

Modification of Financial Ratio Analysis Based on Fair Value: Is It More Predictive?

Nur Rahmanti Ratih¹, Marhaendra Kusuma*²,

Yuniep Mujati Suaidah³, Abdul Hadi Bin Ahamad⁴

^{1,2}Universitas Islam Kediri, Jl Sersan Suharmaji 38 Kota Kediri, Indonesia

³ITEBIS PGRI Dewantara, Jl. Prof. M. Yamin No 77 Pandanwangi, Jombang, Indonesia

⁴Universiti Teknologi MARA, Jalan Ilmu 1/1, 40450 Shah Alam, Selangor, Malaysia

ABSTRACT

The purpose of this study is to respond to these profit changes by modifying the ROA, ROE, and NPM ratio formulas by expanding the concept of "earnings" to include comprehensive income and attributable income. Observational data from 2,641 firm-years from 543 publicly listed companies in Indonesia for the 2020-2024 period using multiple linear regression analysis. The results of this study indicate that modified financial ratio analysis has value relevance because it influences stock returns and has predictive power over dividends. The implication of this finding is that profitability using comprehensive income has value relevance and that level 1 of the fair value hierarchy is the most predictive and most responded to by the market, compared to comprehensive income and attributable income. The originality of this study examines the value relevance of using modified financial ratio analysis, specifically profitability, by involving comprehensive income and attributable income.

Keywords: attributable profit profitability; comprehensive income profitability; financial ratio analysis; value relevance.

INTRODUCTION

Financial Accounting Standards (SAK) in the preparation and presentation of financial statements, use the fair value accounting approach, because it is more representative of the actual conditions and is expected to have more relevance to users. Valuation and presentation of assets at fair value give rise to unrealized gains or losses which are the difference between the fair value and the acquisition or recorded value, in the circumstances when financial statements are presented. Assets recorded at book value, acquisition cost, or historical cost are adjusted to fair value at the date of presentation of the financial statements, and the valuation difference is recognized as other comprehensive income (OCI) and presented in the income statement. This difference is referred to as other comprehensive income (OCI). The all-inclusive income approach used by SAK and IFRS in defining income, is the argument why OCI, although not real realized income, is presented in the income statement together with real realized income in net income. In its presentation in the income statement, OCI is presented in detail per item and grouped into two groups, namely items that will be reclassified to net income and those that will not. The sum of OCI and net income is called comprehensive income (Kusuma and Kusumaningarti, 2023).

The addition of OCI information, net income attributable to owners (parent and non-controlling), comprehensive income attributable to owners in the presentation of this consolidated income statement

has been around for a long time, precisely since the SAK Effective Per June 1, 2012. Unfortunately, the use of this additional information in financial ratio analysis for financial performance evaluation, both by financial analyst practitioners, learning in universities, or financial researchers is still rarely used. Financial ratio analysis still focuses on net income, not many involve comprehensive income, OCI, and OCI reclassification. In fact, OCI, although in the presentation period is unrealized income that does not affect cash flow, several OCI items have the potential to become realized income that affects the value of net income and cash flow, through realization (sale of assets or debt repayment) in the coming period. So that OCI (and comprehensive income) are better able to describe future conditions, than net income. In line with the evidence provided by Shi, Wang and Zhou (2017) and Kusuma (2020) who found that comprehensive income is better able to predict future income and cash flows, than net income and cash flows themselves. OCI is an “output” of the application of fair value accounting in the presentation of financial statements, so involving OCI and comprehensive income in the financial ratio analysis shows that it has taken into account the effect of the application of fair value accounting on a more comprehensive evaluation of financial performance. OCI has characteristics such as management subjectivity in its assessment, its high sensitivity to uncertainty and fluctuations in the company’s external environmental conditions beyond management control which have an impact on the fair value of assets and liabilities, so involving OCI and comprehensive income in the financial ratio analysis, especially in conditions during and after the Covid-19 Pandemic, shows that it has taken into account the effect of future uncertainty and macroeconomic fluctuations on a more comprehensive evaluation of financial performance (Rahayu and Kusuma, 2020).

Similar to OCI, the presentation of profit and equity attribution is a “new” phenomenon in the presentation of consolidated financial statements in Indonesia. Previously, before convergence, the contents of the income statement were purely net income, without further information regarding net income and comprehensive income disaggregated to each type of owner (owners of the parent entity and owners with non-controlling interests), as well as the contents of the balance sheet were purely assets, liabilities and equity, without disaggregating equity to each type of owner. In the old accounting standards, non-controlling interests were not recognized as owners, but were considered as expenses so that they were presented in the balance sheet in the liabilities group and in the income statement in the expenses group (Kusuma and Agustin, 2024). In the current SAK, non-controlling interests are recognized as part of the company’s owners, so that they are worthy of being presented in equity and receive a “share” of ownership rights to the net assets of the group entity presenting the consolidated financial statements, which is accommodated in the equity disaggregation, namely equity attributed to owners of the parent entity and equity attributed to non-controlling interests. Likewise, the disaggregation of net income and comprehensive income into those attributable to owners of the parent entity and non-controlling interests. Unfortunately, the use of this additional attribution information in financial ratio analysis for evaluating financial performance, either by financial analyst practitioners, learning in universities, or financial researchers is still rarely used (Kusuma, 2023b). The negative impact of not using attributable profit information will be felt in companies that have many subsidiaries, and the percentage of NCI ownership is relatively large in the subsidiaries, the use of aggregate net income has the potential to be biased, because in aggregate profit not all are the rights of the parent entity owners, there are NCI rights to the profit. Attributable profit is rarely used by analysis practitioners because this type of profit is not yet popular, the regulations that require its presentation are also relatively new, analysis practitioners are more accustomed to net income information as aggregate profit, and not all companies have subsidiaries

so they do not present consolidated financial statements, where attributable profit only appears in the consolidated financial statements.

Financial ratio analysis still focuses on net income (aggregate) and equity (aggregate), not many involve comprehensive income and equity disaggregated into attributions to parent and non-controlling owners (Rahayu, 2019); (Zarefar and Armadani, 2024). In fact, the attribution of profit and equity reflects the “allocation” of profit performance and net asset ownership rights of the group entity, the allocation of which is proportional to the amount of share ownership of each type of owner. Thus, involving profit and equity attributable in financial ratio analysis is more realistic for predicting future investment returns according to the proportion of share ownership held by each owner, rather than aggregate profit and equity. Especially for non-controlling interests in subsidiaries, it is more realistic to attribute profit to them than aggregate profit which predominantly contains profit for owners of the parent entity.

So far, research in measuring financial performance, especially profitability, has mostly only used one concept of profit in interpreting “Return” in Return on Asset (ROA), Return on Equity (ROE) and Net Profit Margin (NPM). Net income is no longer sufficient as the sole benchmark for assessing profitability because it only includes realized profits and excludes potential revenue from the realization of assets in the shorter future periods. Furthermore, there are limitations to the game of accrued revenue and accrued expenses. In fact, along with the addition of comprehensive income and attributable income items, the type of profit becomes more than just net income. Likewise, in interpreting “Equity” in the formulation of ROE, most only use one concept of aggregate equity. In fact, the content of equity in the financial position report does not stop at aggregate equity, as the total sum of capital deposits, retained earnings, and additional paid-in capital. After that, there is still equity disaggregation, namely equity attributed to the parent owner as the controller in the parent entity and non-controlling minority owners in subsidiaries that are one group in the consolidated financial statements. The originality of this study is to test the relevance of the value of profit information with the modification of the profitability ratio by measuring ROA, ROE and NPM using comprehensive income and attributable income, and specifically ROE also uses equity attributed to owners. This research is academically useful by filling the gap in the literature on the relevance of the value of profit information with the modification of the profitability ratio in line with the application of fair value, all inclusive income and entity theory. The results of this study are useful for users of financial statements to also use information on various types of profit widely, not limited to net profit.

Financial Ratio Analysis

The theories underlying this research are fair value accounting (PSAK 68) and entity theory in the presentation of consolidated financial statements (PSAK 65), as well as the concept of value relevance of financial reporting in the Conceptual Framework for Financial Reporting. The application of fair value accounting is the basis for the presentation of comprehensive income, where unrealized income from adjusting the carrying amount to fair value is presented in the income statement. The entity theory is the basis for the presentation of attributable income, where non-controlling interests in subsidiaries are entitled to information on profit disaggregation in the presentation of consolidated financial statements. Both are efforts to improve the quality of profit information and the value relevance of financial statements. Financial ratio analysis is a tool to evaluate the financial performance of an entity through financial statements by using ratio formulations for items in the financial statements and then interpreting them.

Financial ratio analysis is a tool to evaluate the financial performance of an entity through financial statements by using ratio formulations for items in the financial statements and then interpreting them. Financial performance evaluation is needed to assess the level of health, evaluate target achievement, evaluate management performance, predict future performance as a basis for decision making (Zarefar and Armadani, 2024). Financial ratio analysis is divided into: 1). conventional financial ratio analysis, and 2). modified ratio analysis. Conventional ratio analysis, namely ratio analysis involving net income (NI) and aggregate equity information. This is commonly explained in financial literature and used by practical analysis and research so far. The conventional ratio analysis discussed in this study is only the profitability and solvency ratios, which contain information on profit and equity. Conventional profitability ratios (based on net income) (Rahayu, 2019), consist of:

Return on assets (ROA-NI), shows the effectiveness of the use of assets in generating net income:

$$ROA (NI) = \frac{Net\ Income}{Total\ Asset}$$

Return on equity (ROE-NI), shows the effectiveness of the use of equity (aggregate) in generating net profit:

$$ROE (NI) = \frac{Net\ Income}{Total\ Equity}$$

Net profit margin (NPM-NI), shows the comparison of net profit with net sales:

$$NPM (NI) = \frac{Net\ Sales}{Net\ Income}$$

Solvency or leverage ratio, using the Debt to equity ratio (DER), which shows the comparison of debt to equity:

$$DER = \frac{Total\ Debt}{Total\ Equity}$$

Modified ratio analysis, meaning the formulas of various conventional financial ratios are modified in accordance with changes in the content of the presentation of financial statements, namely the presence of other comprehensive income information or OCI (aggregate and disaggregate based on what will and will not be reclassified), comprehensive income (which is the sum of net income with OCI), attribution to owners of the parent entity and non-controlling interests of net income, comprehensive income and equity.

Modification Involving Comprehensive Income, namely financial ratio analysis involving other comprehensive income information (OCI), either aggregate, detailed per item or disaggregated into groups that will and will not be reclassified to net income. Comprehensive income (CI) is the sum of net income and OCI. The presentation of OCI and comprehensive income information is required by Financial Accounting Standards (SAK) since June 1, 2012, but not many financial accounting researchers or practitioners have involved OCI and comprehensive income in conducting financial ratio analysis. This analysis is a form of development of conventional ratio analysis. The advantage of using comprehensive ratio analysis is that it takes into account the impact of the external environment beyond the control of management that is full of uncertainty (which is accommodated in OCI) which may affect future

financial performance, so that it can be used more to predict future investment performance and returns. This analysis is also more in line with the application of fair value accounting which is the basis for the preparation and presentation of current SAK. The application of fair value accounting is accommodated in OCI which is the difference between the acquisition value (historical value or recorded value) and the fair value. The use of OCI and comprehensive income in measuring financial performance as research variables in Indonesia was initiated by research of Kusuma (2021a); Kusuma, Assih and Zuhroh (2021) and Kusuma (2021b), while abroad it has begun to be used in research including by Būmane (2018) in Latvia, Gazzola and Amelio (2014) in the Czech Republic and Marchini and D'Este (2015) in Italy. Modified profitability ratios based on comprehensive income (CI), consist of:

Return on assets (ROA-CI), shows the effectiveness of asset use in generating comprehensive income:

$$ROA (CI) = \frac{\text{Comprehensive Income}}{\text{Total Asset}}$$

Return on equity (ROE), shows the effectiveness of the use of equity (aggregate) in generating comprehensive profit:

$$ROE (CI) = \frac{\text{Comprehensive Income}}{\text{Total Equity}}$$

Net profit margin (NPM), shows the comparison of comprehensive profit with net sales and realized profits (losses) from the realization/sale of assets (liabilities) which in the previous period were presented as OCI:

$$NPM (CI) = \frac{\text{Net Sales} + \text{Gains from Realized Assets}}{\text{Comprehensive Income}}$$

Profitability ratio involving OCI but only items presented in the group "to be reclassified to net income" or abbreviated as ROCI (OCI Reclassification). Return on assets (ROA-OCI), shows the effectiveness of asset use in generating comprehensive income:

$$ROA (ROCI) = \frac{\text{Net Income} + \text{OCI to be Reclassified}}{\text{Total Asset}}$$

Return on equity (ROE), shows the effectiveness of the use of equity (aggregate) in generating comprehensive profit:

$$ROE (ROCI) = \frac{\text{Net Income} + \text{OCI to be Reclassified}}{\text{Total Equity}}$$

Net profit margin (NPM), shows the comparison of comprehensive profit with net sales and realized profits (losses) from the realization/sale of assets (liabilities) which in the previous period were presented as OCI:

$$NPM (ROCI) = \frac{\text{Net Sales} + \text{Gains from Realized Assets}}{\text{Net Income} + \text{OCI to be Reclassified}}$$

Modification involving attribution to parent entity owners and non-controlling interests, namely financial ratio analysis involving information on profit and equity attributed to two types of company owners in the presentation of consolidated financial statements, namely parent entity owners (with

majority shareholding above 50% and having control rights) and owners with non-controlling interests (minority shareholders in subsidiaries). Similar to OCI and comprehensive income, the presentation of information on profit and equity attributed is required by SAK since June 1, 2012, but not many researchers or financial accounting practitioners involve profit and equity attributed in conducting financial ratio analysis (Margaret and Hidayat, 2016). In fact, by using profit and equity attributed, it is more in line and proportional to the percentage of share ownership of investors or prospective investors whether they are majority or minority shareholders. Profit and equity attributed are proportional to the allocation of profit and dividends) to each type of owner, rather than aggregate profit and equity (Athori and Kusuma, 2023). The modified profitability ratio of profit and equity attributable to owners of the parent entity (PEI) and non-controlling interests (NCI) is as follows:

ROA with NI attributable to owners of the parent entity (PEI) (Kusuma, Assih and Zuhroh, 2021); (Yahaya, Fagbemi and Oyeniyi, 2015); (Yan and He, 2018) :

$$ROA (NI PEI) = \frac{\text{Net Income Attributable to Owners of the Parent Entity}}{\text{Total Asset}}$$

ROA with CI attributable to owners of the parent entity (PEI):

$$ROA (CI PEI) = \frac{\text{CI Attributable to Owners of the Parent Entity}}{\text{Total Asset}}$$

ROA with NI attributable to non-controlling interests (NCI):

$$ROA (NI KNP) = \frac{\text{Net Income Attributable to Non Controlling Interests}}{\text{Total Asset}}$$

ROA with CI attributed to non-controlling interests (NCI)

$$ROA (CI KNP) = \frac{\text{CI Attributable to Non Controlling Interests}}{\text{Total Asset}}$$

ROE with NI attributable to owners of the parent entity (PEI):

$$ROE (NI PEI) = \frac{\text{Net Income Attributable to Owners of the Parent Entity}}{\text{Equity Attributable to Owners of the Parent Entity}}$$

ROE with CI attributable to owners of the parent entity (PEI):

$$ROE (CI PEI) = \frac{\text{CI Attributable to Owners of the Parent Entity}}{\text{Equity Attributable to Owners of the Parent Entity}}$$

ROE with NI attributable to non-controlling interests (NCI):

$$ROE (NI KNP) = \frac{\text{Net Income Attributable to Non Controlling Interests}}{\text{Equity Attributable to Non Controlling Interests}}$$

ROE with CI attributable to non-controlling interests (NCI):

$$ROE (CI KNP) = \frac{\text{Net Income Attributable to Non Controlling Interests}}{\text{Equity Attributable to Non Controlling Interests}}$$

Net profit margin, shows the comparison of net profit (NPM NI) and comprehensive profit (NPM CI) with net sales. NPM with NI attributed to PEI:

$$NPM (NI PEI) = \frac{Net\ Sales}{Net\ Income\ Attributable\ to\ Owners\ of\ the\ Parent\ Entity}$$

NPM with NI attributable to non-controlling interests (NCI):

$$NPM (NI KNP) = \frac{Net\ Sales}{Net\ Income\ Attributable\ to\ Non\ Controlling\ Interests}$$

NPM with CI attributable to owners of the parent entity (PEI):

$$NPM (CI PEI) = \frac{Net\ Sales + Gains\ from\ Realized\ Assets}{CI\ Attributable\ to\ Owners\ of\ the\ Parent\ Entity}$$

NPM with CI attributed to non-controlling interests (NCI)

$$NPM (CI KNP) = \frac{Net\ Sales + Gains\ from\ Realized\ Assets}{CI\ Attributable\ to\ Non\ Controlling\ Interests}$$

Solvency ratio or leverage with debt to equity ratio, shows the comparison of debt to equity attributed to PEI and NCI. DER with equity attributed to PEI:

$$DER PEI = \frac{Total\ Debt}{Equity\ Attributable\ to\ Owners\ of\ the\ Parent\ Entity}$$

DER with equity attributable to NCI:

$$DER KNP = \frac{Total\ Debt}{Equity\ Attributable\ to\ Non\ Controlling\ Interests}$$

Relevance Value of Financial Reports

The relevance value of financial statements is the suitability and usefulness of the information contained in the financial statements with the needs of users. The relevance value is indicated by the use of financial statement information by users as a basis for making decisions. An indicator that accounting information is used by users in this case investors is the change in stock prices or stock returns before and after the financial statements are published. Stock returns illustrate investors' reaction to the information contained in the financial statements, such as net income, operating cash flow, dividends and so on. Investor reactions to information in the financial statements are in the form of decisions to buy shares from the entity presenting the financial statements, hold shares, and also sell shares which ultimately the market mechanism forms stock prices (Kusuma *et al.*, 2022).

In addition to being proxied by stock returns, the relevance value can also be indicated by the ability of current period financial statement information to predict future information. The future information that prospective investors want to know is the company's ability to pay dividends, which is reflected in the prospects for future cash flows and future dividends. Dividends are the rights of company owners or shareholders to operational performance reflected in net income. Getting optimal dividends is one of the motivations for investors to invest in stock securities. Regular dividend payments that tend to experience an upward trend, in line with signaling theory, will spur an increase in stock prices and company value (Kusuma, 2021b).

Prediction of future dividends can be done by regressing current period accounting information with dividends in the next period. Modification of dividend predictions can be done by linking dividends attributed to two types of owners (parent and non-controlling interests) with profits and equity attributed to two types of owners. Dividend information is presented in the financial statements, especially in the statement of changes in equity, but still in aggregate. If we want to know the dividends attributed, we can find out from the proportion of net income attributed. Total net income (aggregate) how much percentage is attributed to the owners of the parent entity, and how much percentage is attributed to non-controlling interests (Kusuma and Agustin, 2023). The percentages of each are used to obtain the disaggregation value of dividends to each owner. Dividends attributable to PEI can be calculated by multiplying the percentage of PEI NI to aggregate NI, by the dividends stated in the statement of changes in equity:

$$\text{Dividends Attributable to Owners of the Parent} = \left(\frac{NI_{PEI}}{Total\ NI} \times 100\% \right) \times Total\ Dividends$$

Dividends attributable to NCI can be calculated by multiplying the percentage of NCI NI to aggregate NI, by the dividends stated in the statement of changes in equity:

$$\text{Dividends Attributable to NCI} = \left(\frac{NI_{NCI}}{Total\ NI} \times 100\% \right) \times Total\ Dividends$$

The theory of information content of earnings (Ball and Brown, 1968) states that earnings reported in financial statements have information content for the public, especially market players, this is indicated by changes in stock prices before and after the company announces earnings. Ball & Brown then tested this theory again with more data, namely internationally, where previously only in the United States capital market, and a longer and more recent time period, the results are consistent with the previous ones, or support the theory put forward from previous empirical evidence (Ball and Brown, 2019). Market players await earnings announcement information in making investment decisions because earnings are perceived by the market as an indicator of the company's ability to pay investment returns and the prospect of cash availability in the next period in the future. Along with the development of the company's business environment and the regulations inherent in it, the content of the income statement has also developed, namely the addition of total comprehensive income and profit attributable to shareholders. The results of the (Kanagaretnam, Mathieu and Shehata, 2009) in Canada, (Banks, Hodgson and Russell, 2018) in Australia, (Yousefinejad, Ahmad and Zaini, 2017) in Malaysia, (Rahayu and Kusuma, 2020) in the ASEAN market, and (Kusuma, 2023c) in Indonesia prove that comprehensive income and attributable income have information content like net income.

Signaling theory (Spence, 1974) states that financial statements are a signal from management to market players about performance, ability, and predictive material in providing input for deciding matters related to the company, both investment decisions and financing in the future. Profit is a signal about the company's performance that shows financial health, expectations of returns received by fund providers in the future, based on historical information from the current and previous periods. All types of profit items contained in the income statement each contain different signals related to financial performance, especially the company's profitability. Gross profit is a signal of the ability to efficiently produce costs and optimize sales. Operating profit is a signal of matching operating income with periodic operating expenses. Conventional ROA and ROE use net profit as a signal of performance from realized income and expenses, both cash and accrual. ROA, ROE and modified NPM based on comprehensive income are signals of combined performance of realized and unrealized profits. ROA, ROE and modified NPM

based on attributable profits are signals of profit distribution for each type of shareholder in one parent group entity (Murdiyanto and Kusuma, 2022).

Agency theory (Jensen and Meckling, 1976) explains that the separation of principals and agents brings about differences in interests and access to information that can affect the quality of information reflected in financial statements. In addition to the independence and professionalism of independent auditors playing a role in reducing this agency problem, transparency of information also plays a major role. The form of transparency is the presence of comprehensive income and attributable income presentation items. With comprehensive income, agents provide transparency of information on the potential for future profit receipts from the realization of increases in the fair value of productive assets where in the current period it is in the information on the other comprehensive income (OCI) post with the presentation name that will be reclassified to net income (Kusuma, 2024). This transparency increases the predictability of current period profits and reduces type 1 agency problems. The next form of transparency is the presence of net income information attributed to each type of group entity shareholders and comprehensive income information attributed to each type of group entity shareholders, both shareholders with large ownership and full control and small shareholders in subsidiaries without control rights. This transparency increases the predictability of current period profits and reduces type 2 agency problems (Kusuma and Athori, 2023). The results of Kusumaningarti, Kusuma and Athori (2025) research prove that attributable profit has value relevance and the ability to reduce agency problems of public companies. Sarwono and Jundia (2024) added that transparent profitability measurement can reduce agency problems in government institutions between the government as an agent and the people through legislative representatives as principals, as well as in commercial banking institutions between fund owners and fund managers (Ardaranie, Mulyani and Handayani, 2024). The presence of comprehensive income and attributable income causes an increase in audit procedures, which has an impact on the audit completion time (Agustin and Kusuma, 2024) and the amount of fees for independent auditors (Kusuma and Luayyi, 2024). The presence of comprehensive income and attributable income opens up opportunities for income management, income smoothing (Kusuma, 2023a) and tax avoidance (Wahyudi, Sari and Kusuma, 2024). With the modification of the measurement of comprehensive income profitability, it increases its relationship with sustainability performance (Andriana *et al.*, 2025); (Athori *et al.*, 2025).

The efficient market hypothesis theory (Fama, 1970) states that the stock price of a company is formed from all information available in the market about the company. One of the available information is the financial report which contains information on conventional profit in the form of net profit, and profit from the development of the latest accounting standard regulations, namely comprehensive profit and attributable profit. The results of Kusuma (2020b) research show that comprehensive profit has a positive effect on stock prices, and attributable profit is also positively reacted to by the market. Kusuma and Kusumaningarti (2023) in her study developed the concept of the Earnings Responses Coefficient (ERC) which was previously introduced by Scott (2012), by testing the market reaction to comprehensive profit which is then termed the Comprehensive Earnings Response Coefficient (C-ERC) and testing the market reaction to attributable profit which is then termed the Attributable Earnings Response Coefficient (A-ERC), and the test results concluded that the order of market reaction is net profit, followed by comprehensive profit and finally attributable profit.

The Conceptual Framework for Presentation of Financial Statements (IFRS and Indonesian SAK) states that the main characteristic of financial statements that have value relevance for users is that financial statements have the ability to influence user decisions. The ability of financial statements

to influence user decisions can be realized by changes in the company's stock price after the audited financial statements are published publicly. In order to have the ability to influence user decisions, important financial statement items must have the ability to predict important information that will occur in the future, for example, current period profitability can predict investment returns received by investors in the future. In an effort to improve value relevance, information quality and reliability of financial reporting (Kusuma *et al.*, 2021). SAK as a financial accounting standard in Indonesia, uses the basis of fair value accounting theory, the concept of all-inclusive income recognition and entity theory used by IFRS. Fair value accounting theory is used as a basis because it has more representation value, namely it is more capable of reporting assets at their actual value conditions in the financial statement position response, than the historical value previously used. Historical values are outdated, do not have the ability to show values that are in accordance with current conditions (Kusuma and Rahayu, 2022). Adjustments of assets from historical value to current fair value are recognized and reported as Other Comprehensive Income (OCI) (Kusuma and Saputra, 2022). PSAK No. 10 which was later revised in PSAK No. 113 states that in the valuation of assets based on fair value, there are three fair value inputs that will further affect the quality of OCI. OCI level 1 is obtained from the valuation of assets whose fair value is objectively available in the market, such as the fair value of financial assets in the form of stock securities investments, stock prices available in the capital market. OCI level 2, market prices are not available but similar substitute prices are available, for example foreign exchange rates in assessing cash flow hedges. OCI level 3, market prices and similar substitute prices are not available in the active market, so that management subjectivity is high in assessing assets. This fair value hierarchy further affects the quality of comprehensive income information. Comprehensive income with OCI level 1 has a greater influence coefficient than OCI level 3. The concept of all-inclusive income recognition is used as the basis for including OCI in the income statement, although the OCI components are unrealized income, but because they affect equity and meet the definition of income, OCI must be presented in the income statement (Kusuma, Marjukah and Kasim, 2025). In the old accounting standards before IFRS convergence (SAK before 2009), the concept of net surplus income was adopted, so that OCI was not recognized and was not presented in the income statement.

The entity theory is used as a basis because it has more value of fairness of rights and information about the existence of shareholders without controlling rights (hereinafter referred to as Non Controlling Interest or NCI) in subsidiaries in presenting consolidated financial statements. In previous accounting standards, NCI was presented floating in the financial position statement in a post between debt and equity. In the current SAK, NCI is clearly presented in equity, and even transparently states the equity attributed to NCI. This presentation is not limited to transparency and recognizing the existence of NCI as the owner of the company, but also makes it easier for NCI to know its rights to the net assets of the group company, making it easier for it to predict the return on its investment in the future. In addition, in previous accounting standards, NCI was in the income statement as an expense. In the current SAK, NCI is not recognized as an expense, but becomes part of the owner represented in net income attributed to NCI and net income attributed to NCI. This presentation is not limited to transparency and recognizing the existence of NCI as the owner of the company, but also makes it easier for NCI to know its rights to the distribution of group company profits, making it easier to predict the return on its investment in the future (Kusuma and Luayyi, 2024). Kusuma (2021a) research results prove that ROA comprehensive profit and ROA attributable profit can predict capital gains that will be received by investors. Kusuma (2024) concluded that profitability of comprehensive profit can predict bankruptcy. The hypothesis proposed by this study is:

- H1. The profitability of conventional measurement using net income has a positive effect on stock returns.
 H2. The profitability of modified measurement using comprehensive income has a positive effect on stock returns.
 H3. The profitability of modified measurement using attributable income has a positive effect on stock returns.

METHOD, DATA, AND ANALYSIS

This study uses a quantitative paradigm. Secondary data was obtained from the financial statements of companies listed on the IDX 2020-2024 with a population of 917 companies. The sample selection method was purposive sampling and obtained a sample of 543 companies and observation data n = 2,641, with the following details:

Table 1. Sample Selection Criteria

Criteria	Quantity
Population of companies listed on the IDX 2020-2024	917
Reduced:	
Listed after 2020	(201)
Financial reports are not routine	(116)
Incomplete information on OCI & profit attribution	(57)
Sample	543
Sample x Period	2.715
Outlier data	(74)
Observation data	2.641

Source: Investment Gallery, Universitas Islam Kadiri, 2025.

Value relevance is indicated by the ability to influence users as measured by significant influence on stock returns that represent the reaction of stock market players. The ability of conventional financial ratios using aggregate net income and aggregate equity in influencing stock returns (stock returns reflect user reactions after the publication of financial statements) is described in the following model 1:

$$RS_{i,t} = \alpha_0 + \beta_1 ROA(NI)_{i,t} + \beta_2 ROE(NI)_{i,t} + \beta_3 NPM(NI)_{i,t} + \beta_4 DER_{i,t} + \beta_5 SIZE_{i,t} + \epsilon \tag{1}$$

The ability of the modified comprehensive profit financial ratio (net profit replaced by comprehensive profit) to influence stock returns is described in the following model 2:

$$RS_{i,t} = \alpha_0 + \beta_1 ROA(CI)_{i,t} + \beta_2 ROE(CI)_{i,t} + \beta_3 NPM(CI)_{i,t} + \beta_4 SIZE_{i,t} + \epsilon \tag{2}$$

The ability of the modified financial ratio (aggregate profit and equity replaced by profit and equity attributed to owners of the parent entity) to influence stock returns is described in the following model 3:

$$RS_{i,t} = \alpha_0 + \beta_1 ROA(NIPEI)_{i,t} + \beta_2 ROA(CIPEI)_{i,t} + \beta_3 ROE(NIPEI)_{i,t} + \beta_4 ROE(CIPEI)_{i,t} + \beta_5 NPM(NIPEI)_{i,t} + \beta_6 NPM(CIPEI)_{i,t} + \beta_7 SIZE_{i,t} + \epsilon \tag{3}$$

The hypothesis acceptance criteria are as follows, H1 that conventional profitability measurement using net income has a positive effect on stock returns, is accepted if ROA, ROE and NPM net income (NI) in model 1 have a positive coefficient sign with a significance level of t below 5%. H2 that modified profitability measurement using comprehensive income has a positive effect on stock returns, is accepted if ROA, ROE and NPM comprehensive income (CI) in model 2 have a positive coefficient sign with a significance level of t below 5%. H3 that modified profitability measurement using attributable income

has a positive effect on stock returns, is accepted if ROA, ROE and NPM income attributable to owners of the parent entity (PEI) in model 3 have a positive coefficient sign with a significance level of t below 5%.

Robustness Test

The robustness test is carried out by replacing the measurement of value relevance with the ability to predict future investment returns measured by the dividend payout ratio for period t+1. The ability of conventional financial ratios as predictors of future dividends is described in the following model:

$$DIV_{i,t+1} = \alpha_0 + \beta_1 ROA(NI)_{i,t} + \beta_2 ROE(NI)_{i,t} + \beta_3 NPM(NI)_{i,t} + \beta_4 DER_{i,t} + \beta_5 SIZE_{i,t} + \varepsilon \quad (4)$$

The ability of the comprehensive income modification financial ratio as a predictor of future dividends is described in the following model:

$$DIV_{i,t+1} = \alpha_0 + \beta_1 ROA(CI)_{i,t} + \beta_2 ROE(CI)_{i,t} + \beta_3 NPM(CI)_{i,t} + \beta_4 SIZE_{i,t} + \varepsilon \quad (5)$$

The ability of modified financial ratios, where aggregate earnings and equity are replaced by earnings and equity attributable to owners of the parent entity as a predictor of future dividends is illustrated in the following model:

$$Div_{i,t+1} = \alpha_0 + \beta_1 ROA(NIPEI)_{i,t} + \beta_2 ROA(CIPEI)_{i,t} + \beta_3 ROE(NIPEI)_{i,t} + \beta_4 ROE(CIPEI)_{i,t} + \beta_5 NPM(NIPEI)_{i,t} + \beta_6 NPM(CIPEI)_{i,t} + \beta_7 SIZE_{i,t} + \varepsilon \quad (6)$$

Additional Tests

Additional analysis to test the ability of modified financial ratios, where aggregate earnings and equity are replaced by earnings and equity with non-controlling interests as predictors of future dividends is described in the following model:

$$DIV_{i,t+1} = \alpha_0 + \beta_1 ROA(NINCI)_{i,t} + \beta_2 ROA(CINCI)_{i,t} + \beta_3 ROE(NINCI)_{i,t} + \beta_4 ROE(CINCI)_{i,t} + \beta_5 NPM(NINCI)_{i,t} + \beta_6 NPM(CINCI)_{i,t} + \beta_7 SIZE_{i,t} + \varepsilon \quad (7)$$

The ability of the comprehensive income modification financial ratio by disaggregating OCI based on the hierarchy of fair value levels in influencing stock returns is described in the following model:

$$RS_{i,t} = \alpha_0 + \beta_1 ROA(Level1)_{i,t} + \beta_2 ROA(Level2)_{i,t} + \beta_3 ROA(Level3)_{i,t} + \beta_4 SIZE_{i,t} + \varepsilon \quad (8)$$

RESULTS AND DISCUSSION

Results

The following table shows the results of descriptive statistics and the results of Pearson correlation analysis. The average stock return is 0.024; the average ROA net income is 0.048; the average dividend t+1 is 0.015. ROA using net income has an average of 0.048; comprehensive income is 0.051; and income attributable to the parent is 0.052. Conventional ROA with net income is positively correlated with stock returns with a coefficient of 0.621*** and dividend t+1 with a coefficient of 0.412**. Modified ROA with comprehensive income (ROA CI) is positively correlated with stock returns with a coefficient of 0.508** and dividend t+1 with a coefficient of 0.454**. Modified ROA with net income attributable to the parent (ROA NI PEI) is positively correlated with stock returns with a coefficient of 0.512** and dividend t+1 with a coefficient of 0.498**.

Modification of Financial Ratio Analysis Based on Fair Value: Is It More Predictive?
Nur Rahmanti Ratih, Marhaendra Kusuma, Yuniap Mujati Suaidah, Abdul Hadi Bin Ahamad

Table 2. Descriptive Statistics Results and Pearson Correlation Analysis Results

Variable	Mean	Min	Max	SD	Var	Mean	Min	Max	SD					
Panel A. Descriptive Statistics Results														
RS	0.024	-0.114	0.614	4.519	NPM CI	0.067	-0.053	0.080	3.822					
Div t+1	0.015	-0.187	0.332	5.206	ROA NI PEI	0.052	-0.048	0.068	5.931					
ROA NI	0.048	-0.074	0.081	4.371	ROE NI PEI	0.066	-0.057	0.074	4.040					
ROE NI	0.057	-0.062	0.077	5.824	NPM NI PEI	0.071	-0.067	0.082	5.159					
NPM NI	0.062	-0.054	0.096	5.539	ROA CI PEI	0.054	-0.048	0.069	9.268					
ROA CI	0.051	-0.047	0.084	7.605	ROE CI PEI	0.061	-0.053	0.075	7.377					
ROE CI	0.063	-0.052	0.073	11.741	NPM CI PEI	0.068	-0.052	0.064	10.486					
Panel B. Correlation Analysis Results														
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) RS	1	0.681***	0.621***	0.604***	0.547**	0.508**	0.512**	0.388*	0.578**	0.512**	0.547**	0.587**	0.445*	0.398*
(2) Div t+1		1	0.412**	0.503**	0.354*	0.454**	0.365*	0.276*	0.478*	0.498**	0.209	0.410*	0.321*	0.132
(3) ROA NI			1	0.73***	0.443*	0.554**	0.665**	0.576**	0.018	0.401**	-0.049	0.607***	0.418**	-0.042
(4) ROE NI				1	0.297*	0.218*	0.529***	0.431*	0.742***	0.635***	0.001	0.546**	0.871***	0.001
(5) NPM NI					1	0.356*	0.373**	0.784***	-0.039	-0.040	0.802***	-0.041	-0.042	0.874***
(6) ROA CI						1	0.551**	0.362*	0.778***	0.478	-0.049	0.803***	0.741***	-0.022
(7) ROE CI							1	0.435*	0.646***	0.385	-0.036	0.677***	0.589*	0.712***
(8) NPM CI								1	0.457*	0.219	0.751***	0.40**	0.318	-0.022
(9) ROA NI PEI									1	0.153	-0.034	0.750***	0.661***	-0.027
(10) ROE NI PEI										1	-0.311*	0.704***	0.644***	-0.048
(11) NPM NI PEI											1	0.581**	0.389*	0.678***
(12) ROA CI PEI												1	0.512**	-0.039
(13) ROE CI PEI													1	-0.020
(14) NPM CI PEI														1

Notes: Significance of Pearson correlation coefficient ***, **, * for 1%, 5%, 10% levels.

Hypothesis Test Results

The following table presents the results of hypothesis testing with multiple regression analysis. H1 that conventional profitability measurement using net income has a positive effect on stock returns is accepted because ROA = 0.828 (12.715)^{***}, ROE = 0.739 (9.826)^{***} and NPM net income (NI) 0.584 (10.937)^{***} in model 1 each have a positive coefficient sign with a significance level of t below 5%. H2 that modified profitability measurement using comprehensive income has a positive effect on stock returns is accepted because ROA = 0.691 (8.407)^{***}, ROE = 0.502 (8.518)^{***} and NPM comprehensive income (CI) = 0.501 (6.629)^{**} in model 2 each have a positive coefficient sign with a significance level of t below 5%. H3 that profitability measurement modification using attributable profit has a positive effect on stock returns, is accepted because ROA = 0.805 (9.729)^{***}, ROE = 0.716 (8.830)^{***} and NPM attributable profit to owners of the parent entity (PEI) = 0.727 (11.941)^{***} in model 3 each have a positive coefficient sign with a significance level of t below 5%. Based on the adjusted R2 value, the following three models show that model 1 (54.11%) has a larger adjusted R2 value than model 2 (40.20%) and model 3 (41.81%), this means that net profit is still superior in predicting future information and is more responded to by the market.

Table 3. Hypothesis Test Results

Variable	Value Relevance = Stock Return sebagai Y		
	Model 1	Model 2	Model 3
Intercept	0.415 (8.604)*	0.328 (10.463)*	0.334 (8.468)*
ROA NI	0.828 (12.715) ^{***}	-	-
ROE NI	0.739 (9.826) ^{***}	-	-
NPM NI	0.584 (10.937) ^{***}	-	-
ROA CI	-	0.691 (8.407) ^{***}	-
ROE CI	-	0.502 (8.518) ^{***}	-
NPM CI	-	0.501 (6.629) ^{**}	-
ROA NI PEI	-	-	0.805 (9.729) ^{***}
ROE NI PEI	-	-	0.716 (8.830) ^{***}
NPM NI PEI	-	-	0.727 (11.941) ^{***}
ROA CI PEI	-	-	0.538 (12.052) ^{***}
ROE CI PEI	-	-	0.449 (7.136) ^{**}
NPM CI PEI	-	-	-0.250 (5.247)*
SIZE	0.303 (5.157)*	-0.401 (5.579)*	0.361 (4.358)*
F	12.443 ^{***}	10.057 ^{***}	9.886 ^{***}
Adjusted R ²	0.5411	0.4020	0.4181

Notes:
Significance of regression coefficients ^{***}, ^{**}, ^{*} for levels 1%, 5%, 10%.

Source: Data processed by researchers, 2025

Model Robustness Test

The following table presents the results of the model robustness test, by replacing the dependent variable as a proxy for value relevance, from previously measured by stock returns as a proxy for how the market responds to profitability, replaced by the ability of profitability to predict important information in the future, which is represented by the predictive power of dividends as a reflection of investment returns.

Modification of Financial Ratio Analysis Based on Fair Value: Is It More Predictive?

Nur Rahmanti Ratih, Marhaendra Kusuma, Yuniap Mujati Suaidah, Abdul Hadi Bin Ahamad

Table 4. Model Robustness Test Results

Variable	Value Relevance = Dividen t+1 sebagai Y		
	Model 4	Model 5	Model 6
Intercept	0.451 (8.826)*	0.355 (9.747)*	0.366 (10.901)*
ROA NI	0.726 (12.937)***	-	-
ROE NI	0.673 (9.048)***	-	-
NPM NI	0.524 (10.159)***	-	-
ROA CI	-	0.569 (8.809)***	-
ROE CI	-	0.502 (8.912)***	-
NPM CI	-	0.411 (6.038)**	-
ROA NI PEI	-	-	0.727 (9.758)***
ROE NI PEI	-	-	0.688 (8.967)***
NPM NI PEI	-	-	0.693 (11.076)***
ROA CI PEI	-	-	0.404 (12.185)***
ROE CI PEI	-	-	0.415 (7.294)**
NPM CI PEI	-	-	-0.262 (5.303)*
SIZE	0.301 (5.132)*	-0.389 (5.356)*	0.337 (4.412)*
F	12.984***	10.387***	9.078***
Adjusted R ²	0.5024	0.384	0.4045

Notes:
Significance of regression coefficients ***, **, * for levels 1%, 5%, 10%.

Source: Data processed by researchers, 2025

The models are consistent in providing results with hypothesis testing when value relevance is measured by the predictive power of dividends. Model 4 shows that ROA net income = 0.726 (12.937)***; ROE net income = 0.673 (9.048)***; NPM net income = 0.524 (10.159)*** has a positive effect on dividends in period t+1. Model 5 shows that ROA comprehensive income = 0.569 (8.809)***; ROE comprehensive income = 0.502 (8.912)***; NPM comprehensive income = 0.411 (6.038)**; has a positive effect on dividends in period t+1. Model 6 shows that ROA income attributable to controlling parent owners = 0.727 (9.758)***; ROE income attributable = 0.688 (8.967)***; NPM attributable profit = 0.693 (11.076)*** has a positive effect on dividends in period t+1.

Additional Test

The following table presents the results of additional analysis tests to test the ability of modified financial ratios, where aggregate profit and equity are replaced by profit and equity with non-controlling interests as predictors of future dividends (model 7) and the ability of modified financial ratios of comprehensive income by disaggregating OCI based on the hierarchy of fair value levels in influencing stock returns (model 8). The results of additional analysis show that the modified financial ratios, where aggregate profit and equity are replaced by profit and equity with non-controlling interests also have relevance ROA NI NCI = 0.708 (9.367)***; ROE NI NCI = 0.619 (8.845)***; NPM NI NCI = 0.620 (11.754)***. Related to the fair value hierarchy in valuing assets, the results of additional analysis show that comprehensive income with OCI category of fair value hierarchy input level 1, is more predictive and more reacted by the market than levels 2 and 3, ROA with OCI Level 1 = 0.551 (6.782)**; ROA with OCI Level 2 = 0.412 (5.211)*; ROA with OCI Level 3 = 0.016 (3.889). This shows that the objectivity of OCI affects the quality of comprehensive income information which then affects the value relevance.

Table 5. Additional Analysis Test Results

Variable	(Model 7) Y = Div _{t+1}	(Model 8) Y = RS
Intercept	0.397 (10.928)*	-0.446 (8.902)*
ROA NI NCI	0.708 (9.367)***	-
ROE NI NCI	0.619 (8.845)***	-
NPM NI NCI	0.620 (11.754)***	-
ROA CI NCI	0.431 (12.663)***	-
ROE CI NCI	0.454 (7.721)**	-
NPM CI NCI	-0.246 (5.821)*	-
ROA Level 1	-	0.551 (6.782)**
ROA Level 2	-	0.412 (5.211)*
ROA Level 3	-	0.016 (3.889)
SIZE	0.392 (43.034)*	0.622 (11.476)***
F	9.078***	5.872***
Adjusted R ²	0.401	0.2167

Notes :

Significance of regression coefficients ***, **, * for levels 1%, 5%, 10%.

Source: Data processed by researchers, 2025

Discussion

The Effect of Conventional Profitability Measurement Using Net Income on Stock Returns

The hypothesis testing of this study successfully proved that conventional profitability measurement using net income has a positive effect on stock returns. This means that net income has value relevance, because it is used by users as input in making investment decisions that are manifested in changes in stock prices after the publication of profit information in the financial statements. The theoretical meaning of the findings of this study is that net income information has value relevance. The results of this study support the theory of profit information content (Ball and Brown, 1968) and signal theory (Spence, 1973). The results of the model resilience test are also consistent with these findings, that net income has predictive power over future information, as a supporting reinforcement for having value relevance. These findings are in line with the evidence provided by Kusuma (2021b) that net income profitability has value relevance because it can increase the value of the company. The use of modified profitability ratio analysis involving comprehensive income plays a more significant role, especially when analyzing companies with significant holdings of available-for-sale financial assets. These assets are considered productive assets, particularly in the financial sector, with the goal of generating capital gains. These assets are typically released or realized when market prices rise, resulting in a relatively short ownership period. Using profitability based on comprehensive income is considered more appropriate because it better predicts future profits from the realization of these financial assets, which were previously presented in the OCI group to be reclassified. This group profitability ratio includes this, while the conventional profitability ratio only uses net income.

The Effect of Modified Profitability Measurement Using Comprehensive Income on Stock Returns.

The hypothesis testing of this study successfully proved that modified profitability measurement using comprehensive income has a positive effect on stock returns. This means that ROA, ROE, NPM

based on comprehensive income as an alternative modification of financial performance measurement, also have value relevance as well as net income, because it can be used by users as input in making investment decisions that are manifested in changes in stock prices after the publication of comprehensive income information in the financial statements, although it contains OCI which is unrealized income. The theoretical meaning of the findings of this study is that comprehensive income information has value relevance. The results of this study, in addition to supporting the theory of income information content (Ball and Brown, 1968) and signal theory (Spence, 1973), are also in line with the objectives of SAK shifting from historical cost to fair value. That this change is not limited to increasing the representative value of the presentation of assets and liabilities, but also the impact of the change that gives rise to OCI in comprehensive income, also has value relevance. The results of the model resilience test are also consistent with this finding, that comprehensive income has predictive power over future information, as a supporting reinforcement for having value relevance. These findings are in line with the evidence provided by Kusuma and Agustin (2024) and Andriana *et al.*, (2025) that comprehensive income profitability has value relevance because it is able to improve market performance and Athori *et al.*, (2025) that net income profitability improves sustainability performance.

The Effect of Profitability of Modified Measurement Using Attributable Profit on Stock Returns.

The hypothesis testing of this study successfully proved that profitability of modified measurement using attributable profit has a positive effect on stock returns. This means that ROA, ROE, NPM based on profit attributed to shareholders with majority ownership and control of the parent entity as an alternative modification of financial performance measurement, also has the same value relevance as net profit, because it can be used by users as input in making investment decisions that are manifested in changes in stock prices after the publication of attributable profit information in the financial statements, although it contains OCI which is unrealized income and has no relationship with cash flow and net profit in the current period. The theoretical meaning of the findings of this study is that information to shareholders with majority ownership and control of the parent entity has value relevance. The results of this study, in addition to supporting the theory of profit information content (Ball and Brown, 1968) and signal theory (Spence, 1974), are also in line with the objectives of SAK shifting from parent theory to entity theory. That this change is not only limited to increasing transparency, but also the impact of the change which places minority rights in the right position as part of the owner even though the shares are small without control rights, also has value relevance. The results of the model robustness test are also consistent with this finding, that profit attributed to shareholders with minority ownership in subsidiaries and without controlling rights (NCI) has predictive power over future information, as a supporting reinforcement of having value relevance. This finding is in line with the evidence provided by Kusuma and Athori (2023) that the profitability of attributable profit has value relevance because it can improve market performance.

CONCLUSION AND SUGGESTIONS

Conclusion

Modification of financial ratio analysis based on fair value using comprehensive income and attributable profit in the formulation of ROA, ROE and NPM is proven to have value relevance because it is able to influence user decisions including when replacing measurement of value relevance with the

dividend payout ratio, show that the modification of the fair value-based financial ratio analysis using comprehensive income and attributable income in the ROA, ROE and NPM formulations is proven to strengthen the conclusion that it has value relevance because it is able to predict dividends as a reflection of future investment returns. Aggregate income and equity are replaced by income and equity with non-controlling interests, also has relevance. Related to the fair value hierarchy in valuing assets, the results of additional analysis show that comprehensive income with OCI in the fair value hierarchy category of input level 1, is more predictive and more reacted to by the market than levels 2 and 3. This shows that the objectivity of OCI affects the quality of comprehensive income information which then affects value relevance. Net income is still superior in predicting future information and is more responded to by the market. This is because net income is the actual realized income and is considered by market players to best represent the company's performance compared to comprehensive income and attributable income. Comprehensive income contains elements of unrealized earnings which are limited to transitory income from adjustments for the current period, and attributable income becomes less relevant if a separate group entity presents financial statements with subsidiaries. This result is in line with Kusuma Buton's research, that ERC based on net income is the most relevant compared to ERC based on comprehensive income and attributable income.

Suggestion

The limitation of this study is that it has not modified profitability with a focus on operating profit. The latest accounting standard, IFRS 18, revises the appearance of the income statement with a focus on changes in the presentation of profit classification, especially on the meaning of operating profit. Further research is recommended to develop profitability based on operating profit and link it to market reactions and predictive power, in line with changes to SAK which will be effectively implemented on January 1, 2027. This study also has not explored what variables are able to moderate the value relevance of comprehensive income that is specific to the OCI level 3 fair value hierarchy test with its characteristics that contain high subjectivity because fair value is not actually available in an active market. Further research is recommended to test the moderating role of variables that strengthen the value relevance of OCI level 3.

REFERENCES

- Agustin, B. H. and Kusuma, M. (2024). Pengaruh Penghasilan Komprehensif Lain & Laba yang Diatribusikan Terhadap Audit Report Lag. *Jurnal Proaksi*, 10(4), pp. 739-752. doi: 10.32534/jpk.v11i4.6323.
- Andriana, R. *et al.* (2025). The Effect of Marketing Activities on Profitability With Others Comprehensive Income As Moderation: Evidence from Southeast Asia. *Ekulibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi*, 20(1).
- Ardaranie, R., Mulyani, S. and Handayani, R. T. (2024). What Factors Affect Profitability/ ? (Case Study on Conventional National Private Bank Listing on Indonesian Stock Exchange Period 2019-2022). 10(13), pp. 290-305.
- Athori, A. *et al.* (2025). Pengaruh Corporate Sustainable Performance Terhadap Comprehensive Financial Performance. *Jurnal Proaksi*, 12(1).
- Athori, A. and Kusuma, M. (2023). Effect of Others Comprehensive Income on Company Value by Mediation of Retained Earnings: Evidence From Indonesia. *JCA (Jurnal Cendekia Akuntansi)*, 4(2), p. 141. doi: 10.32503/akuntansi.v4i2.4580.

- Ball, R. and Brown, P. (1968). An Empirical of Accounting Income Numbers. *Journal of Accounting Research*, 6(2), pp. 159–178. Available at: <https://www.jstor.org/stable/2490232>.
- Ball, R. and Brown, P. (2019). Ball and Brown (1968) after fifty years. *Pacific Basin Finance Journal*, 53(December 2018), pp. 410–431. doi: 10.1016/j.pacfin.2018.12.008.
- Banks, L., Hodgson, A. and Russell, M. (2018). The location of comprehensive income reporting – does it pass the financial analyst revision test?. *Accounting Research Journal*, 31(4), pp. 531–550. doi: 10.1108/ARJ-04-2017-0075.
- Būmane, I. (2018). The methodology of the statement of comprehensive income and its impact on profitability: The case of Latvia. *Entrepreneurship and Sustainability Issues*, 6(1), pp. 77–86. doi: 10.9770/jesi.2018.6.1(6).
- Fama, E. F. (1970). American Finance Association Efficient Capital Markets/ : A Review of Theory and Empirical Work Author (s): Eugene F . Fama Source/ : The Journal of Finance , Vol . 25 , No . 2 , Papers and Proceedings of the Twenty- Eighth Annual Meeting of the American', *The Journal of Finance*, 25(2), pp. 383–417.
- Gazzola, P. and Amelio, S. (2014). The Impact of Comprehensive Income on the Financial Ratios in a Period of Crises. *Procedia Economics and Finance*, 12(March), pp. 174–183. doi: 10.1016/s2212-5671(14)00333-5.
- Jensen, M. and Meckling, W. (1976). Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, pp. 305–360. doi: 10.1177/0018726718812602.
- Kanagaretnam, K., Mathieu, R. and Shehata, M. (2009). Usefulness of comprehensive income reporting in Canada. *Journal of Accounting and Public Policy*, 28(4), pp. 349–365. doi: 10.1016/j.jaccpubpol.2009.06.004.
- Kusuma, M., Assih, P. and Zuhroh, D. (2021). Pengukuran Kinerja Keuangan/ : Return on Equity (ROE) Dengan Atribusi Ekuitas. *Jurnal Ilmiah Manajemen Dan Bisnis*, 22(2), pp. 223–244. doi: 10.30596/jimb.v22i2.7935.
- Kusuma, M. and Luayyi, S. (2024). Do others comprehensive income, profit, and equity attributable impact external audit fee?. *Journal of Accounting and Investment*, 25(1), pp. 112–136. doi: 10.18196/jai.v25i1.20470.
- Marchini, P. L. and D'Este, C. (2015). Comprehensive Income and Financial Performance Ratios: Which Potential Effects on RoE and on Firm's Performance Evaluation?. *Procedia Economics and Finance*, 32(January 2009), pp. 1724–1739. doi: 10.1016/s2212-5671(15)01478-1.
- Margaret, M. and Hidayat, T. (2016). Persepsi Investor Terhadap Perubahan Penyajian Kepentingan Nonpengendali Sebelum Dan Sesudah Berlaku Efektifnya Psak 4 (Revisi 2009). *Jurnal Akuntansi dan Keuangan Indonesia*, 13(1), pp. 86–101. doi: 10.21002/jaki.2016.05.
- Murdiyanto, E. and Kusuma, M. (2022). Moderasi Leverage dalam Pengaruh Ukuran Bank dan Aset Keuangan Terhadap Kinerja Keuangan Komprehensif BPR Konvensional dan BPR Syariah Se-Kediri Raya. *Jurnal Ekonika/ : Jurnal Ekonomi Universitas Kadiri*, 7(2). Available at: <http://ojs.unik-kediri.ac.id/index.php/ekonika/index>.
- Rahayu, P. and Kusuma, I. W. (2020). Predictive Value of Other Comprehensive Income: Evidence From Asean. *Jurnal Akuntansi dan Keuangan Indonesia*, 17(2). doi: 10.21002/jaki.2020.09.
- Rahayu, S. M. (2019). Mediation effects financial performance toward influences of corporate growth and assets utilization. *International Journal of Productivity and Performance Management*, 68(5), pp. 981–996. doi: 10.1108/IJPPM-05-2018-0199.
- Sarwono, A. E. and Jundia, H. S. (2024). Financial Performance Based on the Local Government Budget (Case Study: East and Central Java Provincial Governments). *Jurnal Akuntansi dan Perpajakan*, 10(1), pp. 148–165. doi: 10.26905/ap.v10i1.12202.

- Scott, W. (2012) *Financial Accounting Theory*, Toronto: Prentice-Hall.
- Shi, L., Wang, P. and Zhou, N. (2017). Enhanced disclosure of other comprehensive income and increased usefulness of net income: The implications of Accounting Standards Update 2011-05. *Research in Accounting Regulation*, 29(2), pp. 139-144. doi: 10.1016/j.racreg.2017.09.005.
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), pp. 355-374.
- Spence, M. (1974). Competitive & Optimal Responses to Signals/ : An Analysis of Efficiency & Distribution. *Journal of Economics Theory*, 7(3), pp. 296-332. Available at: [http://doi.org/10.1016/002-0531\(74\)90098-2](http://doi.org/10.1016/002-0531(74)90098-2).
- Wahyudi, M., Sari, H. P. and Kusuma, M. (2024). Kualitas Auditor sebagai Pemoderasi Hexagon Fraud Theory, Fraudulent Financial Statement dan Tax Avoidance. *Ekuivalensi/ : Jurnal Ekonomi Bisnis*, 10(2), pp. 324-338.
- Yahaya, K. A., Fagbemi, T. O. and Oyeniya, K. K. (2015). Effect of International Financial Reporting Standards on the Financial Statements of Nigerian Banks. *Journal of Agricultural Economics, Environment and Social Sciences*, 1(1), pp. 18-29.
- Yan, C. and He, H. (2018). Non-controlling Large Shareholders and Firm Performance in China', *Asia-Pacific Journal of Financial Studies*. 47(3), pp. 401-425. doi: 10.1111/ajfs.12216.
- Yousefinejad, M., Ahmad, A. and Zaini, E. (2017). Value Relevance of available-for-sale financial instruments (AFS) and revaluation surplus of PPE (REV) components of other comprehensive income. *SHS Web of Conferences*, 34, p. 03004. doi: 10.1051/shsconf/20173403004.
- Zarefar, A. and Armadani, A. (2024). Do Fundamental Financial Ratios Affect the Company'S Stock Price? Indonesia Evidence. *Jurnal Akuntansi dan Keuangan Indonesia*, 21(1), pp. 49-63. doi: 10.21002/jaki.2024.03.