

Investors' Responses on SOE's Liquidity Risk Disclosures: Case of Indonesia

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ABSTRACT

This study aims to examine the value relevance of liquidity risk disclosure of Indonesia listed state-owned enterprises after Indonesia Statement of Financial Accounting Standard, Disclosure of Financial Instruments (Revised in 2010 and 2014). This study uses 20 Indonesia listed state-owned enterprises from 2012 to 2017 or 115 firm years as final samples. Using panel data analysis, this study shows that liquidity risk disclosure is relevant information for investors in the Indonesia stock exchange. Investors respond differently on liquidity risk disclosure before and after the announcement windows period of financial reports. The main contribution of this study is examining the value relevance of liquidity risk disclosures of Indonesia listed state-owned enterprises.

Keywords: Risk disclosure; liquidity risk; value relevance; investors' responses; state-owned enterprises.

INTRODUCTION

The objective of researching value relevance is to provide empirical evidence that the accounting information system can be a useful signal for investors. This signal indicates that accounting information is used by investors in their investment decision-making process. The usefulness of accounting information is reflected in stock prices in the capital market. Previous studies regarding this issue document a significant positive relation between accounting information and abnormal stock return. The stronger the relation, the more informative is the information [19]. When we examine accounting information as the product of regulation, the result of the examination conveys the signal regarding the benefits of the regulation for interested parties. Concerning the regulation of accounting information, studies on value relevance are often associated with the application of the latest accounting standards.

After the decision to fully adopt the International Financial Reporting Standards (IFRS), the Indonesian Institute of Accountants intensively follows the changes of IFRS, including the standard of financial instruments disclosure. This study addresses the change of financial instruments disclosure that is regulated by Statement of Financial Accounting Standards 60 (SFAS 60) in 2014. The standard was adopted from IFRS 7: Financial Instruments Disclosures. There are

several fundamental changes regarding the regulation of financial instrument disclosures, including the disclosure of liquidity risk that requires companies to disclose the maturity analysis of financial liabilities (quantitative aspects) and the risk management policies to manage liquidity risk (qualitative). Those disclosures are expected to provide a signal for investors regarding the risk of exposure from financial liabilities owned by the company so that investors can make investment decisions appropriately.

There is increasing in the quantity of risk disclosure after the implementation of IFRS in Finnish. The impact of the standard on the quality of risk disclosure is more pronounced among less profitable firms. Larger firms and firms reporting under the requirements of the SEC disclose more quantitative risk information, but the quality of risk disclosure does not improve in the subsequent years. The findings have implications for standard-setters to evaluate different strategies to increase the quality of risk disclosure in annual reports [24].

There are two classifications of risk-reporting studies: the studies that examine the incentives for and/or informativeness of risk reporting [12]. Previous studies find that there are several incentives for risk reporting, for instance decreasing investor's firm's risk information, hence decreasing firms' cost of capital [6]. Other ones are, such as, strengthen firm's corporate governance, the economic benefit of risk factors during a company's

initial public offering (IPO), and the potential impact of risk disclosures on banks' credit ratings [9], [10], [27]. Corporate risk levels and audit fees also may become the incentive of risk disclosures in the annual report narratives of companies [11], [34].

Furthermore, the empirical evidence regarding the informativeness of risk reporting shows that risk disclosure is useful information for investors in a capital market. For instance, [4] examined the perceptions of Item 1A risk factor disclosure effectiveness of SEC's Disclosure Effectiveness Initiative between accounting regulators and academics. They find that risk factor disclosures in 10-K filings are increasing over time even after the financial crisis period. The unexpected risk factor disclosures are significantly and positively associated with absolute cumulative abnormal returns around 10-K filing dates in the preceding period. These results suggest that risk factor disclosures are informative to the equity market investors during this period. They also find that changes in risk factor disclosures become less informative in the post-crisis period.

Previous studies also examined the price effects of risk disclosure that decrease the firm's cost of capital [29], [31]. In addition, the market response to risk disclosure is small when the expected level of risk is high. This risk disclosure, especially business risk disclosure may have a causal effect on firm risk [15], [20]. The informativeness of risk disclosure can be also associated with stock return volatility, firm's value, and the ability of risk disclosure to predict future earnings. The positive association between risk disclosures and future earnings implies the usefulness of risk disclosure for investors. [23], [25], [32].

Previous studies regarding the investors' response that examined investors' response to financial instruments disclosure find that accounting information is relevant for investors in the capital market and able to improve the market's ability to anticipate future earnings. Evidence from Jordan, financial instruments disclosure was value relevant after the implementation of IFRS 7 [35]. A similar study in Indonesia finds that the value relevance has increased after IFRS adoption. In developing countries which has low investor protection and weak law enforcement, the mandatory IFRS adoption can be a tool to increase the confidence of investors and other users on financial reporting [18]. These results suggest that compliance with IFRS mandatory disclosure requirements does produce relevant financial statements [18]. These studies examined the relevance of the value relevance of IFRS adoption in privately-held listed companies.

This study examines the relevance of liquidity risk disclosure value of liquidity risk that is regulated by SFAS 60 in the context of state-owned enterprises (SOEs) in Indonesia. Previous studies that examined risk disclosure at SOEs have conducted by examining the potential impact of the composition of the boards of directors and other company-specific features on risk disclosure levels and the impact of textual risk disclosure on the amount of firm-specific information incorporated into share prices [1], [30]. Their results suggest that risk disclosure is useful to investors, so it resolves the debate over whether qualitative risk disclosures in annual reports convey useful information to investors.

This study addresses the SOEs liquidity issues in Indonesia, since SOEs' financial resources may be affected by government political policies in supporting government infrastructure development. State-owned enterprises (SOEs) contribute approximately 10% of the world's GDP and the numbers are growing more prevalent in the world economy, specifically in developing countries [26].

Therefore, the contribution and purpose of this study are to examine the value relevance of liquidity risk disclosure of publicly-listed SOEs in Indonesia that can be beneficial for evaluating the implementation of Statement of Financial Accounting Standards 60 (SFAS 60) regarding the use of liquidity risk disclosure of SOE liquidity for investors in the capital market of Indonesia.

Hypothesis Development

Risk Disclosure in the Perspective of Signaling Theory

The signaling theory explains how individuals or groups communicate symbolically towards their actions or values that benefit both parties (signalers and observers) by demonstrating credibly the attributes contained in the signals. Signals are several characteristics that are attached individually to the signalers and can be manipulated by themselves. The notion of quality may refer to the underlying, unobservable ability of the signaler to fulfill the needs of an outsider as an observer of the signal. Signal plays an important role to reduce asymmetry information. The quality of information as important as the intention of information itself. Both make signal resolve information asymmetries among parties. High-quality signals influence outside observers' (investors) perceptions of firm quality [7].

In the context of voluntary disclosure, the disclosure provides information signals to investors regarding the present value of the company. There are six motivations for management to prepare voluntary disclosures, namely: (i) capital market

transactions; (ii) corporate control contests; (iii) stock compensation; (iv) litigation; (v) proprietary costs; and (vi) talent signaling management [14]. This study uses two of those six motivations, namely the capital market transaction hypothesis and management talent signaling hypothesis.

Based on the capital market transaction hypothesis, investor perceptions toward companies are important for managers, especially when a company issues debt, shares, or acquires other companies. Managers who have superior information about the company's prospects in the future are motivated to disclose information voluntarily to reduce information asymmetry between managers and investors. If managers do not disclose relevant information about the company's prospects in the future, then the investors may expect a premium to cover the information risk due to asymmetry problems. For this reason, managers have an incentive to provide voluntary disclosure to reduce information asymmetry, then reduce the cost of equity when managers make transactions in the capital market.

Similar incentives occur when managers provide voluntary disclosures regarding company risk. The company risk disclosure aims to reduce information asymmetry between managers and investors regarding the risks managed by the company so that investors can anticipate the risks and prospects of the company in making investment decisions. Because investors have adequate information about the risk managed by the manager, the investor should not demand a premium for the information risk, thereby reducing the company's cost of equity.

According to the management talent signaling hypothesis, the company's market value is a function of investors' perceptions of managers' ability to anticipate and respond to changes in the future economic environment. Firms that experiencing an adverse change in earnings will release more disclosure to signals about future earnings [14], [33]. This provides an incentive for managers to provide voluntary disclosures to shape investors' perceptions about their ability to anticipate the changes in the future, thereby increasing the value of a company. In accordance with the argumentation of the management talent signaling hypothesis, risk disclosure provides a signal to the market regarding the company's ability to face the challenge of future risk of changes, thereby increasing the value of the company.

Value Relevance of Liquidity Risk Disclosure

This study only evaluates accounting information by providing empirical evidence as a signal from an information system that is responded to by investors in the capital market [19]. Relevant

information assumes that stock prices reflect the consensus beliefs of investors as firstly documented by Ball & Brown, hence this evaluation does not require assumptions of market efficiency [2], [3].

There are three competing arguments regarding how risk disclosures affect users' risk perceptions [21]. Firstly, the null argument which states that risk disclosures are boilerplate. Secondly, the divergence argument states that risk disclosures reveal unknown risk factors and contingencies, thereby increasing users' risk perceptions. Thirdly, the convergence argument states that risk disclosures resolve a company's known risk factors and contingencies, thereby reducing users' risk perceptions. Generally, the findings of previous studies support the divergence argument, confirming the value relevance assumption that risk disclosure is informative. Furthermore, the informativeness of risk disclosure is conditional on the risk disclosure area i.e., credit, liquidity, market, or interest rate risk, especially studies that are using non-US-based companies as their sample [12], [21].

This study adds empirical evidence to the third argument, namely the convergence argument to confirming that risk disclosures are informative. Therefore, liquidity risk disclosure would be a relevant information for investors if it is useful for the investment decisions making process, hence it is reflected in the movement of company stock prices and conditional on a specific area of risk. The conditional specific area of this study is the area of liquidity risk at SOEs [3], [12], [17]. A previous study documented that disclosure of annual reports that have positive intonation had been responded to positively by investors. It was reflected in a significant positive relationship between the positiveness variable and the cumulative abnormal returns [36]. In this study, risk disclosure is measured by analyzing the number of sentences that disclose the liquidity risk faced by the company and the risk mitigations were undertaken by the company.

A higher number of sentences of liquidity risk disclosure may provide a signal of "good news" for investors. This information is used by investors to assess the liquidity risk and the ability of managers to manage liquidity risks that may have an impact on the company's performance in the future. Furthermore, investors may use their assessments to make investment decisions. This is in line with the management talent signaling hypothesis. The disclosure of liquidity risk signals the market that the company can face the challenges of risk changes in the future. Hence, it conveys that the aims of the manager's actions in managing risk to increase the company's value. This happens because risk disclosure is generally

influenced by the level of investor risk-aversion and the impacts of the risk uncertainty on the future of a company [28].

A "good news" information can reduce market expectations regarding the volatility of long-term returns. Sometimes, a higher number of sentences of liquidity risk disclosure can be a signal of "bad news" for investors. But, a higher number of sentences of liquidity risk disclosure can be a signal of "good news" as well because this information may increase market expectations regarding the immediate returns' volatility. This is in line with the capital market transaction hypothesis which states that companies have an incentive to disclose relevant information about the company's prospects to reduce information asymmetry between the company and investors or among investors [14]. In the context of mandatory risk disclosure, disclosure of liquidity risk increases market expectations of immediate return volatility due to the use of financial instruments and the company's potential current contingencies. Hence, the level of liquidity risk disclosure can be responded to positively or negatively by investors, which would be reflected in the company's absolute cumulative abnormal returns.

Based on those arguments, we propose the following hypothesis:

H1: Liquidity risk disclosure affects the company's absolute cumulative abnormal return.

This study also concerns the difficulty of disclosure quality, especially liquidity risk disclosure quality. Computational linguistics, as part of natural language processing techniques, may indirectly represent disclosure quality. There were variations of empirical evidence on the impact of information on stock prices. The announcement of information may reduce information asymmetry around short windows or over annual windows. It depends on the investor's view about the meaning of idiosyncratic stock returns [5]. We argue that the investor's view about liquidity risk disclosure may differ among variations of event-windows study. Investors might react differently before and after the announcement date of financial reporting. To test this argument, this study examined the influence of liquidity risk disclosure on a company's absolute cumulative abnormal return by using four event windows, namely the event window at (0,0), (-5,0), (0,+5), and (-5,+5). Thus, based on this argument, we propose the following hypothesis:

H2: There are different effects of liquidity risk disclosure on a company's absolute cumulative abnormal return over different time of event windows.

RESEARCH METHOD

The Cumulative Abnormal Returns

Equation 1 below is used to test those two research hypotheses. This model was modified from previous studies that had tested market reactions on disclosure narratives in annual reports [36].

$$|CAR_{(t1,t2)}|_{i,t} = \varphi_0 + \varphi_1 LIQ_RISK_{i,t} + \varphi_2 DEARNINGS_{i,t} + \varphi_3 SIZE_{i,t} + \varphi_4 MTB_{i,t} + \varphi_5 LEV_{i,t} + \varepsilon_{i,t} \quad (1)$$

The dependent variable is absolute cumulative abnormal return during the event period ($|CAR_{(t1,t2)}|$). Abnormal return is computed as a difference between the actual return and expected returns of firm i , as in equation 2 below:

$$AR_{i,t} = R_{i,t} - \hat{R}_{i,t} \quad (2)$$

$R_{i,t}$ was *return* of firm i at day t , while $\hat{R}_{i,t}$ was obtained after estimating the firm's i daily return ($R_{i,t}$) on 12 months period of daily market *return* ($R_{M,t}$) which was ended on the last day of the third month after the current period-ends as shown in equation 3 below. The estimation period range follows a previous study [13].

$$R_{i,t} = \alpha_i + \beta_i R_{M,t} + \varepsilon_{i,t} \quad (3)$$

The Liquidity Risk Disclosure

The Liquidity Risk Disclosure (LIQ_RISK) is defined as the company's efforts to disclose the risk of failing to meet company obligations timely. This variable is measured by a dummy variable, which is given a value of 1 if the number of sentences that disclose liquidity risk and risk mitigations that are undertaken by a company is above the average value of the number of sentences of the research sample, and given a value of 0 if otherwise. We do not reject hypothesis 1 if The Liquidity Risk Disclosure (LIQ_RISK) variable is significant. This means liquidity risk disclosure can be a signal of "good-news" or "bad-news" for investors. Hence, this information is relevant for investors to make investment decisions. Furthermore, to test Hypotheses 2, we estimate the model in Equation 1 by using four event windows, namely: (0,0), (-5,0), (0,+5), and (-5,+5).

In addition, we use four control variables that may influence absolute cumulative abnormal return, namely: earnings' changes ($DEARNINGS$), firm's size ($SIZE$), market-to-book (MTB), and leverage (LEV). $DEARNINGS$ is measured by the changes of income before extraordinary items from

period t minus $t-1$ and it is deflated by the market value of equity at the end of the third month of period $t-1$. Positive earnings changes are good news for investors, so they will respond positively [36]. Therefore, the *DEARNINGS* is expected to have a positive effect on the company's absolute cumulative abnormal return.

SIZE is measured by the natural logarithm of total company assets. A larger company is perceived to be more stable and liquid, so a larger company is positively responded to by investors compared to a smaller company. But on the other hand, a larger company is generally a diversified and multinational company. The availability of information about this kind of company is inadequate, hence it will be negatively responded to by investors [36]. Therefore, it is difficult to determine the expected response of investors on this variable.

MTB reflects the company's growth opportunity. This variable is measured by the firm's ratio of market to the book of equity. A higher market-to-book ratio reflects higher expectations of a company's profit growth, hence it will be positively responded to by investors. However, on the other hand, a company with higher growth tends to be riskier, hence it will be negatively responded to by investors [22]. Therefore, it is difficult to determine the expected response of investors on this variable. In addition, *LEV* is measured by the ratio of long-term debt to total equity. A higher value of a company's leverage, higher risk, and volatility of a company, hence it will be negatively responded by investors.

RESULTS AND DISCUSSION

The Data and Sample

Table 1 shows 115 observations as the final sample with the observation period during 2012-2017. The research period began in 2012 by considering the effective date for the implementation of Indonesian SFAS 60: the disclosure of financial instruments, including liquidity risk on January 1, 2012.

Table 1. The Sampling Selection Process

The Sample Criteria	Numbers (Firm Years)
The numbers of publicly-listed of SOE on the Indonesia Stock Exchange during the period of 2012-2017	117
The numbers of incomplete data of observation (2 different companies) during the period of 2012-2017	(2)
The numbers of the final sample	115

The Descriptive Statistics and Correlation among Variables

Table 2 presents the descriptive statistics of variables of the research model. The value of the mean of absolute cumulative abnormal returns ($|CAR|$) at an event window of (0,0) shows that investors obtain an absolute return for 1.4% of the SOE's stock price on the announcement's date of financial statements. In addition, 21.74% of SOEs disclosed higher liquidity risks. The mean value of earnings growth is negative 31.57%, while the mean value of SOE's leverage is 24.89%. In general, there is decreasing in SOE's opportunity and their leverage is moderate.

Table 2. The Descriptive Statistics of Variables

Variable	Obs.	Mean	Std. Dev.	Min	Max
$ CAR _{(0,0)}$	115	0.0141	0.0127	0.0000	0.0572
$ CAR _{(-5,+1)}$	115	0.0870	0.0425	0.0126	0.2295
$ CAR _{(+1,+5)}$	115	0.0979	0.0595	0.0147	0.2900
$ CAR _{(-5,+5)}$	115	0.1724	0.0848	0.0273	0.5732
LIQRISK	115	0.2173	0.4142	0.0000	1.0000
GEARNINGS	115	-0.3157	3.9263	-27.984	11.1222
SIZE	115	24.3637	1.7298	20.8729	27.7470
MTB	115	0.0609	0.1540	0.0001	0.7543
LEV	115	0.2489	0.1692	0.0000	0.6292

Dependent variable: Absolute Cumulative Abnormal Returns ($|CAR|$) with event window (0,0), (-5,0), (0,+5), dan (-5,+5).

Independent variable: Liquidity Risk Disclosure ($LIQRISK$), measured by a dummy variable, which is given a value of 1 if the number of sentences that disclose liquidity risk and risk mitigations that are undertaken by a company is above the average value of the number of sentences of the research sample, and given a value of 0 if otherwise.

Control variables: (i) earnings' changes (*DEARNINGS*), measured by the changes of income before extraordinary items from period t minus $t-1$ and it is deflated by the market value of equity on the end of third month of period $t-1$; (ii) firm's size (*SIZE*), measured by the natural logarithm of total company assets; (iii) market-to-book (*MTB*), measured by firm's ratio of market to book of equity; (iv) leverage (*LEV*), measured by the ratio of long-term debt to total equity.

Table 3 presents the correlation among research variables. The liquidity risk disclosure variable (*LIQRISK*) has a significant negative correlation with the absolute cumulative abnormal return during 5 days after the date of the announcement of financial statements ($|CAR|_{(+1,+5)}$). In addition, the liquidity risk disclosure variable (*LIQRISK*) positively correlated, but not significant with the leverage variable. This finding provides an initial indicator regarding the possibility of disclosure of liquidity risk might be responded negatively by investors after the announcement of the financial statements. This could be caused by the increase of liquidity risk exposure that arises from corporate leverage.

Table 3. The Correlation among Variable

	$ CAR _{(0,0)}$	$ CAR _{(-5,-1)}$	$ CAR _{(+1,+5)}$	$ CAR _{(-5,+5)}$	LIQRISK	GEARNINGS	SIZE	MTB
$ CAR _{(-5,-1)}$	0.3483*	1.0000						
$ CAR _{(+1,+5)}$	0.3039*	0.3269*	1.0000					
$ CAR _{(-5,+5)}$	0.2168*	0.6987*	0.8761*	1.0000				
LIQRISK	-0.1543	0.0247	-0.2361*	-0.1398	1.0000			
GEARNINGS	0.0788	0.0196	0.0798	0.0597	0.0425	1.0000		
SIZE	-0.0678	-0.2067*	-0.2925*	-0.3222*	0.5590*	0.0271	1.0000	
MTB	-0.0979	0.0552	-0.0095	0.0527	0.1572	0.3261*	0.2228*	1.0000
LEV	-0.0884	-0.1345	-0.1199	-0.1477	0.1388	-0.4290*	0.4225*	0.0097

Dependent variable: Absolute Cumulative Abnormal Returns ($|CAR|$) with event window (0,0), (-5,0), (0,+5), and (-5,+5). **Independent variable:** Liquidity Risk Disclosure ($LIQRISK$), measured by a dummy variable, which is given a value of 1 if the number of sentences that disclose liquidity risk and risk mitigations that are undertaken by a company is above the average value of the number of sentences of the research sample, and given a value of 0 if otherwise. **Control variables:** (i) earnings' changes ($GEARNINGS$), measured by the changes of income before extraordinary items from period t minus $t-1$ and it is deflated by the market value of equity on the end of third month of period $t-1$; (ii) firm's size ($SIZE$), measured by the natural logarithm of total company assets; (iii) market-to-book (MTB), measured by firm's ratio of market to book of equity; (iv) leverage (LEV), measured by the ratio of long-term debt to total equity.

*) ***) significant at alpha 10%, 5%, or 1%

Investors' Responses on SOE's Liquidity Risk Disclosure

Figure 1 illustrates the movement of average absolute abnormal returns during the event windows 5 days before and 5 days after the date of the announcement of the annual report, which includes the disclosure of liquidity risk of SOEs.

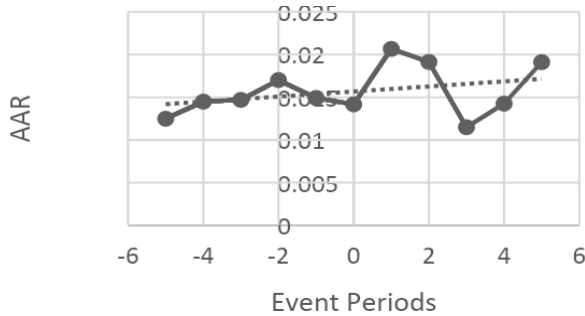
**Figure 1.** The Movement of Average Absolute Abnormal Returns

Figure 1 shows that there is a movement of average absolute abnormal return (AAR) from 5 days before and 5 days after the announcement date of the annual report. The movement of average AAR during the event window of H-5 to H0 is relatively flat compared to the event window of H0 to H+5. Therefore, this study uses four different event windows, namely: (0,0), (-5,-1), (1,+5), and (-5,+5) to analyze investors' responses to SOEs' liquidity risk disclosure.

Table 4 presents the four estimation results of the research model which is estimated using the robust standard unbalanced panel approach to overcome the heteroscedasticity problem [16]. Table 4 shows that the explanation power of the research model lies between of 0.13% -8.48%. The result in the column (1) of table 4 is used to test H1,

while the results in the column (2)-(4) of table 4 are used to test H2. In column (1) of table 4, the variable of liquidity risk disclosure ($LIQRISK$) has a significant negative effect on absolute cumulative abnormal returns ($|CAR|$) on the announcement date of annual reports (financial statements). Therefore, H1 could not be rejected.

Meanwhile, the variable of liquidity risk disclosure ($LIQRISK$) in the column (2)-(4) have different effects on absolute cumulative abnormal returns ($|CAR|$). In column (2) of table 4, $LIQRISK$ has a significant positive effect on CAR 5 days before the announcement date of financial statements. But, in column (3) of table 4, $LIQRISK$ has a negative effect on CAR during 5 days after the announcement date of financial reporting. Unfortunately, in column (4) of table 4, $LIQRISK$ does not have a significant effect during 5 days before and 5 days after the announcement date of financial statements. Therefore, H2 could be rejected.

The results of this study confirm that liquidity risk disclosure is relevant information for investors. Specifically, liquidity risk disclosure is relevant for investors 5 days before the announcement, on the day of the announcement, and 5 days after the announcement of the financial report. It is useful for the investment decisions making process, which is reflected in the SOEs' stock price [3], [17]. Prior to the announcement date, investors are still responding positively to information regarding SOEs' liquidity risks. The information about liquidity risk that they are obtained conveys a signal of "good news" for investors. This possibly because investors still perceive that SOEs are able to face the risk of challenges of future changes, hence SOEs' actions in managing liquidity risk are favorable and may increase the value of SOEs.

The risk disclosure can be influenced by the level of risk-aversion of investors and the impact of uncertainty on the future of a company. A "good news" information can reduce market expectations regarding the volatility of long-term returns [28]. However, investors' responses change from the date of the financial statements' announcement and 5 days after the announcement date. Their reactions regarding SOEs' liquidity risk is turning become a negative response. The SOEs' liquidity risk conveys a signal of "bad news" for investors, thereby increasing market expectations of returns' volatility immediately. These results are not in line with the capital market transactions hypothesis [14].

The results also confirm that SOEs' liquidity risk may increase market expectations of returns' volatility immediately due to the use of financial instruments in the current period. There are two explanations possibilities for these findings. Firstly, investors are not sure regarding the mitigation efforts that are already undertaken by SOEs to overcome the liquidity risk after assessing SOEs liquidity risks that are disclosed in the financial statements, Secondly, the results of this study also show that leverage does not have a significant effect on CAR variable. It might be due to the average value of leverage is quite moderate (24.89%), hence their response is neutral.

However, this average value of leverage is approaching the psychological limit of leverage ratio (30%), but SOEs' liquidity risk disclosure may not adequate in explaining SOEs' mitigation regarding liquidity risk that might be exposed by their leverage. Hence, Investors react negatively to SOEs' liquidity risk disclosure after the announcement of financial statements.

Of the four control variables, only earnings growth (GEARINGS) and SOEs' size (SIZE) are relevant information for investors. Investors react positively to earnings growth since the announcement of the financial statements and continue 5 days after the announcement date. This finding shows that investors appreciate the current period of SOEs' growth. The size of SOEs is consistent-negatively responded to by investors 5 days before the announcement date, 5 days after the announcement date, and 5 days before and 5 days after the announcement date. However, investors do not react to SIZE on the day of announcement data. These negative responses may convey the message that investors perceive a larger SOE as diversified and complex, hence it is more difficult to assess the information about SOEs' operation inadequately [36].

CONCLUSION

This study aims to examine the value relevance of accounting information for investors in the capital market, particularly regarding liquidity risk disclosure after the implementation of Indonesian SFAS 60. The results show that the liquidity risk disclosure is relevant information for investors to be used in making investment decisions in the capital market.

There are differences in investors' response to liquidity risk disclosure. Investors react negatively to the SOE's liquidity risk disclosure on the day of the announcement date of financial statements and it continues 5 days after the announcement date. On the contrary, Investors react positively to the SOE's liquidity risk disclosure 5 days before the announcement date of financial statements. The

Table 4. The Estimation Results of Research Model

$[CAR_{(t1,t2)}]_{i,t} = \varphi_0 + \varphi_1 LIQRISK_{i,t} + \varphi_2 GEARNINGS_{i,t} + \varphi_3 SIZE_{i,t} + \varphi_4 MTB_{i,t} + \varphi_5 LEV_{i,t} + \varepsilon_{i,t}$													
		ABSCAR (0,0)			ABSCAR (-5,-1)			ABSCAR (1,5)			ABSCAR (-5,5)		
Independent Variables	Expected Sign	Coef.	t	Prob.	Coef.	t	Prob.	Coef.	t	Prob.	Coef.	t	Prob.
_cons	+/-	0.0007	0.04	0.965	0.2788	3.86	0.000***	0.3071	3.52	0.001***	0.6247	3.99	0.000***
LIQRISK	+/-	-0.0056	-1.70	0.093*	0.0200	1.82	0.072*	-0.0161	-1.67	0.097*	0.0104	0.62	0.176
GEARNINGS	+	0.0002	2.06	0.021**	0.0000	0.07	0.476	0.0012	1.74	0.042**	0.0011	0.93	0.353
SIZE	+/-	0.0006	0.96	0.164	-0.0080	-2.58	0.011**	-0.0085	-2.31	0.023**	-0.0188	-2.86	0.005***
MTB	+/-	-0.0076	-1.38	0.170	0.0269	0.98	0.330	0.0233	0.79	0.434	0.0708	1.35	0.181
LEV	-	-0.0069	-1.07	0.144	-0.0059	-0.21	0.418	0.0036	0.11	0.456	0.0068	0.14	0.443
F Prob.				0.0472			0.0702			0.0045			0.0390
R-squared				0.0451			0.0813			0.1038			0.1250
Adj. R-squared				0.0013			0.0391			0.0626			0.0848
Numbers of Observations				115			115			115			115

Dependent variable: Absolute Cumulative Abnormal Returns (|CAR|) with event window (0,0), (-5,0), (0,+5), and (-5,+5).

Independent variables: Liquidity Risk Disclosure ($LIQRISK$), measured by a dummy variable, which is given a value of 1 if the number of sentences that disclose liquidity risk and risk mitigations that are undertaken by a company is above the average value of the numbers of sentences of the research sample, and given a value of 0 if otherwise. **Control variables:** (i) earnings' changes ($GEARNINGS$), measured by the changes of income before extraordinary items from period t minus $t-1$ and it is deflated by the market value of equity on the end of third month of period $t-1$; (ii) firm's size ($SIZE$), measured by the natural logarithm of total company assets; (iii) market-to-book (MTB), measured by firm's ratio of market to book of equity; (iv) leverage (LEV), measured by the ratio of long-term debt to total equity.

*) **) ***) significant at alpha 10%, 5%, or 1%

changes in investors' response might be due to the changes in their perception regarding SOEs' liquidity risk after assess SOEs' liquidity risk in the financial statements.

This study has several implications. Firstly, SOEs are suggested to improve the quality of liquidity risk disclosures to provide adequate understanding, thereby reducing information asymmetry between SOEs and investors. To improve the quality of liquidity risk disclosure is by disclosing SOEs' liquidity risk mitigation and the impact of liquidity risk exposures to SOEs in the future more adequately. Secondly, investors should consider using SOEs' liquidity risk disclosure for their investment decisions.

This study has several limitations as well. Firstly, it did not examine the extent of the impact of liquidity risk disclosure in increasing the informativeness of SOEs' earnings; (ii) It also did not examine the possibility of differences in investor responses on liquidity risk disclosure before and after the implementation of SFAS 60. Therefore, further research may consider both limitations.

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