

INDEPENDENT AUDIT COMMITTEE, VOLUNTARY DISCLOSURE,  
INFORMATION ASYMMETRY AND VOLUME OF TRANSACTION:  
A MODELLING STUDY OF

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**ABSTRACT.** *This study developed a model of the variables independent audit committee, voluntary disclosure, information asymmetry and volume of transaction in order to investigate the direct and indirect effect among the built variables. Data were collected from annual reports of banking companies listed on IDX. The Hypotheses testing performed with a variance-based approach using Smart- PLS in the data processing. The results of this study confirmed that an increase of the number independent audit committee members can effectively perform their overseeing function over management in order to make a better voluntary disclosure, reduced information asymmetry and increased volume of transaction. The findings of this study become more special where this research emphasizes the importance of corporate information disclosure to the public. Voluntary disclosure can significantly mediate the effect of independent audit committees on a volume of transaction, moreover, a high voluntary disclosure has a direct significant effect in reducing the level of information asymmetry so that the information asymmetry can be a mediating variable for the effect of voluntary disclosure on a volume of transaction.*

**Keywords:** audit committee, disclosure, information asymmetry, volume of transaction

## INTRODUCTION

Indonesia's stock market showed an increasing number of issuers and single investors identification (SID), by the year of 2014 the recorded issuers were 510 companies that continue to rise, becoming 539 companies in 2016. There was also an increase of SID from 18,83 % in 2014 becoming 23,47 % in 2016. The increase in the number of issuers and SID should be followed by an increase in the volume of transaction. This should indicate that the investors are increasingly trusting the capital markets, as an alternative to investing with an expectation of achieving satisfactory returns in the future (Ady, et al., 2013).

On the other hand, there may be risks of losses faced by investors. To reduce the risk that might happen because of decreasing price, investors can refer to the volume of transaction in making investment decisions. A high volume of transaction is a reflection of high demand and can boost stock price increases (Chae, 2005). The fact that occurred in Indonesia that even though there was an increase in the number of new issuers and SID, but the volume of transaction is still considered low and the spread of stock price is

relatively large. This indicates that the market is still inefficient, where investors act irrationally in taking investment decisions, compared to other Asian countries such as Korea, Singapore, and some other countries (Mukhtaruddin et al., 2014; Purwanti & Kurniawan, 2013; Mensi, 2012). A study has shown that at the low of information asymmetry will significantly influence on to the increase of volume of the transaction (Alsahlawi & Ammer, 2017). An efficient market is reflected with the number of relevant and high quality of information submitted to the public so as to find a low information asymmetry (Ferguson, 2015). One of the regulatory efforts to reduce the level of information asymmetry in Indonesia is reflected in the circular letter of Indonesia Financial Services Authority No.32/SEOJK.04/2015 which requires going public companies to present a transparent financial report to users. The regulation is a form of management accountability to users.

The major cases, such as Enron, Tyco, Worldcom, Lippo Bank, Citibank, and other big cases indicate that it is important to have better oversight over corporate, including the implementation of corporate governance. The presence of independent audit committees can improve function to oversight of the financial reporting process and may increase voluntary disclosure (Samaha et al., 2015). Corporate governance can improve information disclosure and lead to greater transparency, the presence of independent audit committees and voluntary disclosure will able to reduce information asymmetry (Alves et al., 2015; Bhasin, 2016). A low scope of reporting can lead on high information asymmetry (Billet et al., 2016) by providing more information and doing more disclosure than required will give a good signal for investors and it can increase the liquidity and volume of the transaction (Schoenfeld, 2017).

Based on the above descriptions, this study becomes very important to identify the effect of the independent audit committee on voluntary disclosure and information asymmetry, the effect of voluntary disclosure on information asymmetry and volume of transaction, and the influence of information asymmetry on the volume of transaction. This study differs from previous studies in which the study is conducted with a variance-based approach to test the hypotheses, also the study to examine whether voluntary disclosure and information asymmetry partially and simultaneously can mediate the variables according to the model constructed.

## **LITERATURE REVIEW AND HYPOTHESES**

### **Independent Audit Committee on Voluntary Disclosure**

Overseeing over financial reporting process conducted by management will be more effective by the presence of an independent audit committee (Madi, et al., 2014; Kantudu & Samaila, 2015). It is because independent audit committees are neutral and they

are accountable to the board of commissioners (Setiany et al., 2017). Independent audit committees have more opportunities to control and reduce the opportunity of agents to retain information for their own benefit (Allegrini & Grecco, 2013), able to oversee the transparency of the financial statement process and reduce information asymmetry (Ferrero et al., 2015). Therefore the existence of an independent audit committee will increase the volume and quality of information disclosed to the public (Latridis, 2013).

The previous study found out that there was no effect of an independent audit committee on the level of voluntary disclosure (Othman, et al., 2014; Ramadhan, 2014). However, research conducted by Setiany et al., (2017) shown there was a significant effect of independent audit committee members on voluntary disclosure, which is in line with the findings that stated there was the significant influence of independent audit committee members on information transparency and voluntary disclosure (Felo et al., 2009).

### **Independent Audit Committee on Information Asymmetry**

The presence of audit committee in the organization will improve monitoring of financial reporting process, to produce more reliable financial information, as well as to improve the quality and openness of information to the public (Bedard & Gendron, 2010). The companies with an adequate size of the independent audit committee will have a better process of monitoring over financial statement preparation and a better public disclosure quality. It is because the independent audit committee member tend to be more objective and more effective in performing their duties, where they have no direct personal interest to management or to the company (Beasley & Salterio, 2001; Madi et al., 2014; Alfraih & Almutawa, 2017). It further found that the existence of an independent audit committee has made the information asymmetry became smaller (Allegrini & Grecco, 2013) and also protect the rights of minority shareholders (Akhtaruddin & Haron, 2010; Bhasin et al., 2012).

Studies have shown that the existence of independent audit committee members has a significant effect on increasing information disclosure (Akhtaruddin et al., 2009; Allegrini & Grecco 2013), and may reduce information asymmetry (El-Mahdy et al., 2013; Bhasin, 2016; Bansal & Sharma, 2016). In another study different result have been found, a big independent audit committee member can not significantly affect on increasing information disclosure (Bedard & Gendron, 2010).

### **Voluntary Disclosure on Information Asymmetry**

Agent as an internal part of the company is more informed of the circumstances and prospects of the company, while external parties are relatively limited and it can lead to information asymmetry (Abdioglu et al., 2015; Han et al., 2014).

Signals are the result of actions taken by management in providing messages or indications and messages to investors about how the prospect of the company (Bergh & Gibsons, 2011). Disclosure of information can be a signal and an effort to overcome the problems of information asymmetry occurs between principal and agent (Jiang et al., 2011). Voluntary disclosure and internet-based disclosure can reduce information asymmetry (Ferrero et al., 2015), although it does not directly affect the credibility of the company (Gajewski & Li, 2015). Performing voluntary disclosure more than required indicates an openness that can be a corporate strategy to attract investors by reducing information asymmetry (Shroff et al., 2013; Allegrini & Grreco, 2013; Sihombing et al., 2017).

### **Voluntary Disclosure on Volume of Transaction**

The volume of transaction describes the activity of shares traded and demanded by investors which can be an interpretation of news circulating in the market on the valuation of traded products (Chiu & Chau, 2014). To increase the volume of transaction and to face competition in the stock market, the agent should perform better voluntary disclosure (Alberti et al., 2012).

There are two determinant factors for voluntary disclosure, namely motivation and constraint. Voluntary disclosure is an effort conducted by management to deliver public information if the benefits obtained will be greater than the cost incurred (Shehata, 2014). Some studies have found that the increase of voluntary disclosure may increase stock liquidity and also increase the volume of the transaction (Gunawan & Lina, 2015; Schoenfeld, 2017; Ajina et al., 2015; Bischof & Daske, 2013). Other studies have found that disclosure can make the market inefficient if the company delivers untrue information so that stock prices and volume of the transaction can be ridiculed through disclosure (Wen, 2012).

### **Information Asymmetry on Volume of Transaction**

The number of shares traded in trading days is called the volume of the transaction (Abbondante, 2010). It is a measure of stock liquidity, as it may reflect how many shares were sold by the previous shareholders and bought by other investors (Ahmad & Sar, 2016). Small bid-ask-spreads reflect low levels of investment risk because there is symmetric information among management and market participants (Fuhrmann et al., 2016). The investors in the stock market will prefer to trade on instruments with a small bid-ask spread, it is the reason why the instruments with small bid-ask spreads are more actively traded (Leuz & Verrecchia, 2000). On the other occasion, it was shown that investors ignore the information submitted by management to the public, so the volume of the transaction was not determined by information submitted (DellaVigna & Pollet, 2009).

## **RESEARCH METHODOLOGY**

This research is a confirmatory explanatory study, the hypotheses made and tested to explore how the direct and indirect effect of the exogenous variables on the endogenous variables in accordance with the research model built. The effect among variables is illustrated by path model, where the variables studied are independent audit committee, voluntary disclosure, information asymmetry and volume of transaction.

The data used are secondary data, that is annual report data obtained from the Indonesia Stock Exchange website on banking companies throughout the year 2014-2016. There are 43 listed banks since January 1, 2014 and there are 4 new listed banks after January 1, 2014. Thus, the sample in this study is 39 banks representing all banks in Indonesia. Hypotheses testing for direct and indirect effect is done with variance based approach using Smart-PLS.

Independent audit committees are measured using the number of independent audit committees members in every observation year (Samaha et al., 2015; Setiany et al., 2017; Felo et al., 2009). Measurement for voluntary disclosure is performed with content analysis, given the number "1" if the company discloses and the number "0" if the company does not disclose items of the disclosure. The variables of voluntary disclosure in this study consist of 8 disclosure classifications, namely general corporate information, corporate strategy, corporate governance, financial performance, risk management, non-financial key, corporate social and other information.

The information asymmetry is measured from the average bid-ask spread on April 1-15 of 2015-2017 (the date after the last official annual report published on the IDX website) throughout the year of observation. The occurrence of information asymmetry characterized by the greater bid-ask spread (Fuhrmann et al., 2016; Abad et al., 2015). The volume of transaction variables seen from the number of shares traded (Abbondante, 2010; Leuz & Verrecchia, 2000; Ahmad & Sarr, 2016). This study used the volume of the transaction during April 1-15 of 2015-2017 to measure the volume of transaction variables. To avoid the big differences distance in numbers among research variables, before the hypothesis testing performed the numbers on the variables of information asymmetry and volume of the transaction are transformed using natural logarithms.

## **RESULTS**

There are 43 banks listed on the Indonesia Stock Exchange in the year of 2014-2016, while there are 4 banks that recorded its issuance of shares after January 1, 2014, so there are 39 banks put into the sample of research than this study uses 117 data observation.

The findings of the indirect effect test in this study indicated that voluntary disclosure can mediate the effect of independent audit committees on the volume of transaction. The indirect effect testing results also found that information asymmetry can

have a significant effect of voluntary disclosure on the volume of transaction. The existence of independent audit committee members is a very important issue to be applied in an effort to oversee the financial reporting process and to improve disclosure of information that is beneficial to stakeholders. The disclosure of information that more than mandatory will enrich investors knowledge about company information, will increase investors interest in buying stock, will make the market more passionate about the transaction and will increase the volume of stock transaction in Indonesia banking company.

## DISCUSSION AND CONCLUTIONS

### Descriptive Statistics

Descriptive statistical results of this research variables were analyzed and interpreted objectively as can be seen from the mean, minimum, maximum and standard deviation (found in Table 1). The average existence of independent audit committee members is close to 4 persons, but there are banks with 2 independent audit committee members, with a maximum of 6 members. In the circular letter of Indonesia Financial Services Authority No.32/SEOJK.04/2015 which recommends that the go public company has at least 3 members of the independent audit committee in order to be able to oversee the function in financial reporting process more effectively. Data showed that value of standard deviation is smaller than the mean value for independent audit committee ( $0.905 < 3.547$ ), the data of the independent audit committee has a low variability position compared with its mean.

Table 1 shown that from 48 voluntary disclosure items, the average achievement score for voluntary disclosure was 67.2%, with a minimum score of 38% and a maximum of 85%. It showed a smaller standard deviation value than its mean ( $0.098 < 0.672$ ), which means that there is a lower spread of observational data than the average available data.

Further details of the voluntary disclosures occurred, indicating that the existing banks tend to disclose only general information. Management realizes that making a larger disclosure of such classifications can lead to the high cost and can pose a threat in the competition (Beattie & Thomson, 2007; Gregory et al., 2004).

**Table 1.** Descriptive Statistics of Variables

	Mean	Minimum	Maximum	Std. Deviation
Independen audirt committee	3.547	2.000	6.000	0.905
Voluntary disclosure	0.672	0.380	0.850	0.098
Information asymmetry	82.00	1.00	1,845.00	277.00
Volume of transaction (in lot)	9,990,149	28	236,445,911	25,546,013

This study uses a stock price spread as a reflection of information asymmetry, calculated from the average bid-ask price of 1 to 15 April after the company's annual reporting period. Table 1 showed that the minimum information asymmetry (as reflected in the stock price spread) was IDR 1, while the maximum value was IDR 1,845. Information asymmetry has a standard deviation of 277 which is greater than the mean value of price spread. This showed that there has been a high spread of data for information asymmetry. This result indicates that information asymmetry is still occurring and that the banking stock market in Indonesia is still in an inefficient market (Mukhtaruddin et al., 2014; Ady, et al., 2013).

Table 1 also shown that the average volume of the stock transaction was 9,990,149, with a minimum value of 28 which means that there is a certain day where the stock trading transaction was a very small amount, the maximum value was 236,445,911. The volume of the transaction has a standard deviation of 25,546.013 greater than the mean value, there was a higher data variability than the average.

### Hypotheses Testing

Table 2 shows the correlation among research variables and the contribution of exogenous variables toward endogenous variables in accordance with the research model built. The overall found that the relationship between variables in this study belongs to the group of very low up to moderate. There is a very low correlation between the independent audit committee and the information asymmetry. The relationship between information asymmetry and volume of transaction is classified as a moderate, while the relationship between other variables according to this study is found in a weak classification.

**Table 2.** Correlation and R square

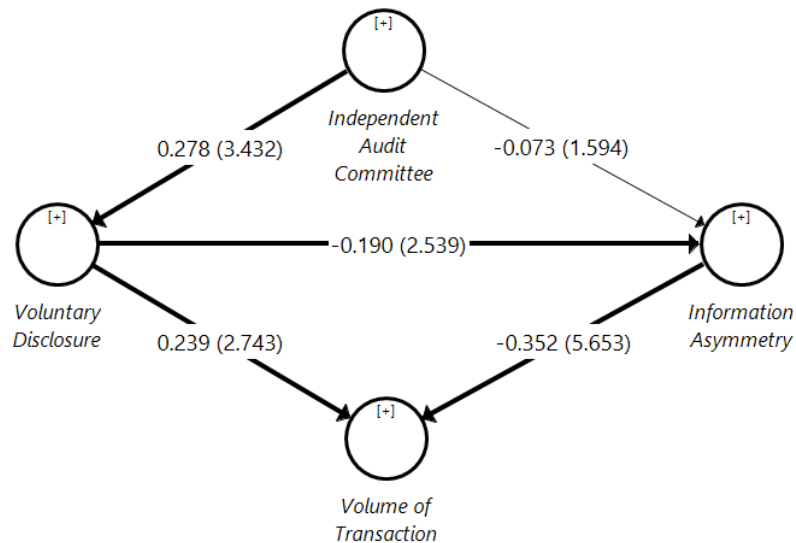
Variables	Independent audit committee	Voluntary disclosure	Information asymmetry	Volume of transaction	R <sup>2</sup>
Independent audit committee	1.000	0.278	-0.125	0.230	
Voluntary disclosure	0.278	1.000	-0.210	0.313	0.077
Information asymmetry	-0.125	-0.210	1.000	-0.403	0.049
Volume of transaction	0.230	0.313	-0.403	1.000	0.216

The coefficient of determination (R<sup>2</sup>) indicates that the independent audit committee contributes 7.7% to voluntary disclosure. The resulting of R<sup>2</sup> also shows that 4.9% of information asymmetry can be determined by the independent audit committee and voluntary disclosure. Furthermore, it was found that R<sup>2</sup> for the volume of transaction is 21.6%, which is the contribution of voluntary disclosure and information asymmetry.

Although the results of this study shown a very weak up to moderate relationship among variables and the contribution of exogenous variables to endogenous was small, but then according to the research model that has been built, this study further to find out whether there is a significant effect between exogenous variables on endogenous variables in accordance with the research hypotheses.

This research conducted at  $\alpha = 5\%$ , based on the rule of thumb inner test model the results are significant when  $t_{stat} > 1.96$  or at P value  $< 0.05$ . The research model is path analysis, there are 9 hypotheses developed to be tested with a variance based analysis approach (using Smart-PLS). The results of testing the direct effects among variables can be found in Figure 1 summarized in Table 3 and explained further below.

**Figure 1. Full Diagram**



Independent audit committee significantly affects voluntary disclosure with a path coefficient of 0.278 and tstat of 3,432 which mean H1 is accepted. A positive path coefficient signified that the increase in the number of independent audit committee members was also followed by the increasing of voluntary disclosure level. The high total number of independent audit committee member provided better oversight in the process of delivering information and its information content to the public, resulting in higher levels of disclosure. This result supported previous studies (Madi et al., 2014; Samaha, et al., 2015; Setiany et al., 2017; Barros et al., 2013).

The total number of independent audit committee member can not significantly effect on information asymmetry with a path coefficient of -0.073 and tstat of 1.594, which means H2 is rejected. A negative path coefficient indicated that the increasing number of independent audit committee member simultaneously their movement with the decreasing of information asymmetry. Although the effect was insignificant, independent audit



committee members performed their function in an effort to reduce the level of information asymmetry. This result is in line with previous research stated that there is no significant difference between firms that have a large independent audit committees and who have small ones in order to minimize information asymmetry (Bedard & Gendron, 2010), while it was contradicted with the ones stated that the independent audit committees have a significant effect on reducing information asymmetry by improving the quality of financial statements (El-Mahdy et al., 2013; Bhasin, 2016; Bansal & Sharma, 2016).

Voluntary disclosure has a significant effect on information asymmetry with a path coefficient of -0.190 and tstat of 2,539, H3 is accepted. A negative value on the path coefficient indicates that an increase of voluntary disclosure was also followed by a decreasing of information asymmetry. The increasing of valuable information submitted by management as an agent (Abdioglu et al., 2015) is a better description of disclosure, with better disclosure then the stakeholders will obtain information with better quantity and quality so that the level of information asymmetry can be mitigated (Gajewski & Li, 2015; Shroff et al., 2013; Allegrini & Grreco, 2013).

**Table 3.** Path Analysis Result

	Path coefficient	T Statistics	P value	Hypotheses
Independent audit committee disclosure → Voluntary disclosure	0.278	3.432	0.001	Supported
Independent audit committee → Information asymmetry	-0.073	1.594	0.111	Not-supported
Voluntary disclosure → Information asymmetry	-0.190	2.539	0.011	Supported
Voluntary disclosure → Volume of transaction	0.239	2.743	0.006	Supported
Information asymmetry → Volume of transaction	-0.352	5.653	0.000	Supported

Voluntary disclosure has a significant effect on the volume of the transaction with a path coefficient of 0.239 and tstat of 2.743, then H4 is accepted. A positive path coefficient showed that the increase of voluntary disclosure coincided with the increase of volume of banking stock transactions. The result of this study was in line with the previous finding said that with increasing voluntary disclosure may increase stock liquidity and volume of transaction, which is also characterized by a more efficient market (Gunawan & Lina, 2015; Schoenfeld, 2017; Ajina et al., 2015; Bischof & Daske, 2013).

Information asymmetry has a significant effect on the volume of the transaction with a path coefficient of -0.352 and tstat of 5.653, H5 was accepted. A negative path

coefficient indicated that the lower information asymmetry coincided with the direction of movement with an increase in the volume of banking stock transactions in Indonesia. The result of this study are in line with previous research which says that the decrease in spreads (as an indication of low information asymmetry) will increase the volume of transaction and make the stocks more liquid (Wang & Yau, 2000; Chae, 2005; Frank & Gracia, 2009; Ady , et al., 2013; Garnia et al., 2014; Santoso & Mogie, 2015; Ferguson, 2015). There are also other findings that do not support this result, stating that there is no significant effect between bid-ask spreads and the volume of the transaction (DellaVigna & Pollet, 2009).

Table 4 outlines the results of hypotheses testing the indirect effects among variables built with the variance-based approach using Smart-PLS 3. This variance-based approach concludes the test results to be significant if the t statistics > 1.96 or at P value <0.05. One of the hypotheses testing result showed that the t statistics value of the indirect effect of the independent audit committee on information asymmetry through voluntary disclosure is 1,927 < ttable1.96 then H6 is rejected. It can be concluded that indirectly through voluntary disclosure, an independent audit committee has no significant effect on information asymmetry.

**Table 4.** Specific Indirect Effects

Indirect path	T statistics	P values	Hypotheses
Independent audit committee -> Voluntary disclosure -> Information asymmetry	1.927	0.054	Not-supported
Independent audit committee -> Voluntary disclosure -> Volume of transaction	2.009	0.045	Supported
Independent audit committee -> Information asymmetry -> Volume of transaction	1.403	0.161	Not-supported
Voluntary disclosure -> Information asymmetry -> Volume of transaction	2.458	0.014	Supported
Independent audit committee -> Voluntary disclosure -> Information asymmetry -> Volume of transaction	1.858	0.063	Not-supported

The test results in Table 4 also shown that the t statistics indirect effect of the independent audit committee on the volume of the transaction through voluntary disclosure is 2,009> ttable 1.96 then H7 is accepted. Indirectly through voluntary disclosure, the independent audit committee has a significant effect on the volume of transaction. The existence of a bigger independent audit committee as a supervisor also functions to supervise management to provide a better disclosure (Allegrini & Greco, 2013), in this condition the investors will be more confident about the quality of financial statements prepared by management, further will impact on the increasing to the volume of stock transaction in the market (Schoenfeld, 2017).

Another result also has shown that the statistics indirect effect of the independent audit committee on the volume of the transaction through information asymmetry is 1.403 < ttable 1.96 then H8 is rejected. It indicated that indirectly through information asymmetry, the independent audit committee has no significant effect on the volume of transaction. The level of information asymmetry in Indonesia banking companies is still high, it is reflected by the bid-ask spread. Information presented by management to the public is not regarded as an effective and optimal tool to assist users in making stock investment decisions.

The result of the hypothesis testing also indicated that the value of t statistics for the indirect effect of voluntary disclosure on a volume of the transaction through information asymmetry is 2,458 > ttable 1.96 then H9 is accepted. The voluntary disclosure has a significant effect on the volume of the transaction when mediated by information asymmetry. High disclosure able to attract investors and it should also be a signal that the agent worked for the interest of the principal. Furthermore, voluntary disclosure is able to reduce information asymmetry, to increase transparency and to protect the rights of minority shareholders (Ferrero et al., 2015; Shehata, 2014; Fathi, 2013).

The final hypothesis testing in this study is to find out whether voluntary disclosure and information asymmetry can simultaneously mediate the effect of an independent audit committee on the volume of transaction. As the result of this testing shows that the t statistics of 1.858 < 1.96 it is concluded that H10 rejected, voluntary disclosure and information asymmetry simultaneously have no significant effect to mediate the effect of the independent audit committee on the volume of transaction.

## **CONCLUSION AND MANAGEMENT INTERPRETATION**

This study has shown that the independent audit committee has a significant influence on voluntary disclosure. This result is in accordance with the function of audit committee members (including the independent ones) in overseeing the financial reporting process and assisting in better disclosure of information to stakeholders. The study also found that independent audit committee has no significant effect on information asymmetry, which indicates that there is still a problem of information asymmetry in Indonesia banking sector stock market. This is supported by descriptive statistics which shown that the deviation standard data is greater than its average, it has a high data spread.

The high voluntary disclosure and low information asymmetry (marked by a small share price spread) have made the banking stock market in Indonesia increasingly enthusiastic, increasing the volume of transaction. These results emphasize that adequate voluntary disclosure is indispensable to stimulate the stock market and increase the volume of transaction that will provide benefit to the company and its investors. This circumstance emphasizes that a satisfactory voluntary disclosure is absolutely necessary to stimulate the

stock market and increase the volume of transaction that will provide benefit to the company and its investors.

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