

# TRADING VOLUME REACTIONS AND THE ADOPTION OF INTERNATIONAL ACCOUNTING STANDARD (IAS 1): PRESENTATION OF FINANCIAL STATEMENTS IN INDONESIA

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## ABSTRACT

*Indonesia is in the process of IFRS convergence and plans to fully adopt the IFRS. Therefore, the impact of IFRS adoption on local standards needs to be investigated. This study focuses on the impact of adoption of IAS No.1: Presentation of Financial Statements into Indonesian local standards (PSAK 1). This study aims to examine the impact of the adoption on the trading volume around the annual earnings announcement in the first year that the standard becomes enacted in 2011. Consistent with IAS No. 1, Indonesian local standard, namely PSAK 1 that requires companies to present total comprehensive income as bottom-line of the financial performance report, which summaries all changes in owners' equity except changes arising from transactions with owners. The samples are Indonesian listed companies which included in the LQ45 index. The findings indicate that there is higher trading volume reaction around the earnings announcement since the total comprehensive income presented as bottom-line in the financial performance report as required by IAS 1. So It is implied that the policy of adopting the IAS No. 1 about Presentation of Financial Statements supports the proponents of the IFRS convergence program in Indonesia as it finds that the presentation of earnings information according to IAS No. 1 might has higher information content.*

**Keywords:** Comprehensive Income, Trading Volume, Net Income, International Accounting Standard.

## INTRODUCTION

As part of the process of the IFRS convergence, Indonesia issued PSAK 1 (Revised 2009) about Presentation of Financial Statements which became effective for the period January 1, 2011. As one of the developing countries and members of the G20, Indonesia has committed to convergence with IFRS starting in 2012. Significant changes in accounting standards, such as PSAK No.1 can be alarming for some parties, including managers and investors because the cost of adoption is very high. It is essential to adopters in Indonesia to grasp the benefit of the passage, one of which affects stock prices and trading volume. PSAK 1 adopted the IAS No. 1. PSAK 1 changed the components of financial statements. The significant changes from the previous standard are the emergence of a The Statement of Comprehensive Income instead of The Income Statement. The main difference between The Statements of Comprehensive Income and The Income Statement is the addition of Other Comprehensive Income (OCI) component under the net income, so that the Statement of Comprehensive Income there will present the term "comprehensive income" as bottom-line income.

Comprehensive income is an amount that summarizes changes in equity over a period result from transactions and other events, other than changes resulting from transactions with owners in their capacity as owners of the company. Before the revision, information on other comprehensive income is presented on the statement of changes in owner's equity. The revision aims to enable users of financial statements to find a single profit figure that summarizes all changes in owners' equity other than changes arising from transactions with owners of equity. With the enactment of PSAK 1 (Revised 2009), users of financial statements are expected to obtain earnings information that takes into account changes in the overall value of the company. Thus, users of financial statements will be more facilitated in making decisions that pay attention to all aspects that affect the change in corporate value. It can also be said, users of financial statements can obtain earnings information that has higher information content. Analysis of investment decision making through key data in the company's financial statements is called fundamental analysis. Fundamental analysis is a method of stock analysis by analyzing data or information related to company performance, generally financial statements become the main source in this analysis. Like other investor in general, the investors in Indonesia mainly use the financial statement as source of their analysis for decision making. They also use the financial analyst report for their reference. Thus, through this fundamental analysis, investors in Indonesia use financial report data and information contained in it in making investment decisions.

An earnings announcement is said having higher information content if the change in stock price and trading volume reaction around the date of the announcement is higher than at any other time in the same period (Beaver, 1968). The revision of PSAK 1 (Revised 2009) raises the issue of the earnings announcement, i.e. the issue of the information content of the number of profits presented in the financial performance report. Chambers et al. (2005) found that comprehensive income is useful information for investors, or in other words, comprehensive income has high information content. Biddle & Choi (2006) also found consistent result with Chambers et al. (2007) i.e. comprehensive income is able to reflect financial performance better than net income. It can be said, comprehensive income has higher information content than net income.

This study aims to examine the trading volume reaction around the earnings announcement after the presentation of comprehensive income, which in accordance with PSAK 1 (Revised 2009). This study can provide feedback regarding the purpose of the revision. The objective of the PSAK 1 revision is to better present capital changes information that summarizes all changes in corporate value. If the earnings information can reflect all changes in the value of the company, then users of financial statements will obtain more useful information in decision making. It can also be said that the study aims to prove the quality of information of the comprehensive income. The previous research has shown that comprehensive income has value relevance for investors (Chambers et al., 2007). In addition, Hirst & Hopkins (1998) prove that the position of presentation of other comprehensive income affects the estimation of users of financial statements. In other words, the location for the presentation of other comprehensive income has value relevance, so PSAK 1 (Revised 2009) is a revision whose impact is significant for investors. Therefore, comprehensive income has value relevance as the market reacts to announced information in the form of abnormal return.

This research differs from previous research in terms of the use of proxies to test market reactions to the presentation of comprehensive income. The market reaction used to measure the impact of the application of PSAK 1 (Revised 2009) in this study is the stock trading volume. This study will compare the reaction of trading volume to earnings announcements in this case

the issuance of annual financial statements, in the period before and after the policy of PSAK 1 (Revised 2009) is applied. This research expects to contribute to: (1) Board of Accounting Standards, as the feedback on revision of PSAK 1, whether the presence of bottom line income in the form of comprehensive income have a higher information content than net income; (2) For academics, this research adds to the literature of the IFRS adoption as well as the value relevance of accounting information; (3) For investors, this research is expected to be useful for better investment decision making.

This paper consists of the following sections: Section 1 Introduction, discusses background and research motivation, research questions, objectives and research contributions; Section 2 Literature Review, contains the literature review, previous research and hypothesis development; Section 3 Research Method, contains the research design, data and samples, research models and operational variables; Section 4 contains the discussion and analysis; Section 5 contains conclusions, research limitations and suggestions for further research.

## **THEORETICAL FRAMEWORK AND DEVELOPMENT OF HYPOTHESES**

### **Theoretical Basis**

This research is based on the Theory of Efficient Market Hypothesis (EMH) which discusses the stock price formed in a company, which is a reflection of all available information. Fama (1970) describes an efficient market concept indicating that the current stock price reflects all relevant information, past, present information and added information from the company itself (insider information). In general, the EMH theory provides an overview of existing and relevant information affecting the price of a security. In an efficient market, investors will react quickly to changes in information. Profit announcements are a form of corporate transparency towards investors. Based on EMH theory, investors will react quickly to the company's earnings announcement. The investor's reaction will be reflected in changes in the company's stock price. Investors tend to bid at high prices when good information (good news) and bid at low stock prices when bad information (bad news). Profit announcements made by the company are positive information about the company's financial condition. Thus, based on this theory, corporate earnings announcements can increase trading volume reaction.

### **Previous Research**

The first study to test the market reaction to earnings announcements was carried out by Ball & Brown (1968). Ball & Brown (1968) found a greater variation of stock returns around the date of earnings announcements, which indicates the existence of information content from the earnings announcement. More specifically more information about earnings announcements, Beaver (1968) proves that the reaction of changes in prices and trading volume increases around the date of the company's earnings announcement. According to Beaver (1968), changes in prices reflect changes in aggregate market confidence, while trading volume reactions indicate the number of actions or trades of each investor. Ahmed & Schneible (2007) conducted a study on the impact of Fair Disclosures policy on transactions on the stock market. Ahmed & Schneible (2007) examined how stock volume reacts to quarterly earnings announcements on the period before and after the entry into effect of the Fair Disclosures policy. This study uses a research model similar to Ahmed & Schneible (2007) that simultaneously evaluating the impact of a policy on stock trading volume around earnings announcement date. The difference with

previous research is that this study employs trading volume to examine investors' reactions on earnings announcement which is presented in the form of comprehensive income as bottom-line of the financial performance report in accordance with PSAK 1. Biddle & Choi (2006) found that the information content of comprehensive income is higher than net income. Therefore, this study argues that comprehensive income is considered important and has value relevance for investors.

Another study that attempted to test the information content of the comprehensive income was the study of Hirst et al. (2001). Hirst et al. (2001) investigate whether the comprehensive measurement and reporting of income in the Financial Statements systematically influence the estimates and assessments of financial statements. Hirst et al. (2001) investigated whether the measurement and reporting of comprehensive income on the Financial Statements systematically affected the forecast and assessment of financial analysts. Hirst et al. (2001) find evidence that financial analyst estimation will be influenced by the clarity of disclosure of information in financial statements. Comprehensive income reported in separate financial performance reports more influence the analyst's assessment of bank risk than reporting on changes in equity and financial performance reports. From the results of research Hirst et al. (2001), it is known that the comprehensive Income Statement has different information content if it is presented at different locations. The comprehensive income presented in the financial performance report is also predicted to better detect earnings management by the company (King et al., 1999).

Prior studies on comprehensive income mostly focused on the impact of the presentation of the item on the company's stock price. One of them was the research of Chambers et al. (2007) examining the relevance of comprehensive income by comparing the presentation of earnings before and after the entry into force of SFAS 130. Chambers et al. (2007) sought to compare the impact of a comprehensive presentation of income between the period before and after the enactment of SFAS 130. Chambers et al. (2007) find that the presentation of OCI after the application of SFAS 130 has value relevance for investors, which is the dollar-for-dollar basis. But Chambers et al. (2007) found no evidence that investors are more concerned about OCI presented in the financial performance report. This finding is in contrast to the results of the survey of Hirst et al. (2001) and King et al. (1999) indicating that users of financial statements prefer that OCI is presented in the equity changes report.

## **Hypotheses Development**

Based on previous research, it was found that the trading volume reaction will increase when an earnings announcement contains information content (Beaver, 1968). Comprehensive income is information that has value relevance because it can assist investors in making decisions that take into account all changes in corporate value (Hirst et al., 2001; Chambers et al., 2007; Biddle & Choi, 2006).

This study argues that the earnings announcement presented in the single report of financial performance contains a higher quality of information. Therefore, it can be expected that there is abnormal trading volume reaction that arises in response to the company's earnings announcement (financial statements issuance). In other words, the presentation of comprehensive income in the statements of comprehensive income under PSAK 1 (Revised 2009) is expected to have a higher information content than the net income presented before the revision of PSAK 1 (Revised 2009). Higher information content will cause a higher trading volume reaction around earnings announcement date (Beaver, 1968; Ahmed & Schneible, 2007).

The research hypothesis as follows:

*H1: There will be higher trading volume reaction around the earnings announcement after the revision of PSAK 1 (2009).*

## RESEARCH METHODOLOGY

### Data and Sample

The population in this study are all companies listed on the Indonesia Stock Exchange (IDX) in the period 2010-2011. Since this study uses the trading volume as main variable, so is the liquidity of the stock trading volume is essential. Thus, this study of employs companies trading volume is considered liquid enough to be examined are included in the LQ45. The LQ45 index consists of 45 companies that have the highest standard of capitalization in the last 12 months; have been included in the top 60 companies with the highest regular market value in the last 12 months; have been listed in Indonesia Stock Exchange for at least 3 months; and high transaction value and frequency.

Observations were made over two years, namely in 2010 and 2011, in order to compare the trading volume reaction to earnings announcements before and after the implementation of PSAK 1 (Revised 2009). The PSAK 1 is effective in 2011. The sample criteria used are: (1) Companies included in the LQ45 index during the period; (2) Companies with stock prices and trading volume data are available in the IDX. The data are obtained from IDX publications and the Indonesian Capital Market Directory. The estimation method used is OLS (Ordinary Least Squares).

### Research Model

The research model used to test the hypothesis follows Ahmed and Schneible (2007):

$$ABVOL_{(-1,+5)it} = \alpha_0 + \alpha_1 PSAK1 + \alpha_2 ABSRET_{it} + \alpha_3 PSAK1 * ABSRET_{it} + \alpha_4 MKTVOL_{it} + \alpha_5 DIFVOL_{it} + \alpha_6 LGMVE_{it} + \alpha_7 LGPRC_{it} + e_{it} \quad (1)$$

ABVOL is a seven-day cumulative trading volume around the issuance of financial statements in period  $t$ , in the form of a percentage of the number of shares outstanding, subtracted by the median cumulative seven-day trading volume; PSAK1 is a dummy variable of value 1 for the year 2011 (after) and 0 for the year 2010 (before); PSAK1\*ABSRET is an interaction variable dummy PSAK1 with ABSRET; ABSRET is the absolute value of a seven-day cumulative stock return around the period of financial statement issuance; MKTVOL is the market trading volume around the date of issuance of the company's financial statements; DIFVOL is the difference between the average trading volume and the median; LGMVE is the natural logarithm of the equity market value (the closing price is multiplied by the number of shares outstanding two days prior to the issuance of the financial statements); LGPRC is the natural logarithm of the stock price (the closing price two days before issuance of financial statements). The hypothesis is accepted if the coefficients of the PSAK1\*ABSRET ( $\alpha_3$ ) variable is positive significant.

## Measurement Period

The announcement period employed in this study is the day -1 from the date of announcement to +5 days after the date of issuance of annual financial statements (7 days). If there is a holiday date, the date is not included in the announcement period. For example, the date of issuance of the annual financial statements is the 21<sup>st</sup>, and it turns 20<sup>th</sup> and 22<sup>nd</sup> are holiday dates where there is no stock trading activity on the Stock Exchange, then day -1 is the 19<sup>th</sup> and the day of +1 is the 23<sup>rd</sup>.

The announcement period from day -1 to +5 is referred to previous research which states that trading volume reaction occurs on day -1 and day 0 of the date of announcement and persists to day +5 from the date of announcement (Bamber, 1987; Main & Cready, 1997). The research methods must be clearly stated and described in sufficient detail or with sufficient references.

## RESULTS

### Sample and Descriptive statistics

This study uses the sample of companies included in the LQ45 index during the period of 2010-2011. From 45 companies, only 44 companies that have complete data. The period covered in this study is 2010 as the year before revision and 2011 as the year after revision. Table 1 shows the descriptive statistics all samples.

Table 1 DESCRIPTIVE STATISTICS					
	Mean	Median	Standard Deviation	Minimum	Maximum
Abnormal Volume	0.0024	0.0005	0.0112	-0.0216	0.0573
Abnormal Return	0.0393	0.0337	0.0279	0.0003	0.1621
PSAK1 * Abnormal Return	0.0194	0.0001	0.0288	0.0000	0.1621
Closing Price	8513	3413	13692	113	72350
Market Value (Trillion rupiah)	52	33	57	1.6	292
Differential Volume	0.0019	0.0011	0.0032	-0.0023	0.0158
Market Volume	0.0017	0.0016	0.0003	0.0012	0.0026

### Hypothesis Testing Results

The result of model regression in Table 2 shows that the model is statistically significant as shown by probability F-statistics of 0.000497 and adjusted R-square value of 20.7%. From the results, it can be seen that PSAK1\*ABSRET coefficient is positive significant, means that PSAK 1 (Revised 2009) affect a significant and higher trading volume reaction around the issuance of the company's financial statements in 2011. Thus, the hypothesis (*H1*) is supported. Total comprehensive income presented as bottom line as required by PSAK 1 has higher information content than before (when net income is as the bottom line). There is abnormal trading volume reaction that arises in response to the company's earnings announcement. It is consistent with Beaver (1968) and Ahmed & Schneible (2007).

**Table 2**  
**REGRESSION TEST RESULTS ABNORMAL VOLUME**

ABVOL <sub>(-1,+5)it</sub> =α <sub>0</sub> +α <sub>1</sub> PSAK1+α <sub>2</sub> ABSRET <sub>it</sub> +α <sub>3</sub> PSAK <sub>1</sub> *ABSRET <sub>it</sub> +α <sub>4</sub> MKTVOL <sub>it</sub> +α <sub>5</sub> DIFVOL <sub>it</sub> +α <sub>6</sub> LGMVE <sub>it</sub> + α <sub>7</sub> LGPRC <sub>it</sub> +e <sub>it</sub>					
Variable	Expected Sign	Coefficient	Std. Error	t-Statistic	Probability
C		0.045605	0.042728	1.067336	0.2890
PSAK1	+	-0.010214	0.002983	-3.424025	0.0010***
ABSRET	+	0.004309	0.013275	0.324621	0.7463
PSAK1*ABSRET	(H <sub>1</sub> ) +	0.199547	0.053356	3.739931	0.0003***
LSIZE	-	-0.001087	0.001595	-0.681283	0.4977
LPRC	-	-0.001080	0.001285	-0.840437	0.4032
DIFFOL	-	-1.121086	0.415929	-2.695376	0.0086***
MKTVOL	+	1.353551	3.941029	0.343451	0.7322
R-squared	0.270859		Mean dependent var.		0.002406
Adjusted R-squared	0.207059		S.D. dependent var.		0.011173
S.E. of regression	0.009949		Akaike info criterion		-6.296094
Sum squared resid	0.007919		Schwarz criterion		-6.070881
Log-likelihood	285.0281		Hannan-Quinn criter.		-6.205361
F-statistic	4.245450		Durbin-Watson stat		1.760587
Prob(F-statistic)	0.000497				

Note: \*\*\* significant at 99% confidence level.

### Sensitivity Test

A sensitivity test is an additional test conducted to test the robustness of the main test results. The sensitivity test is conducted using different window events. The sensitivity test was conducted using the announcement period for 2 days, i.e. day -1 and day 0 from date of issue of the financial report. This is referred to Cready (1997).

The results remain consistent with the main test results. The positive coefficients of  $\alpha_3$  indicate that the abnormal trading volume in the period of earnings announcements around the date of financial statements issuance is higher in the period after revision of PSAK 1 (Revised 2009).

## DISCUSSION

The results of this study are consistent with previous research on the value relevance of the comprehensive income (Chambers et al., 2007; Biddle & Choi, 2006). It is noted that the coefficient of dummy variable of PSAK 1 is negative, means that the abnormal volume in the period after revision is lower than the abnormal volume in the period before the revision. However, the positive sign of the interaction variable PSAK1\*ABSRET indicates higher abnormal volumes associated with the information content in the period after the revision than before. Thus, a larger abnormal volume in the period before revision is not an abnormal volume related to information content of the earnings announcement. This is consistent with Kim & Verrecchia (1997) that mentioned some of the determinants of trading volume reactions are difference in precision among investors prior to the announcement and the difference in investor interpretation of earnings announcement. Abnormal volumes arising from the information content of the earnings announcement is due to a different precision of each investor prior to the announcement. The DIFVOL coefficient values were significant and negative, indicating the initial expectations of the investors.

Sensitivity test is conducted and the result is consistent with the main result. We can conclude that the total comprehensive income has higher information content than the Net Income. This study contributes to the literature about the benefit of the International Accounting Standard adoption, especially about the usefulness of the financial statements. The revision of the local accounting standard to the International Accounting Standard provides more relevant information to the investor. There is higher trading volume reaction around the earnings announcement in the first year of the adoption of the standard.

## CONCLUSIONS

The adoption of IAS 1 into PSAK 1 (Revised 2009) changes the presentation of bottom line-in the financial performance report from "*net income*" to "*total comprehensive income*". This revision aims to make it easier for investors to use a profit/loss figure that already covers all factors that affect the change in corporate value, or in other words, earnings information that has higher information content.

The results show that the comprehensive income has value relevance for the investor. The study also concludes that bottom-line income presented in the form of total comprehensive income after revision of PSAK 1 has a higher information content than the presentation of net income (before revision). It was found that trading volume reaction around the earnings announcement is higher in the period after revision of PSAK 1 than before revision. The results of this study imply that the presentation of bottom line-income in the form of "*total comprehensive income*" is better in presenting the company's performance than "*net income*".

This study has limitation because only use trading volume reaction in examining the effect of the presentation of the Other Comprehensive Income after revision of PSAK 1 in Indonesia. Further study may examine other variables such as stock price reactions and bid ask spread.

## REFERENCES

- Ahmed A.S., & Schneible, R.A. (2007). The impact of regulation fair disclosure on investor's prior information quality: Evidence from an analysis of changes in trading volume and stock price reactions to earnings announcement. *Journal of Corporate Finance*, 13, 282-299.
- Ball, R., & Brown P. (1968). An empirical evaluation of accounting income numbers. *Journal of Accounting Research*, 6(2), 159-178.
- Beaver, W. (1968). The information content of annual earning announcement, empirical research in accounting. *Supplement to Journal of Accounting Research*, 6, 67-92.
- Biddle, G., & Choi, J.H. (2006). Is comprehensive income useful? *Journal of Contemporary Accounting & Economics*, 2(1), 1-32.
- Chambers, D., Linsmeier, T.J., Shakespeare, C., & Sougiannis, T. (2007). An evaluation of SFAS No. 130 comprehensive income disclosures. *Review of Accounting Studies*, 12, 557-593.
- Fama, E.F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, American Finance Association, 25(2), 383-417
- Hirst, D., & Hopkins, P. (1998). Comprehensive income reporting and analysts' valuation judgments. *Journal of Accounting Research*, 36, 47-74.
- Hirst, D., Hopkins, P., & Wagen, E. (2001). *Fair values, comprehensive income reporting, and bank analysts' risk and valuation judgments*. Working Paper, University of Texas.
- Indonesian Accounting Association. (2017). Definition of financial accounting standards (SAK). Retrieved from <http://iaiglobal.or.id/v03/standar-akuntansi-keuangan/sak>



- Kim, O., & Verrecchia, R.E. (1997). Pre-announcement and event-period private information. *Journal of Accounting and Economics*, 24 (3), 395-419.
- King, T.E., Ortegren, A.K., & Redd, B.J. (1999). An analysis of the impact of alternative financial statement presentations of comprehensive income. *Academy of Accounting and Financial Studies Journal*, 3(1), 19-42.
- Utama, S., & Cready, W. (1997). Institutional ownership, differential pre disclosure precision and trading volume at announcement dates. *Journal of Accounting and Economics*, 24(2), 129-150.

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