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# Analysis Impact of PSAK 24 Revision on Equity, Other Comprehensive Income, and Stock Returns

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***Abstract*—This study aims to analyze the impact of changes in the Statement of Financial Accounting Standards Indonesia (PSAK) 24 Revision on equity, other comprehensive income (OCI), and stock returns. This research uses companies listed on the Indonesia Stock Exchange (IDX) during 2013–2016 as a sample. The results show that changes in equity after the application of PSAK 24 Revision are higher than before. Actuarial gains (losses) dominate a company's OCI, in terms of both existence and value. In 2015 and 2016, more than 95% of companies reported actuarial gains (losses) as OCI components. In terms of value, the average proportion of actuarial gains (losses) exceeds 50% of the total OCI of firms. The most significantly disclosed assumptions are the discount rate and salary growth. The discount rate proved to be positively correlated with the OCI of actuarial gains (losses), whereas salary growth is negatively correlated with actuarial gains (losses). This study finds that OCI from actuarial gains (losses) is significantly associated with stock returns.**

***Keywords—PSAK 24, employee benefits, changes in equity, actuarial assumptions, value relevance, other comprehensive income***

## I. INTRODUCTION

Financial statements are a source of information for users who are assessing an entity and engaging in economic decision making related to the entity. When making decisions, users frequently must compare financial statements of entities with other entities. Thus, a single standard is required to make financial statements comparable. In 2009, the G20 countries agreed to adopt a high-quality and acceptable global standard as a form of financial supervision and regulation.

The International Financial Reporting Standards (IFRS) are internationally accepted accounting standards that have been adopted by various countries, including Indonesia. In 2011, the International Accounting Standards Board (IASB) issued a revision to International Accounting Standard 19 (IAS 19R): Employee Benefit. IAS 19R eliminates the option of actuarial gains (losses) recognition and requires a company to recognize all of the actuarial gains (losses) in other comprehensive income (OCI) at the time that the gains (losses) occur to increase the comparability of financial statements with uniform actuarial gains (losses) recognition [1].

As an impact of IFRS convergence, in 2013, the Financial Accounting Standards Board (DSAK) adopted PSAK 24: Employee Benefits (2013 Revision) (PSAK 24 Revision). The standard which was effective in 2015 mandate full recognition of actuarial gains and losses as an OCI component during the current period. As a consequence, OCI volatility from a company that used the corridor or direct approaches for profits and losses prior to this standard will increase [2]. As a component of equity, increased OCI volatility can ultimately increase equity volatility.

Refyal and Martani [3] concluded that a significant relationship exists between post-employment benefits account changes and a company's earnings response coefficient (ERC) as a result of the adoption of PSAK 24: Employee Benefits (2004 Revision) (PSAK 24 2004 Revision). Decendra [4] stated that the adoption of PSAK 24 Revision affects equity-related financial ratios. In the first year of the application of PSAK 24 Revision, the majority of listed companies' return on equity (ROE) and debt-to-equity ratio (DER) increased.

In contrast to previous research, this study focuses on the impact of the application of PSAK 24 Revision on equity and OCI dominance caused by the application of PSAK 24 Revision and analyzes the value relevance of OCI components resulting from changes in PSAK 24 Revision. Corporate equity is predicted to be more volatile after the adoption of PSAK 24 Revision as a result of an increasingly volatile OCI company in recognition of actuarial gains (losses).

## II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The financial statements aim to provide useful financial information to current and potential investors, lenders, and other creditors when decisions are being made on providing resources to the entity [5]. To be useful, information has to possess fundamental qualitative characteristics, which are relevance and faithful representations [5]. Barth et al. [6] stated that accounting is considered to have value relevance if it can predict the market price of equity. Holthausena and Watts [7] argued that, although research related to value relevance has been widely practiced, the impact on standards-making is insignificant. In contrast, Barth, Beaver, and Landsman [6] stated that research on value relevance is useful when developing standards.

In Indonesia, accounting standards related to employee benefits are set out in PSAK 24, which has been amended several times since it was ratified in 1994 as PSAK 24 Accounting for Pension Benefits. Initially, the scope of PSAK 24 was limited to pension accounting.

In 2004, DSAK approved PSAK 24 2004 Revision, which regulated not only pension benefits but also all forms of employee benefits. The next revision of PSAK 24 Employee Benefits occurred in 2010. In this revision, PSAK 24 adopted IAS 19: Employee Benefit (2009 Revision). IAS 19: Employee Benefit was subsequently revised in 2011 (IAS

19R). As a result, in 2013, DSAK approved PSAK 24 Revision.

IAS 19 (2009 Revision) receives significant criticism from both users and preparers for the lack of ability to provide high-quality and transparent information on post-employment benefits [8]. Deferrals in actuarial gains (losses) represent an example of the lack of quality and transparency of information because the numbers that appear in the financial statements can be misleading. The options granted in recognizing actuarial gains (losses) are also considered to reduce the comparability of financial statements.

PSAK 24 Revision requires the company to recognize all actuarial gains and losses incurred during the year. Recognition of all actuarial gains and losses will affect the volatility of OCI, which is ultimately reflected in the company's equity. Decendra [4] concluded that, in the first year of the application of PSAK 24 Revision, 75% of the total sample increased in ROE. This increase also occurred in DER—as much as 86% of the total sample increased in DER. This increase on DER shows that the application of PSAK 24 Revision affects the company's equity, which is developed into the following hypothesis.

H1: Following the adoption of PSAK 24 Revision, changes in a company's equity are higher.

OCI consists of 1) changes in the revaluation surplus; 2) re-measurement of the defined benefit; 3) gains and losses arising from translation of financial statements; 4) gains (losses) on remeasurement of available-for-sale financial assets, and 5) the effective portion of gains (losses) from cash flow hedging instruments.

The OCI component, which is mandatory, only remeasures the defined benefit because of the company's obligation to provide post-employment benefits to its employees as stipulated in the Undang-Undang Ketenagakerjaan (Labor Law) No. 23 of 2003. Other OCI components are optional (revaluation of assets and gains (losses) on available-for-sale financial assets), a consequence of a particular operation (foreign currency translation gains and losses), and forms of corporate risk management (hedging). Thus, actuarial gains (losses) are predicted to be more frequently reported on other comprehensive income relative to other OCI components, which is developed into the following hypothesis.

H2: The OCI portion from defined benefits is greater than any other OCI components.

PSAK 24 Revision defined actuarial assumptions as the best estimate of the entity regarding the variables that determine the total cost of providing post-employment benefits. Actuarial assumptions consist of demographic assumptions and financial assumptions. Actuarial gains and losses are the result of adjusting for differences in actuarial assumptions and the effects of changes in actuarial assumptions [9]. Thus, actuarial assumptions used by the companies should not be biased and must be aligned with one another. However, Fasshauer, Glaum, and Street [10] stated that differences exist in the assumption of salary growth in Europe associated with companies' industries. Therefore, a discrepancy still exists in the determination of actuarial assumptions. Grant, Grant, and Ortega [11] stated that if the interest rate is assumed to increase by 0.5%, post-employment benefits liabilities will decrease between 12–13%. This finding indicates that the employee benefit liability is very sensitive to changes in actuarial assumptions. Based on a survey conducted by Tower Watson [12], the most influential financial assumptions on the funding ratio of employee benefits in Hong Kong is the interest rate, whereas salary growth is considered not to have changed much, and it is considered not too influential. The requirement to disclose significant actuarial assumptions and prior research is developed into the following hypothesis.

H3: Changes in significant actuarial assumptions correlated with OCI.

One of the significant changes in PSAK 24 Revision is the mandatory recognition of all actuarial gains (losses) in OCI. Decendra [4] concluded that, before the application of PSAK 24 Revision, 93.71% of companies listed on the IDX preferred to use the corridor approach. Thus, prior to this revision, the effect of remeasurement on defined benefits was insignificant to financial statements as a whole. Marchini and D'Este [13] argued that changes in the revaluation surplus and actuarial gains and losses are assessed to have no significant effect on ROE. The question is, will this revision make relevant the OCI component from actuarial gains and losses for employee benefits?

Mitra and Hossain [14] showed that pension adjustments and OCI components in S&P companies have value relevance. Bauer and Lake [15] concluded that the application of IAS 19R in Sweden increased both the incremental value and relative value relevance of OCI. This finding indicates that actuarial gains and losses on the defined benefit have value relevance when recognized directly in OCI. Refyal and Martani [3] showed that the adoption of PSAK 24 influenced ERC, which is developed into the following hypothesis.

H4: The OCI component of PSAK 24 Revision has value relevance.

## III. Research Methodology

This study uses secondary data from the Center for Economic and Business Data (Pusat Data Ekonomi dan Bisnis/PDEB) and hand-collected from audited companies' financial statements available on IDX (www.idx.co.id). The sample used in this study varies by each hypothesis test performed. To test H1, the sample used is listed companies during 2013–2016. To test H2 and H4, the sample used is listed companies during 2015–2016. To test H3, the sample used is listed companies during 2014–2016.

Mean comparisons will be performed to prove that the change in a company's equity during the period after the adoption of PSAK 24 Revision is higher than before the implementation. A proportion test will be used prove that actuarial gains (losses) dominate other OCI components in terms of existence and value. A bivariate correlation test is performed to analyze the correlation between the significant assumptions and actuarial gains (losses).

To prove that the OCI component of PSAK 24 has value relevance, the authors developed a model previously used in the valuation of OCI components [16, 17]; Mitra and Hossain [14] that used return models—a direct influence between accounting information and stock returns. The following

models are used to analyze the value relevance of actuarial gains (losses) either individually or together with other OCI components.

$$CAR_{i,t} = \beta_0 + \beta_1 UE_{i,t} + \beta_2 OCI\,24_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 LEV_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$CAR_{i,t} = \beta_0 + \beta_1 UE_{i,t} + \beta_2 OCI\,24_{i,t} + \beta_3 OTHER\_OCI_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 LEV_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$CAR_{i,t} = \beta_0 + \beta_1 UE_{i,t} + \beta_2 T\_OCI\,24_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 LEV_{i,t} + \varepsilon_{i,t} \quad (3)$$

where $CAR_{i,t}$ = cumulative abnormal return of firm $i$ in year t for 12 months from early April in year t until April in year t + 1; $UE_{i,t}$ = unexpected earnings for firm $i$ using earnings per share of year t minus the profits of each share t year 1 scaled to market price per share at the beginning of year t; $OCI24_{i,t}$ = other comprehensive income of firm $i$ in year t attributable to PSAK 24 Revision 2013; $OTHER\_OCI_{i,t}$ = OCI other than actuarial gain (loss) adjustment of defined benefit of firm $i$ in year t; T_OCI = total other comprehensive income of firm $i$ in year t; $SIZE_{i,t}$ = firm $i$ size in year t; and $LEV_{i,t}$ = firm $i$ leverage in year t

### A. Operationalization Variables

*1) Cumulative Adjusted Return Dependent Variable*

The calculation of the cumulative adjusted return (CAR) is as follows:

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}} \quad (4)$$

$$R_{m,t} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}} \quad (5)$$

$$CAR_{i,t} = \sum_{1\,Apr_{t+1}}^{1\,Apr_t} (R_{i,t} - R_{m,t}) \quad (6)$$

where $R_{i,t}$ = daily stock return on day t; $R_{m,t}$ = daily market return on day t; $P_{i,t-1}$ price per share on day t–1; $IHSG_t$ = closing price index on day t; and $IHSG_{t-1}$ = Indonesia Composite Index (Indeks Harga Saham Gabungan/IHSG) t–1.

*2) Unexpected Earnings Independent Variable*

Unexpected earnings (UE) is calculated using the random walk assumption [18] as follows:

$$UE_{i,t} = \frac{EPS_{i,t} - EPS_{i,t-1}}{P_{i,t-1}} \quad (7)$$

where $EPS_{i,t}$ = earnings per share of firm $i$ in year t; $EPS_{i,t-1}$ = earnings per share of firm $i$ in year t–1; and $P_{i,t-1}$ = stock price in year t–1.

*3) OCI Components of PSAK 24 (OCI24) Independent Variable*

This variable represents an OCI component derived from the remeasurement of the defined benefit and is calculated as follows:

$$OCI24_{i,t} = \frac{ACTR_{i,t}}{MVE_{i,t}} \quad (8)$$

where $ACTR_{i,t}$ = actuarial gains and losses of firm $i$ in year t; and $MVE_{i,t}$ = market value of equity firm $i$ at the beginning of year t.

*4) Other OCI Components (OTHER_OCI) Independent Variable*

This variable represents any other OCI component not attributable to PSAK 24 Revision and is calculated as follows:

$$OTHER\_OCI_{i,t} = \frac{TOTAL\_OCI_{i,t} - OCI24_{i,t}}{MVE_{i,t}} \quad (9)$$

where $TOTAL\_OCI_{i,t}$ = total OCI of firm $i$ in year t.

*5) Company Size (SIZE) Control Variable*

Company size is calculated as:

$$SIZE_{i,t} = LnMVE_{i,t} \quad (10)$$

where $LnMV_{i,t}$ = natural logarithm of equity market value of firm $i$ in year t.

*6) Leverage (LEV) Control Variable*

The leverage used in this study is calculated by:

$$LEV_{i,t} = \frac{T\_LIABILITIES_{i,t}}{T\_ASSET_{i,t}} \quad (11)$$

where $T\_LIABILITIES_{i,t}$ = total firm $i$ liabilities year t; and $T\_ASSET_{i,t}$ = total firm $i$ asset in year t.

## IV. Research Results and Discussion

The samples used in this study are non-financial companies listed on the IDX during each observation year. The number of samples used in this study was 968, 592, 783, and 512 to test HI, H2, H3, and H4, respectively.

### A. Changes in Equity

The change in equity prior to the adoption of PSAK 24 Revision is calculated through the difference between the equity balances in 2013 and 2014. The change in equity after PSAK 24 Revision is the difference between the equity balances in 2016 and 2015. The change in equity in 2013 is calculated by subtracting the equity balance in 2013 without restatement with the equity balance in 2012. The change in equity in 2014 is calculated by subtracting the equity balance in 2014 without restatement with the equity balance in 2013 without restatement. The objective of using unrestated equity balance is to assess the changes in the equity of a sample company before application of PSAK 24 Revision. The change in equity in 2015 is calculated by subtracting the equity in 2015 with the restated equity of 2014. The 2016 equity change is calculated by subtracting the equity balance of 2016 with the company's equity in 2015. The use of the restated 2014 equity aims to determine the impact of the adoption of PSAK 24 Revision. Table 1 illustrates the average change in equity deflated by total assets during 2013–2016.

A mean comparison is conducted to test whether significant differences exist in the mean of the equity changes before and after the adoption of PSAK 24 Revision. Because of abnormal data distribution, a non-parametric method that does not require an assumption of the population distribution form [19] is used. The mean comparison test used is the Mann-Whitney U-test, which can be seen through Table 2.

TABLE I. TABLE 1 CHANGES IN EQUITY BALANCE 2013–2016

| Changes in Equity | Observations | Mean | Std. Deviation | Min | Max |
|---|---|---|---|---|---|
| 2013 | 242 | −0.006 | 0.107 | −0.439 | 0.576 |
| 2014 | 242 | 0.013 | 0.249 | −0.729 | 3.327 |
| 2013 & 2014 | 484 | 0.003 | 0.191 | −0.729 | 3.327 |
| 2015 | 242 | 0.005 | 0.092 | −0.372 | 0.672 |
| 2016 | 242 | 0.004 | 0.072 | −0.312 | 0.243 |
| 2015 & 2016 | 484 | 0.005 | 0.083 | −0.372 | 0.672 |

TABLE II. MANN–WHITHNEY U TEST

| Year | Sample | Mean | Result | |
|---|---|---|---|---|
| 2013 & 2014 | 484 | 0.003 | Prob > \|z\| | 0.047 |
| 2015 & 2016 | 484 | 0.005 | | |

Hypothesis 1 states that the changes in a company's equity after the adoption of PSAK 24 Revision is higher. At the 5% significance level, it can be concluded that there is a significant difference in average equity changes between before and after the PSAK 24 Revision application. This conclusion is obtained from the Mann-Whitney U-test that has a Prob > | z | smaller than 0.05.

### *B. Domination of OCI Components from PSAK 24*

The requirement to provide post-employment benefits to employees and recognition of actuarial gains (losses) on OCI makes the actuarial gains (losses) adjustment of post-employment benefits expected to dominate the comprehensive income of the company either from its presence or its value. Table 3 provides information on OCI components reported by the company since the enactment of PSAK 24 Revision. Table 3 shows that the most reported OCI component by listed companies in Indonesia in 2015 and 2016 is actuarial gains (losses). To compare the portion of actuarial gains (losses) with any other component, a Chi-squared proportion comparison test was conducted. The test results show a significance value of 0.000, with $\alpha = 5\%$, indicating that a significant proportion difference exists between actuarial gains (losses) with the proportion of other OCI components. To prove that actuarial gains (losses) dominate the firm's OCI in terms of value, descriptive statistics are used, as shown in Table 4.

The dominance of actuarial gains (losses) is also tested using the proportion test. Actuarial gains (losses) are considered to dominate companies' OCI if the proportion test with a 50% limit has a significant result. Based on the results of the test of proportion, the coefficient is 0.000.

### *C. Correlation of Significant Actuarial Assumptions with OCI*

PSAK 24 Revision requires the entity to disclose its major demographic and financial assumptions used in determining employee benefits obligations. Table 5 shows the number of companies that disclose both types of actuarial assumptions.

TABLE III. PRESENTATION OF OCI COMPONENTS 2015-2016

| OCI Components | Number of Companies | | | |
|---|---|---|---|---|
| | 2015 | (%)* | 2016 | (%)* |
| Actuarial gain (losses) | 286 | 96.6% | 287 | 97.0% |
| Remeasuremnt of AFS | 53 | 17.9% | 51 | 17.2% |
| Effective portion of cash flow hedge | 14 | 4.7% | 15 | 5.1% |
| Remeasurement of asset | 30 | 10.1% | 32 | 10.8% |
| Association and joint venture entity | 23 | 7.8% | 28 | 9.5% |
| Gain (losses) of translation | 73 | 24.7% | 75 | 25.3% |
| Number of samples | 296 | | 296 | |

[a.] *Percentage is calculated by dividing the number of companies that report OCI to the total sample number.

TABLE IV. PROPORTION OF ACTUARIAL GAINS (LOSSES) TO TOTAL OCI

| Year | Observations | Average proportion | Std. Deviation |
|---|---|---|---|
| 2015 | 286 | 0.69598 | 0.55731 |
| 2016 | 286 | 0.83191 | 1.46624 |
| 2015 – 2016 | 572 | 0.76395 | 1.11027 |

PSAK 24 Revision uses the concept of net interest, and the same interest rate is used to calculate interest expense for defined benefit obligations and interest revenue from plan assets. However, in practice, seven companies disclosed different interest rates between the interest rate used to calculate interest expense and the interest rate to calculate interest revenue. The discount rate used should refers to the interest rate of high-quality bonds or interest on government bonds. Thus, if the entire sample of companies complies with this rule, no significant difference between companies' discount rate assumptions will exist. To prove this point, this study analyzed the distribution of discount rates used by the company through normality testing.

Using Fig. 1, it can be concluded that the discount rate used by the samples does not have a normal distribution. This finding indicates, in general, that a discrepancy still exists in the selection of discount rates by the sample companies. One of the disclosures related to the actuarial assumptions made by the company is the sensitivity analysis of the changes in assumptions. Sensitivity analysis is performed by projecting changes that occur in the defined benefit obligation when, ceteris paribus, an assumption change. The company's notes to financial statements disclose a sensitivity analysis on discount rate and salary rate assumptions. Spearman's test, used to test the correlation between changes in actuarial assumptions and OCI, is shown in Table 6.

TABLE V. DISCLOSURE OF MAIN ACTUARIAL ASSUMPTIONS

| | Year (Number of Observation) | | |
|---|---|---|---|
| Actuarial Assumption | 2014 | 2015 | 2016 |
| Retirement age | 214 | 221 | 222 |
| Increase in health benefit | 3 | 3 | 3 |
| Discount rate | 256 | 261 | 261 |
| Salaries growth | 255 | 260 | 260 |
| Expected rate of return | 7 | 7 | 7 |
| Resignation rate | 110 | 113 | 113 |
| Mortality | 221 | 226 | 226 |
| Disability rate | 103 | 108 | 108 |
| Inflation rate | 2 | - | - |
| Total observations | 261 | 261 | 261 |

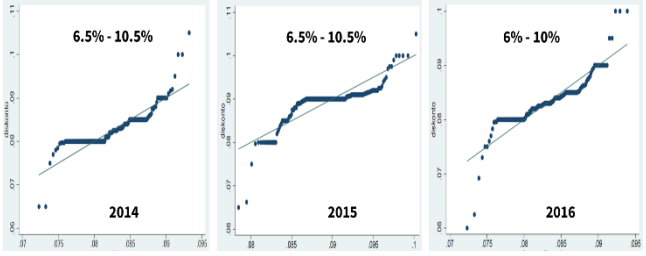


Fig. 1. Distribution of Discount Rate 2014–2016

TABLE VI. CORRELATION BETWEEN CHANGE IN ACTUARIAL ASSUMPTION WITH OCI

| Actuarial Assumption | ρ | Prob > \|t\| |
|---|---|---|
| Change in discount rate | 0.221 | 0.000 |
| Change in salaries growth | -0.195 | 0.000 |

Table 6 shows that changes in discount rate assumptions and salary growth affect actuarial gains (losses) at the 1% significance level. A change in the discount rate has ρ equal to 0.221, indicating that, ceteris paribus, a change in the discount rate has a correlation of 22.1% to actuarial gains (losses). The change in salary growth has a ρ of –0.195, indicating that, other assumptions unchanged, the change in the assumption of a salary increase is negatively correlated with actuarial gains (losses).

*D. Value Relevance of OCI Component from PSAK 24*

Prior to hypothesis testing, a descriptive statistical analysis and a correlation analysis were performed. Descriptive statistics are used to describe descriptive research data [20]. Descriptive statistics of the study sample is indicated in Table 7.

Table 7 indicates that the average sample company has positive stock returns, as observed from the positive CAR mean value. During the observation period, the average firms reported profits on OCI, as observed from the positive mean values of OCI24, OTHER_OCI24, and T_OCI. Correlation analysis is performed to determine the relationship between the variables studied. The correlation between variables is depicted through the numbers 0–1. The closer the correlation value to 1, the higher the correlation between the variables. A correlation value exceeding 0.8 indicates a multicollinearity problem [21]. The test results are presented in Table 8.

TABLE VII. DESCRIPTIVE STATISTICS SAMPLES

| Variables | Mean | Std. Deviation | Min | Max |
|---|---|---|---|---|
| CAR | 0.2222 | 0.5313 | -1.3897 | 1.8357 |
| OCI24 | 0.0003 | 0.0121 | -0.0606 | 0.0626 |
| OTHER_OCI24 | 0.0196 | 0.0865 | -0.3499 | 0.4034 |
| T_OCI | 0.0229 | 0.0974 | -0.3805 | 0.4416 |
| SIZE | 28.1359 | 2.1243 | 21.7318 | 33.7302 |
| LEV | 0.4619 | 0.2055 | 0.0076 | 0.9997 |

Based on Table 8, it can be concluded that OCI24 has a significant positive relationship with the company's stock return at α = 10%. This result indicates that, without any influence from other variables, firms with higher actuarial gains will have higher stock returns. The LEV variable has a significant positive correlation with the firm's stock return at α = 5%, indicating that, without influence from other variables, higher leverage results in higher stock returns. Meanwhile, others variable, namely, OTHER_OCI24, T_OCI, and SIZE, have no effect on CAR. By observing the correlation values between the variables, no variable indicates a multicollinearity problem.

Hypothesis testing is performed using a panel data regression on three research models by using a fixed effect estimation method. To fulfill the best linear unbiased estimate (BLUE) assumption, multicollinearity and heteroscedasticity tests were first performed [22]. No variable indicated a multicollinearity problem. The heteroskedasticity problem is overcome by the general least square (GLS) method. The results of the hypothesis testing are presented in Table 9.

The F statistic test is performed to prove the effect of the independent variables as a whole on the dependent variable. Table 9 indicates that the model used to prove the value relevance of OCI component from PSAK 24 Revision has Prob > chi2 of 0.0000. This result shows that the independent variables—EU, OCI24, OTHER_OCI24, and T_OCI—and the control variables—SIZE, and LEV—jointly affect the companies' CARs at the 1% significance level.

The t-statistic test is performed to test the significance of each independent variable on the dependent variable. Table 9 shows that actuarial gains (losses) consistently influence the significant returns of company stocks (OCI24), either individually or together with other OCI components (OTHER_OCI24) at α < 5%. However, the company's total comprehensive income (T_OCI) was not proven to affect stock returns. The control variable that proved to influence CAR is firm size (SIZE), shown with a probability value 0.0000 in model 1, model 2, and model 3, whereas the firm's leverage (LEV) is not significant in all models.

TABLE VIII. PEARSON CORRELATIONS BETWEEN VARIABLES

| Variables | CAR | OCI24 | OTHER_OCI24 | T_OCI | SIZE | LEV |
|---|---|---|---|---|---|---|
| CAR | 1.0000 | | | | | |
| OCI24 | 0.0778* | 1.0000 | | | | |
| OTHER_OCI24 | 0.1163 | -0.0001*** | 1.0000 | | | |
| T_OCI | 0.1234 | 0.1870 | 0.9434 | 1.0000 | | |
| SIZE | -0.2592 | -0.0617* | -0.1571 | -0.2016 | 1.0000 | |
| LEV | 0.0313** | -0.0177** | 0.0808* | 0.0847* | -0.0014*** | 1.0000 |

***Significant at α = 1%; ** Significant at α = 5%; * Significant at α = 10%

TABLE IX. HYPOTHESIS TESTING

| Dependent Variable: CAR | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| | *Coef.* | *Prob.* | *Coef.* | *Prob.* | *Coef.* | *Prob.* |
| UE | 0.6352 | 0.000*** | 0.6662 | 0.000*** | 0.6286 | 0.000*** |
| OCI24 | 3.6833 | 0.047** | 3.7123 | 0.039** | | |
| OTHER_OCI24 | | | 0.4148 | 0.1090 | | |
| T_OCI | | | | | 0.3743 | 0.1090 |
| SIZE | -0.0690 | 0.000*** | -0.0665 | 0.000*** | -0.0668 | 0.000*** |
| LEV | 0.1010 | 0.3520 | 0.0987 | 0.3570 | 0.0927 | 0.3890 |
| $R^2$ | 0.064 | | 0.0689 | | 0.0554 | |
| Prob > chi2 | 0.0000 | | 0.0000 | | 0.0000 | |

*** Significant at α = 1%; ** Significant at α = 5%; * Significant at α = 10%

The goodness of fit test is done to measure the value of the variation in the dependent variable that can be explained by the variation in the value of the independent variables. Table 9 shows that the $R^2$ values for all models are in the 5–7% range. This result indicates that the independent variables used in each model explain 5–7% of the variation in the dependent variable. The results of the other variables are not included in the research model.

The research model is used to measure the value relevance using the return model and is done by observing how the influence of the information related to the independent variables directly affect stock returns. This model was developed from previous research [23]; Mitra and Hossain, [14] to measure the value relevance of the OCI components. The results of the regression in model 1 and model 2 show that actuarial gains (losses) have a significant effect on returns, both individually and together, with other components of OCI. Other OCI components are not proven to have value relevance. The influence of the OCI24 variable on stock returns indicates that actuarial gains (losses) have value relevance. This finding is in accordance with Biddle and Choi [23] and Mitra and Hossain [14], who proved that the gains (losses) of employee benefits have value relevance. Thus, it can be concluded that the adoption of PSAK 24 Revision, which eliminates the recognition option and requires the recognition of actuarial gains (losses) in OCI, gives actuarial gains (losses) incremental value relevance. Model 3 tests whether the total OCI of the company has value relevance. Based on the regression result, OCI is not proven to affect stock returns; therefore, it can be concluded that, after the application of PSAK 24 Revision, total OCI has no value relevance. In line with model 1 and model 2, the EU and SIZE variables proved to affect the company's stock returns, whereas the firm's leverage has no relationship to stock returns.

## V. CONCLUSION

Based on the tests conducted, a significant difference exists between changes in companies' equity before and after the adoption of PSAK 24 Revision. On average, changes in a company's equity are higher after the adoption of PSAK 24 Revision. Following the adoption of PSAK 24 Revision, actuarial gains (losses) have proven to dominate OCI. This finding represents the effect of omitting options for recognizing the defined benefit actuarial gains (losses) that require the company to recognize all such gains (losses) as incurred in OCI.

The discount rate and salary growth assumptions were proven to be correlated with the firm's actuarial gains (losses) assuming other variables remain. PSAK 24 Revision stated that the discount rate assumption used by the company refers to the interest rate of high-quality corporate bonds or government bonds. Thus, no significant difference should exist between the discount rate assumption used by one company and another. The result of the observation concludes the opposite: the discount rate used by listed companies still has a wide range, indicating the diversity of the assumption.

The OCI component of the PSAK 24 Revision proved to have value relevance both individually and together with other components of OCI. However, other OCI components and total OCI have not been shown to affect the firm's stock returns. This study only measures volatility based on changes in company equity without limiting other factors that cause changes in equity. Volatility is usually measured using standard deviations over long periods. The number of years of observation used in analyzing the relevance of actuarial gains (losses) and other OCI components was only two. Thus, further research is expected to use a longer observation period. In addition, many variables still need to be considered because their $R^2$ values are low.

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