and investors as it is considered that investment activities are activities that require relatively large funds. Therefore, companies that make earnings management would be easier in obtaining investment funds. It is considered that earnings management behavior supports the firm's investment activities. Thus, the third hypothesis of this study is as follows.

H3: Earnings management is positively associated with firm's investment

Research Methodology

Data and Sample Research

The type of research is quantitative research. This study uses secondary data collected from the financial statements of companies listed on the Indonesia Stock Exchange (IDX). Data used in this research is panel data. The population in this study are all companies listed in Indonesia Stock Exchange (IDX) in the period 2010 to 2016. The sample selection is conducted by purposive sampling method which is the selection of samples that are determined not randomly or with certain criteria. This study uses a research sample in the form of a non-financial company. The sample selection is conducted with several approaches to be eliminated as follows:

1. The companies led an initial public offering (IPO) after January 1, 2010. It aims to ensure the completeness of the data obtained in calculating the research variables, especially the tax uncertainty variables that require data from year t-4.
2. The companies are the financial sector, and the property sector and real estate. Those companies are chosen because the financial industries have properties and performance that is different from other industries, while the property and real estate sectors have special treatment in tax aspect that is subject to final tax.
3. The company uses the USD currency in its financial statements. It aims to reduce errors in converting currency.
4. The company has a negative pre-tax profit (pretax income) between year t-4 to year t. This decision was taken because the losing company did not have the incentive to invest and the company losses could bias the amount of tax paid to distort the calculation of the effective tax rate (ETR) on the sample company.
5. The company has a cash tax paid value that is positive between year t-4 to year t. This decision is taken because the company that has a positive cash tax paid indicates that the company does not spend to pay taxes, but get a tax refund in the form of cash that would obscure the calculation.
6. The company does a stock split from 2014 to 2016 period. It aims to reduce errors in the research because the stock split would cause the calculation of the number of shares circulating between periods to be biased.
7. The company does not have complete data related to financial statement elements and information from 2010 to 2016. It aims to ensure the availability of data needed to calculate the variables in the study.

Research Variable

Dependent Variables

The dependent variable in this study is the firm's investment. The firm's investment is determined according to the definition expressed by Richardson (2006) taking into account capital expenditures, acquisition costs, research and development costs, sales of fixed assets, and asset depreciation. This proxy has two virtues: recognizing expenditures for the maintenance of assets used today and taking into account expenditures for investments in new investment projects (future). The firm's investment proxy with Richardson's (2006) approach is translated into the following equation.

$$Inv_{it} = \frac{CAPEX_{it} + RD_{it} + Acquisition_{it} - SalesPPE_{it} + Dep_{it}}{Total\ Assets_{it}}$$

Where:
Inv_{it} : Investment company i in year t
$CAPEX_{it}$: Capital expenditure or corporate capital expenditure i in year t
Rd_{it} : Cost of research and development company i in year t
$Acquisition_{it}$: Acquisition cost of other company's assets in year t
$SalesPPE_{it}$: Sales of fixed assets of company i in year t
$Depos_{it}$: Depreciation expense of company i in year t
$Total\ Assets_{it}$: Total assets of company i in year t

Independent Variables
a. Tax Uncertainty
The measurement of tax uncertainty is calculated by ETR volatility developed by McGuire et al. (2013). The proxy has been used by Gallemore & Labro (2015), Higgins et al. (2015), and Guenther et al. (2016). ETR Volatility is measured through the calculation of the standard deviation of the effective tax rate of the company from the current year and the previous four years which then divided by the absolute value of the average effective tax rate. Companies that have effective tax rates with high volatility are associated with high tax uncertainty (Jacob et al., 2016). The selection of cash ETR as a proxy in calculating ETR volatility is based on a direct relation to the management's requirement in withholding the company's cash from exposure to tax uncertainty. The explanation of the proxy measurement of ETR volatility is described as follows.

$$ETR\ Volatility = \frac{STDEV\ (Cash\ ETR_{it-4} + Cash\ ETR_{it-3} + Cash\ ETR_{it-2} + Cash\ ETR_{it-1} + Cash\ ETR_{it})}{Average\ Cash\ ETR}$$

$$Cash\ ETR_{it} = \frac{Cash\ Tax\ Paid_{it}}{Pretax\ Income_{it}}$$

Where:
ETR Volatility : The standard deviation of ETR cash for five years divided by absolute cash ETR in the year
STDEV : Standard Deviation
$Cash\ ETR_{it}$: Proxy calculation ETR volatility firm i in year t
$Cash\ Tax\ Paid_{it}$: The amount of tax paid by the firm i on year t
$Pretax\ Income_{it}$: Income before corporate tax i in year t

b. Stock Liquidity
Stock liquidity is measured by trading volume activity by research conducted by Munoz (2013). Trading volume activity (TVA) is calculated by comparing the number of shares of a company traded at a time by the number of shares of the company in circulation. This proxy is chosen because it has a reasonable level of accuracy in calculating the personal stock liquidity of each company (Munoz, 2013). The explanation of TVA measures by Munoz (2013) is described below.

$$TVA_{it} = \frac{\sum_{t=1}^{Q} TradedShares_{it}}{DQ.Total\ Shares_{it}}$$

Where:
TVA_{it} : Trading volume activity the company i year t
$Traded\ Shares_{it}$: Number of shares traded the company i year t
$Total\ Shares_{it}$: Total of all shares owned by company i year t
DQ : The number of days of stock transactions in each Quarter

c. Earnings Management
By the dynamics of accounting, earnings management has developed in its calculations. Early earnings management calculations were initially measured using discretionary accrual proxies developed by Jones (1991). The proxy was then modified by several researchers such as Dechow et al. (1995), Kothari et al. (2005), and Jaggi et al. (2009). Jaggi et al. (2009) modified the proxy through the current discretionary accrual approach calculated by considering the total current accrual (TCA). This proxy measures earnings management through revenue, depreciation, and ROA which then show changes in the company's current assets.

This proxy has the advantage of being more able to capture earnings management on activities that occur in current assets. Such activity is usually selected by management in the aggressiveness of its financial statements (Jaggi et al., 2009). An explanation of current discretionary accrual calculations according to the approach (Jaggi et al., 2009) is presented as follows:

$$\frac{TCA_{it}}{A_{it-1}} = \beta_1 \frac{1}{A_{it-1}} + \beta_2 \frac{\Delta REV_{it}}{A_{it-1}} + \beta_3(ROA_{it-1}) + \varepsilon curr_{it}$$

The total value of the current accrual (TCA) is determined by the equation according to Jaggi et al. (2009) as follows.

$$TCA_{it} = NI_{it} + DEP_{it} + AMOR_{it} - CFO_{it}$$

From the regression results would be obtained residual value is defined in the error value. The residual value is called the current discretionary the accrual (CDA).

Where:

TCA_{it} : Total current accruals for firm i in year t

ΔREV_{it}: Changes in net income for firm i in year t

ROA_{it-1} : The ratio of net income to total assets for firm i in year t-1

Ni_{it} : Company's net profit i in period t

DEP_{it} : Company depreciation expense i in period t

$AMOR_{it}$: Amortization expense of firm i in period t

CFO_{it} : Cash flows from operating activities of the company i in year t

Ai_{t-1} : Total assets for firm i in year t-1

$\varepsilon curr_{it}$: The total error value of current firm accrual i in year t

β : The coefficient of the regression equation

Of the three research variables that have been described, it could be determined the regression equation in this study is as follows.

$$Inv_{it} = \alpha_{0it} + \beta_1 Tax\ Unc_{it} + \beta_2 TVA_{it} + \beta_3 EM_{it} + \varepsilon_{it}$$

Where:

Inv_{it} : Firm's investment for firm i in year t

$TaxUnc_{it}$: Tax Uncertainty for the firm i in year t

TVA_{it} : Stock Liquidity for firm i in year t

EM_{it} : Earnings Management for firm i in year t

ε_{it} : error term for firm i in year t

Results and Discussion

The sample is determined by using purposive sampling presented in Table 1 below:

Table 1.
Purposive Sampling

Criteria	Total	Measurement
Companies listed on IDX as of 8 November 2017	560	Firms
Companies listed on IDX from 1 January 2010	-185	Firms
Companies listed on IDX before January 1, 2010	375	Firms
Companies of the financial and property sectors	-95	Firms
The financial statements use currencies other than rupiah	-55	Firms
Companies with negative pretax income and positive cash tax payments from 2010 to 2016 (t to-t)	-122	Firms
Companies that do a stock split from 2010 to 2016	-12	Firms
Elements and information in the Financial Statement are incomplete	-16	Firms
Firms Total	**75**	Firms
Year	**3**	**Years**
Total Samples	**225**	**Firms-Years**

Source: processed from www.idx.go.id

Of the 75 selected firms, a three-year study is conducted from 2014 to 2016. The accumulation of three years of study gives the total sample in this study 225 Firms-Years. This research uses descriptive analysis which includes determination of mean, median, maximum (max), minimum (min), and standard deviation (std.dev). The summary of descriptive statistics on variable data in this study is as follows;

Table 2
Descriptive Statistics

No	Variable	Mean	Med.	Max.	Min.	SDev
1	INV	0,09	0,072	1,988	-0,075	0,138
2	TAX_UNC	0,46	0,351	1,922	0,050	0,363
3	TVA	0,26	0,132	4,094	0,000	0,479
4	EM	0,00	0,021	0,619	-3,038	0,379

The results of the tests in the choice of the regression model (chow test, Lagrange multiplier test, Hausman test) state that the fixed effect model is chosen as the most appropriate model in this study. Thus, the main model of this research regression uses the fixed-effect model. Furthermore, the measurement of goodness of fit is conducted by observing the coefficient of determination on the test results. The adjusted R^2 value in this study is 0.964801. This suggests that the research model could explain the variation of the firm's investment of 96.48% and the rest of 3.52% explained by other factors outside the research model. The Coefficient

F-test is conducted to determine the effect of independent variables simultaneously to the dependent variable. Based on the test, the probability value of F-statistic 0.0000 is smaller than α (0,05). The next test is a t-test to determine the influence of each independent variable individually (partial) on the dependent variable. Based on the analysis, the probability value of t-statistic 0.0000 is smaller than α (0,05). But, earnings management has negative results, which should be positive. Therefore, there are only two variables that are accepted, tax uncertainty and stock market liquidity. The coefficient of determination, F-test and the t-test results are presented in the table 3.

Table 3
The Coefficient of Determination, F-test and the t-test results

Var	*Sign*	*Coeff*	*t-Stat*	*Prob*	**Hyp**
TAX_UNC	-	-0,0381	-4,7537	0,0000	Accepted
TVA	-	-0,0668	-5,4856	0,0000	Accepted
EM	+	-0,1739	-7,4697	0,0000	Rejected
R-squared		0.9769			
Adjusted R-squared		0.9648			
Prob (F -statistic)		0.0000			

a. The Effect of Tax Uncertainty on Firm's Investment

From the hypothesis examining, tax uncertainty is negatively associated with firm's investment. The result of this study is relevant to the results of Blouin et al. (2012) and Jacob et al. (2016). In the United States, Blouin et al. (2012) find that firms facing high tax uncertainties typically have lower levels of investment. Relevant to this result, Jacob et al. (2016) find that firms with high effective tax rate fluctuations tend to face high tax uncertainties. The high uncertainty is synonymous with unfavorable circumstances, so the company decides to reduce its investment level.

Based on the previous literatures, research related to tax uncertainty on the firm's investment has not been found in Indonesia. However, this research could be applied in Indonesia because the United States and Indonesia have some similarities related to the concept of taxation and private sector investment. The tax system in Indonesia has almost the same conditions as the system in the United States such as self-assessment and withholding system, value-added tax, and central and local taxes. Volatility proportion of effective tax rate in calculating tax uncertainty could also be accommodated entirely by data available in Indonesia. Regarding the firm's investment, the concept of a firm's investment also has similarities between Indonesia and the United States. Firm's investment is calculated by capital expenditure and other elements related to investment. The result also has similar results with research conducted in the United States.

The negative influence of tax uncertainty on firm's investment is allegedly caused by the behavior of companies in holding money in uncertain conditions. This activity could be conducted by companies that face uncertain conditions would behave more cautiously in using their money (Hanlon et al., 2014). This caution is conducted as a form of speculation that the company would need it in the future. With such large capital, investment decisions are possible posts to be reduced and even postponed when the company faces an uncertain condition.

There are several reasons the company behaves withholding the cash. From an internal point of view, the detention of money is related to the uncertainty faced by the company over ambiguous and multi-faceted tax rules (Blouin et al., 2012). This uncertainty could directly affect the calculation of corporate taxes. This uncertainty could usually be mitigated by the company so that it is more controllable. From an external point of view, money containment is associated with uncertainty over all government policies that are changing and fluctuating (Niemann, 2011). This uncertainty indirectly leads companies to pay uncertain taxes. This uncertainty is usually difficult to prevent because it comes from factors outside the company's power. Both elements of this uncertainty together create a cost that is not small so that the company would react by holding cash.

b. The Effect of Stock Liquidity on Firm's Investment

From the hypothesis examining, the stock liquidity is negatively associated with the firm's investment. The result is in line with a study conducted by Fang et al. (2014). Fang et al. (2014) stated that firms with high stock liquidity tend to have more frequent ownership changes that may threaten long-term investment decisions. However, the results are different from those of Becker-Blease and Paul (2006) which suggested that stock liquidity has a positive effect on the firm's investment.

Meanwhile, Munoz (2013) proved that stock liquidity is positively associated with the firm's investment. This study suggests that high trading volume has implications with investor supervision to the management to have a better performance.

In Indonesia, research on stock liquidity and firm's investment has been investigated by Malinda and Dalimunthe (2013) using non-financial firms listed on the Indonesia Stock Exchange (IDX). With a period of one year, Malinda and Dalimunthe (2013) found that stock liquidity does not affect corporate investment. This study may be due to conducted from 2014 up to 2016 which the stock market in Indonesia is still not developed as it is today. Also, a study conducted by Malinda and Dalimunthe (2013) used one year so it may be less able to capture all the phenomenon of liquidity that occurred. That study suggests that further research using the study period of more than one year to reveal the phenomenon of activity that occurs in the capital market more comprehensively. Malinda and Dalimunthe (2013) also suggested using independent variables of more than one to provide better results. This research has been fulfilled by Malinda and Dalimunthe (2013) and proves that the stock liquidity is negatively associated with firm's investment.

The result is allegedly caused by a conservative attitude of the management of investment decisions to be established. This conservative attitude occurs because of changes in external conditions that come from stock liquidity. Liquid stocks indicate a more frequent transfer of ownership (Fang et al., 2014). The more frequent ownership movement is synonymous with the frequent change of investor's desire for both short-term and long-term corporate goals. Also, the frequent transfer of ownership is seen as a bad condition for the company. The policy may change quickly at the request of the investor. To that end, management would act more carefully and tend to wait for signals provided by investors. As a result, the firm's investment which is the long-term goal of the company would be executed longer.

Also, the result of this study is allegedly caused by investor preferences regarding company performance. High stock liquidity means that investors want good performance in the short term (Fang et al., 2014). It is understood by management as a signal to deliver good performance in the short term. However, such signals cause management to be too focused on short-term performance and often disobey long-term performance. Regarding funding, management would also allocate more funds to short-term goals than the long-term. As a result, long-term investments are not considered by management.

c.The Effect of Earnings Management on Firm's Investment

From the hypothesis examining, earnings management is not associated with firm's investment. The result differs from the study conducted by McNichols and Stubben (2008), Lenard and Yu (2012), Shen et al. (2015), and Julio and Yook (2016). Using companies in the United States, McNichols and Stubben (2008) found that earnings management has a positive effect on the firm's investment. The profit manipulation done by the company is identical to the company's tendency to increase its investment volume. With this, Lenard and Yu (2012) found that companies that are more vigorous to earnings management would take on investment opportunities with higher capacity that implicate in overinvestment. In China, Shen et al. (2015) found that earnings manipulation led companies to prefer risky and inefficient investments.

In Indonesia, research related to earnings management and the firm's investment has been investigated by Baskoro and Wardhani (2014). By using manufacturing companies between 2007 and 2010, they found that earnings management had a positive effect on a firm's investment. The difference in the result of this study with research conducted by Baskoro and Wardhani (2014) is caused by a different selection of earnings management proxies. In this study used the proxy of current discretionary accrual, while Baskoro and Wardhani (2014) using the discretionary accrual.

Relevant to that, the calculation of earnings management through current activity is usually reflected in current assets items. Current posts are typically chosen by companies to improve investment performance because the post is relatively easy to make adjustments (Jaggi et al., 2009).However, in practice, earnings management with the current activity does not affect the firm's investment. This is alleged because there is earnings management on other activities undertaken by management to determine investment decisions. By looking at the significant effect of total accrual earnings management and the firm's investment, it is possible for the companies to prefer earnings management from noncurrent activities rather than current activities to support its investment activity.

It is very reasonable because in the noncurrent assets group there is a fixed asset post directly related to investment activities. Manipulation could be conducted by increasing the number of purchases of capital goods and minimizing the sale of unused assets. Also, the ineffectiveness of earnings management to the firm's investment is suspected because earnings management is not used as a basis by management in determining investment decisions. Earnings management is not considered a viable option when companies need immediate and large amounts of funds for investment. Management considers that there are financing sources which make more sense than conducting earnings management that in general the impact could not be detected directly. One of the funding chosen by management to support its investment activity is real funding which is obtained by collecting funds through creditors and investors directly. This activity leads to meet the needs of funds quickly and surely on the needs of the firm's investment in large numbers.

Conclusion

Tax uncertainty faced by the company negatively affect the firm's investment. This result indicates that nonfinancial firms listed on IDX tend to have lower levels of investment when facing high tax uncertainties. High uncertainty is closely related to the behavior of companies in holding cash, causing the company to reduce its investment activities. It also revealed that a more certain tax climate would encourage the private sector to increase its investment.

Furthermore, stock liquidity has a significant negative effect on the firm's investment. This result indicates that nonfinancial firms listed on IDX tend to have low levels of investment when the stock market is in a liquid state. High stock liquidity is associated with the frequent ownership of moving companies. The high level of ownership transfer causes frequent changes in investor desire related to the company's objectives, especially related to investment. Management would tend to wait for certainty from investors so that investment activity tends to be longer to be decided. Also, high stock liquidity would spur management to provide good financial performance in the short term and tends to ignore the long-term goals of the company, especially related to investment decisions.

Meanwhile, earnings management does not affect the firm's investment. The effect of earnings management on the firm's investment is allegedly caused by the company preferring earnings management from noncurrent activities to support its investment activities. The insignificant effect of earnings management on the firm's investment is also suspected because there is a more sensible source of financing through real financing, rather than earnings management. Real financing is assessed to have a good degree of certainty and requires a relatively short time to meet the needs of funds for investment purposes. By knowing several factors that affect the firm's investment, it is expected that the company could make the right decision so that a firm's investment would always increase.

Increased firm's investment is undoubtedly a good thing for the company. Increased firm's investment is believed to have a major impact on the company. On the internal side, an increase in the firm's investment would make the company grow in a positive direction. Company's assets would increase so they have more resources to generate income. The income of the company would increase dramatically. The company would be judged to have a stable level of health.

On the external side, the increase in firm's investment leads the company considered to have a good performance, both by investors and creditors. The company would be easier to refinance for the next stage of development. Ease of financing provides an opportunity for the company to continue to grow. It certainly would have implications for the increase in a firm's value. Increased value of stocks makes stock prices would be boosted. Then, shareholders would get some benefits from it. Relating to the theory agency, increasing the firm's investment is evidence that the agent has worked by the wishes of the principal.

Limitations of this study are the use of several research variables that have a lot of restriction as it is known that the variable tax uncertainty has some restriction like issuing negative pretax income and cash tax paid positive. Meanwhile, stock liquidity variables require the issuing of companies that conduct stock split during the research period. The restriction significantly reduces the study sample. It has recorded only as many as 75 companies that meet the criteria to be sampled research. This amount is sufficiently small to describe the state of the earnings management variable that generally has no restriction on sample selection. For future research, it is desirable to avoid research with a combination of variables that have many restrictions in the sample determination. Examining the variables separately are needed, especially the earnings management variables that generally have no restriction, to obtain more comprehensive results.

Also, future studies are recommended to extend the time interval to capture the phenomenon related to the effect of tax uncertainty, stock market liquidity, and earnings management on a firm's investment. This research uses non-financial company data with a three-year time interval, from 2014 to 2016. Three-year time interval maybe could not describe all variables. Longer time intervals are intended to produce more accurate research because it uses more data to minimize fluctuations due to external factors. Also, this study excludes the companies using USD currency from the research sample. The future research is suggested to accommodate companies that do bookkeeping with currencies other than the rupiah so that the results of study could cover all companies listed in the Indonesia Stock Exchange.

The facts suggest that the ease of doing business in Indonesia is increasingly showing positive progress. However, if we look at rank globally, Indonesia is only at the top level 91 in 2016. Improvements to regulations and mechanisms should be the main focus of the government, especially the regulatory bodies of capital investment, to make it easier for private parties to invest. Therefore it is necessary to simplify and improve the ease of various aspects of ease doing business. Based on the results of this study, high tax uncertainty could disrupt company decisions in investments that have implications for the economy of a country. Despite positive developments, there are still many issues facing tax authorities to create a definite tax climate. Issues related to the decrease of Corporate Income Tax should be settled immediately so that the private sector does not speculate by delaying its investment activity until the tax rate decreases. Therefore, this tariff reduction must be determined appropriately in order not to impact on future tax revenues. Furthermore, the openness of banking data for taxes or Automatic Exchange of Information (AEoI) that has been rolled out also affect the current tax conditions in Indonesia.

With the issuance of Government Regulation of Law No. 1 of 2017 concerning Access to Financial Information for Tax Interest, the tax authorities could access customers' data directly without going through Bank Indonesia. The Business and banking circles are worried about the security of data residing on the tax authorities. Tax authorities are expected to be trustworthy in carrying out such trust.

The last but not least, the results of research related to stock liquidity and firm's investment imply that company management still tends to consider the desire of investors in deciding company strategy. Investors who play in the stock market is typical of seasonal investors who only buy shares due to price increases for a moment. When the price falls, the investor is reluctant to relinquish his stock. Investors of this type also rarely consider the long-term prospects of the company as they usually have intentions based solely on short-term profits.

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