Peer-Reviewed Article

Jurnal Keuangan dan Perbankan
Volume 25, Issue 4 2021, page. 855 - 879
ISSN: 1410-8089 (Print), 2443-2687 (Online)
DOI: 10.26905/jkdp.v25i4.6132

Modification of Profitability Measures with Comprehensive Income and Reclassification of Other Comprehensive Income as a Mediation of Effects Asset Utilization on Firm Value

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Abstract

This study modifies financial performance measures by developing a comprehensive income-based measure as the impact of applying fair value accounting and the concept of all-inclusive income, which has an effect on changing the income statement format, and testing its mediating role on the effect of asset utilization on firm value, data from 504 companies on the IDX period 2016 – 2020. The results show that financial performance based on comprehensive income mediates asset utilization on firm value if it only contains net income and other comprehensive income for the group to be reclassified. The net income version of ROA & ROE is suitable for evaluating the performance of operating activities, while the comprehensive income version is suitable for evaluating the overall asset utilization performance from the results of revenues that have been realized and have not been realized. Novelty or originality: (1) developing comprehensive profit-based profitability and (2) mediating comprehensive profitability on the effect of asset utilization on firm value.

Keywords: Financial performance; comprehensive income; firm value
JEL: E64, G32

1. INTRODUCTION

The company was founded to prosper the owners. Management carries out operational activities through effective and efficient use of assets to achieve company goals. The forms of asset utilization include the use of factory machinery and supplies of raw materials for production, vehicles to distribute finished product inventories to customers, the use of cash to invest in securities, and so on. All forms of asset utilization aim to obtain cash receipts from product sales, service sales, repayment of receivables from credit sales, and returns from investment in securities (difference in price increases, interest, and dividends). The cash receipts are a return for the sacrifice of cash disbursements for investment in asset procurement and operational expenditures.

Owners can evaluate management's performance in asset utilization through financial reports that are presented periodically by management. Financial statement analysis can be done by reading and comparing various items contained in financial statements, such as the position of assets (cash, receivables, inventories, fixed assets), liabilities, equity, sales, operating costs, cash flows, and so on. Asset utilization is considered effective and efficient if the ratio of output (cash receipts from the sale of goods, services, investment returns) to the use of inputs (utilization of assets and operational expenditures) produces a large, positive value and in a high frequency in one period. Tools to measure the effectiveness and efficiency of asset utilization include inventory turnover ratio (ITO), receivables turnover (RTO), fixed asset turnover (FATO), and total asset turnover (TATO). While tools to measure management's financial performance achievement through asset utilization include: others in the ratio of the rate of return on assets (ROA) and the rate of return on equity (ROE).

Evaluation of financial performance and asset utilization aims to assess the achievement of management performance, consider the company's soundness, assess future cash flow and profit prospects as consideration for users in making various decisions related to investment, credit, and other important decisions. Financial statements are the main information key in doing this. In preparing and presenting financial statements, it must be guided by a Financial Accounting Standard (SAK) applicable in a country where the company is established, operates, and has an interest. SAK maintains the quality of the presentation of financial statements in order to increase the value of the relevance of financial statements for the benefit of users.

Financial Accounting Standards in various countries have experienced dynamic developments in their journey. Many countries previously had their SAKs referring to US-GAAP, then due to globalization, cross-border trade, demands for transparency, and demands for fair value accounting, many countries have changed their SAKs to converge with IFRS. The main characteristic of the application of IFRS is fair value accounting to improve the quality of information through a more representative presentation, and this form of fair value application causes a difference in the fair value of assets and liabilities from their historical values. The difference is called other comprehensive income (OCI) and is reported with net income in the income statement. Thus, since convergence with IFRS, the format for presenting income statements in various countries has changed; net income (NI), plus OCI, is called comprehensive income (CI).

This addition causes the concept of return, which has only used NI, can now be expanded into a CI-based return. This change can be used to measure financial performance by analyzing the profitability ratios, which so far have only been based on NI, then the ROA, ROE, and NPM ratios can be developed whose profit value is CI. Thus, the measurement of financial performance becomes more comprehensive, with NI as real income realized in the reporting period and CI as unrealized income arising from adjustments to the value of assets and liabilities at fair value. NI as income according to recognizing net surplus income and CI as income according to the view of all-inclusive income. Using both as financial performance measurement tools can provide results that are more comprehensive and more in line with the fair value accounting approach.

Italy began to adopt IFRS in 2009, and since then, the income statement format has changed; there is additional, comprehensive income along with net income in comprehensive income. This phenomenon inspires Marchini & D'Este (2015) to develop a

formula for measuring financial performance with Return on Equity (ROE) based on comprehensive income. The study conducted on companies listed on the Milan Stock Exchange concluded a significant difference in the value of ROE based on net income and ROE based on comprehensive income, with ROE on comprehensive income tending to be lower. This was due to significant fair value changes during 2007 – 2012 of available-for-sale financial assets and post-employment benefit actuarial differences. But unfortunately, the research of Marchini & D'Este (2015) only uses ROE measuring tools in evaluating financial performance. Būmane (2018) developed research of Marchini & D'Este (2015) in Latvia by adding a modified Return on Assets (ROA) based on comprehensive income as a measure of profitability and separating comprehensive income from other comprehensive income elements. That will be reclassified (realized) and will not be reclassified. The results showed that other comprehensive income items that were most frequently presented in Latvia in the reclassification group were financial assets and cash flow hedges, while those most frequently presented in the unclassified group were revalued fixed assets. Profitability in most companies during the study period showed that the value of ROA and ROE based on comprehensive income showed a positive ratio. But unfortunately, the research of Marchini & D'Este (2015) and Būmane (2018) does not link the development of ROA and ROE based on comprehensive income with other variables related to performance, such as the ability to predict future investment returns.

Indonesia converged with IFRS for the first time since the enactment of SAK Per June 1, 2012, which converged with IFRS Per January 1, 2009. then since then, the appearance of the presentation of the income statement has changed. If previously it only contained net income, since 2012, it has become comprehensive income with additional information on OCI. Based on this phenomenon, it inspires Kusuma (2021) to develop research of Marchini & D'Este (2015) for data from Indonesia by adding a modified ROA based on comprehensive income and ROA based on profit attribution (parent and non-controlling owners), as well as testing the ability of this ROA modification in predicting future earnings and cash flows. The study object was 490 companies listed on the IDX for all industries types before the Covid-19 pandemic (in 2019) and during the pandemic (in 2020). The results showed differences in financial performance before and during the Covid 19 pandemic, both with the net version of ROA and the comprehensive income version of ROA. The comprehensive income version of ROA is proven to be used to predict future investment returns. The comprehensive income version of ROA is better able to represent the actual conditions faced by the company because it involves the impact of changes in the fair value of assets that are reflected in other comprehensive income. But unfortunately, this Kusuma (2021) research only uses one measuring tool in evaluating financial performance, namely ROA, although it has been developed with the attribution profit version. In addition, ROA is not associated with other variables relevant to financial performance, such as the effectiveness of assets, stock prices, and firm value, to increase the value relevance of the modified ROA measuring instrument.

Rahayu (2019) examines the relationship between financial performance, effective use of assets, asset growth, and firm value, with the object of study being manufacturing companies on the IDX. Rahayu (2018) uses more financial performance measurement indicators than previous studies, namely ROA, ROE, and Net Profit Margin (NPM). The results showed that financial performance had a positive effect on firm value, and financial performance was able to mediate the effect of firm growth and use of assets on firm value. But unfortunately, this research by Rahayu (2018) and the company's object of

only the manufacturing sector. In measuring financial performance, only using net income, even though the income statement format in Indonesia has now changed, there are additional reclassifications of other comprehensive income and comprehensive income.

This study develops research from Rahayu (2019); Kusuma (2021); Būmane (2018), and Marchini & D'Este (2015), with the development position as the novelty of this research, namely: (1) development of financial performance measurement tools, especially profitability (ROA and ROE) based on comprehensive income, (2) and other comprehensive income reclassified, (3) involving the use of assets for the category of financial assets, (4) examine the mediating role of comprehensive profit-based profitability on the effect of asset utilization on firm value, and (5) expand the sample not only to manufacturing companies but to all types of industries listed on the IDX. The development of ROA and ROE based on comprehensive income and reclassified other comprehensive income, in addition to being in line with the latest SAK developments in changing the presentation of the income statement, is also more comprehensive in measuring financial performance by involving realized, unrealized, and potential to be realized income. Therefore, it is more related with future cash flow and profit prospects. This study expands the sample to manufacturing companies to know the effectiveness and efficiency of the use of financial assets and their relation to the profitability of comprehensive income and firm value. The utilization of financial assets is an operational activity for companies in the financial sector.

The results of this study contribute academically, practically and regulatively, by measuring financial performance as a whole. It is hoped that it can assist investors in interpreting financial statement information to make investment decisions and be useful for management regarding effective insight and efficiency in the utilization of financial and non-financial assets to generate income: optimal financial performance and firm value. For the academic world, especially financial accounting, and financial management, the results of this study add to the academic literature in the form of empirical evidence of the mediating role of conventional financial performance (Ni-based) and comprehensive income financial performance (CI-based) in the effect of asset utilization on firm value. The results of this study are helpful for the Indonesian financial services authority (OJK) as input in setting regulations for issuers. This is to include the calculation of profitability ratios based on comprehensive income. which is in line with changes in the presentation of income statements based on fair value accounting, all-inclusive income, and entity theory.

2. HYPOTHESES DEVELOPMENT

Financial performance is the achievement of management performance in managing the company in the financial aspect, namely how much profit is obtained from operational activities through the use of assets sourced from liabilities and equity. Good financial performance is capable of generating sales of goods or services and optimal income by utilizing assets effectively and efficiently. The success or failure of management in managing assets is reflected in its financial performance (Rahayu, 2019). Tools to measure financial performance include profitability ratios in the form of ROA, ROE, NPM. Good financial performance can increase the company's ability to fulfill its responsibilities to stakeholders, such as increasing the ability to pay dividends to owners, paying interest to creditors, and promoting and increasing employee salaries (Kusuma,

2017), so that it has an impact on the market reaction which is reflected in the stock price and firm value (Mai, 2017; Utomo et al., 2017).

The results of studies on various objects of companies in Indonesia have produced empirical evidence that agrees that financial performance has a positive effect on firm value, including companies that are members of the Jakarta Islamic Index (Mai, 2017), at banking companies (Utomo et al., 2017), at family company (Oktavina & Manalu, 2018), at group company LQ 45(Handayani & Rahayu, 2019) and in consumer goods manufacturing companies (Siregar et al., 2018). Likewise, studies conducted abroad show that financial performance has a positive effect on firm value, such as in the United States (Frame et al., 2019; Sun, 2019; Shi et al., 2017), in Germany and the United Kingdom (Elbakry et al., 2017), in South Korea (Kim & Yoon, 2019), in Hawaii (Edinger et al., 2019), and in Italy (Veltri & Ferraro, 2018).

Comprehensive income is net income plus other comprehensive income. The policy for presenting statements of profit and loss and other comprehensive income has been mandatory for companies with significant public ownership since SAK Per June 1, 2012, which first converged with IFRS Per January 1, 2009. The presentation of comprehensive income is in line with the concept of revenue recognition of "all inclusive income", namely a view in accounting that considers all things that cause changes in net assets other than equity deposits of owners must be recognized as income and must be presented with net income as comprehensive income, including changes in net assets from an increase or decrease in asset value due to changes in historical value to fair value, even though the increase or decrease has not been realized, it is only the difference from the value adjustment (Shi et al., 2017). Based on this view, the IASB in 2009 revised the format for presenting the income statement in IFRS as of January 1, 2009, which initially only contained net income, then added other comprehensive income, followed by FASB by ratifying ASU 2011 (05), and Indonesia through DSAK IAI ratified SAK as of June 1, 2012. Previously, other comprehensive income was presented in the equity side of the balance sheet, and there was no obligation to detail each item, let alone inform which items would be realized soon.

Other comprehensive income is the difference in excess (gain) or difference (loss) from the carrying amount of assets (liabilities) to their fair values at the date of presentation of the financial statements. The use of the fair value of assets (liabilities) to increase the value relevance and representative value of the financial statements. Other comprehensive income consists of fair value adjustments of (1) available-for-sale financial assets, (2) hedging, (3) asset revaluation, (4) post-employment liabilities, and (5) translation of financial statements of businesses in other countries. A study conducted by Saymeh et al. (2019) in Jordan on banking companies concluded that other comprehensive income has an effect on financial performance, as measured by ROA and ROE.

Based on the regulation on the change in the format of the presentation of the income statement, namely the addition of other comprehensive income, reclassification and comprehensive income, and the concept of all-inclusive income which considers other comprehensive income to be part of income because it causes changes in equity, this study develops a profitability formula, specifically ROA and ROE based on comprehensive income. So far, ROA and ROE in determining the value of "return" are net income. Furthermore, the Conventional profitability formula (Rahayu, 2019), shown in ROA and ROE equations:

$$\text{ROA} = \frac{\text{Net income}}{\text{Total assets}}$$

$$\text{ROE} = \frac{\text{Net income}}{\text{Total equity}}$$

Profitability modification formula with comprehensive income (Būmane, 2018; Marchini & D'Este, 2015), shown in ROA and ROE equations:

$$\text{ROA} = \frac{\text{Comprehensive income}}{\text{Total assets}}$$

$$\text{ROE} = \frac{\text{Comprehensive income}}{\text{Total equity}}$$

Another comprehensive income is income that has not been realized, it is only the difference between fair value adjustments, but the realization can be done immediately after the presentation of the financial statements, for example, t+1 period. Therefore, to make it easier for users to predict net income and cash flows from the realization of other comprehensive income in period t+k from the financial statements, SAK also requires companies to separate the presentation of other comprehensive income items that will and will not be realized, in the "to be reclassified" group." and "not to be reclassified" groups.

Based on this, this study develops the ROA and ROE formulas from Būmane (2018) and Marchini & D'Este (2015), with the return value being the result of adding up net income with other comprehensive income items that have the potential to be realized (reclassification). Our argument is that other comprehensive income items presented in the "to be reclassified" group have the potential to be realized and increase (decrease) net income and cash flows in the next period (thus period t-1 affects the current period), so it needs to be added in measuring "return" from asset investment (ROA) and equity (ROE) in order to comprehensively measure the value of profit, with the following ROA and ROE equations:

$$\text{ROA} = \frac{(\text{NI} + \text{OCIR})}{\text{Total assets}}$$

$$\text{ROE} = \frac{(\text{NI} + \text{OCIR})}{\text{Total equity}}$$

With, ROA: return on the asset; ROE: return on equity; NI: net income; OCIR: reclassification of other comprehensive income.

Rahayu (2019) uses the ratio of inventory turnover (ITO), receivables turnover (RTO), total asset turnover (TATO), and fixed asset turnover (FATO) as indicators of measuring asset utilization. Inventory utilization efficiency is measured by comparing the cost of goods sold with the average inventory (inventory turnover ratio or ITO). This ratio shows how quickly the cash used to purchase raw material inventory is processed into finished product inventory and sold. The efficiency of the utilization of trade receivables is measured by comparing net sales with the average trade receivables (receivables turnover ratio or RTO); this ratio shows how quickly the receivables arise from the sale of products on credit can be paid off. The efficiency of total asset utilization is measured by comparing net sales with total assets (total asset turnover ratio or TATO); this ratio shows

how quickly the cash used to purchase various types of assets is able to produce finished product inventories and are sold. The efficiency of utilization of fixed assets is measured by comparing net sales with fixed assets (fixed asset turnover ratio or FATO); this ratio shows how quickly the cash used to purchase production equipment, vehicle equipment, land, and buildings is able to produce finished product inventories and are sold. The results showed that ITO, RTO, TATO, and FATO positively affected financial performance and firm value.

Suvvari et al. (2019) investigated the utilization of financial assets and financial performance of life insurance companies in India. The results showed that the financial assets of life insurance companies affect profitability performance. The ownership of financial assets will affect the value of other comprehensive income by adjusting the value of available-for-sale financial assets from the carrying amount to fair value. Ownership of fixed assets and intangible assets will affect the value of other comprehensive income in the event of a revaluation. Ownership of assets in the form of investment in foreign business units will affect the value of other comprehensive income on the translation of the financial statements of foreign business units into Indonesian Rupiah. Ownership of assets in the form of receivable hedging contracts will also affect the value of other comprehensive income for the gain (loss) on cash flow hedging contracts. Adjustment of assets from book value or carrying amount to fair value at the presentation date of the financial statements will result in recognition of other comprehensive income which is presented together with net income in the income statement as comprehensive income. Furthermore, in its presentation in the income statement, OCI is grouped based on the possibility of being realized and not being realized. OCI in the presentation period is not really realized revenue and is not related to cash flows, but for OCI items classified as "to be reclassified," this item will be realized in the next period and deserves to be recognized as NI income.

Ownership and utilization of assets can cause OCI recognition (that's because assets owned are valued at fair value) and then can affect the value of CI, so it is appropriate if measuring financial performance also involves CI. This reclassification policy is empirically proven to increase the value of the relevance of the income statement, both in China (Zhao et al., 2018) and Indonesia (Kusuma, 2021; Kusuma et al., 2021; Kusuma, 2020). One item of other comprehensive income reported as part of comprehensive income is cash flow hedges; a study conducted by Pradana & Naomi (2018) on non-bank BUMN's proves that hedging cash flow has an effect on firm value.

Measurement of profitability by involving other comprehensive income in comprehensive income is considered more representative in responding to changes in the fair value of assets and more comprehensively recognizing changes in net assets, both those originating from income that has been realized and unrealized (Kusuma, 2021), in line with changes the format for presenting the income statement in the latest SAK and the concept of "all inclusive income" revenue recognition, that other comprehensive income is also income and is part of income (Banks et al., 2018). Other comprehensive income arises as a result of the application of the fair value accounting concept, namely the difference between the fair value of assets and their acquisition value (Shi et al., 2017). Other comprehensive income is only an adjustment difference and has not been realized in the period of presenting the financial statements, but the presentation of the reclassification group provides information on the potential to be realized and turned into net income in the next period (Kusuma, 2020); therefore this study also involves

measuring profitability by only involving items other comprehensive income which is reclassified and aggregated, to see the impact of the grouping based on the likelihood that it will be realized.

Thus the hypothesis of this study is:

H1. Asset utilization has a positive effect on firm value.
H2. Asset utilization has a positive effect on financial performance based on net income.
H3.Asset utilization has a positive effect on financial performance based on comprehensive income.
H4. Financial performance based on net income is able to mediate the effect of asset utilization on firm value.
H5. Financial performance based on comprehensive income is able to mediate the effect of asset utilization on firm value.

The conceptual framework in this study is presented in Figure 1:

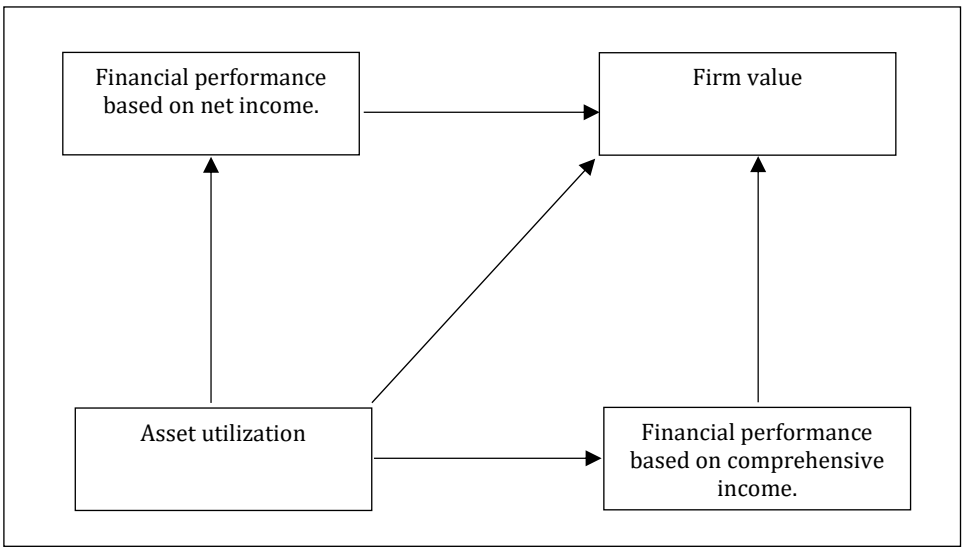

Figure 1. Research Conceptual Framework

Asset utilization is how much assets are used to generate returns on investment assets in the form of gains, interest, dividends for financial assets, and profits from the sale of goods and services for non-financial assets in order to achieve company goals. Asset utilization in this study was measured by financial asset turnover (FITO), inventory turnover (ITO), accounts receivable turnover (RTO), fixed asset turnover (FATO), and total asset turnover (TATO). Financial performance based on net income is how much assets are used to generate net income; this study measures it by ROA and ROE using returns using net income. Financial performance based on comprehensive income is how much assets are used to generate comprehensive income; this study measured ROA and ROE using comprehensive income. Firm value is the stock price created in the capital market mechanism that reflects the market reaction to the company, and in this study, the firm value is measured by Tobin's Q.

3. METHOD, DATA, AND ANALYSIS

This study has variables, namely financial performance based on net income and financial performance based on comprehensive income as intervening variables, with asset utilization as the independent variable and firm value as the dependent variable. Variable measurements are described in the table 1:

Tabel 1. Research Variable and Measurement

Variable	Indicator	Measurement	Reference
Asset utilization	The ability of financial assets to generate investment returns in period t (FITO).	$\frac{\text{Dividend income, interest, gain}}{\text{Average financial assets}}$	Rahayu (2019)
	Inventory ability can be sold in period t (ITO).	$\frac{\text{Sales}}{\text{Average inventory}}$	Rahayu (2019)
	The ability of receivables from sales of collectible credit in period t (RTO).	$\frac{\text{Sales}}{\text{Average receivables}}$	Rahayu (2019)
	The ability of fixed assets to produce products sold (FATO).	$\frac{\text{Sales}}{\text{Average fixed assets}}$	Rahayu (2019)
	Total asset productivity in generating income (TATO).	$\frac{\text{Sales}}{\text{Average total assets}}$	Rahayu (2019)
Profitability based on net income	The ability of total assets to generate net income (ROA NI).	$\frac{\text{Net income}}{\text{Total assets}}$	Saymeh et al., (2019)
	The ability of total equity to generate net income (ROE NI).	$\frac{\text{Net income}}{\text{Total equity}}$	Saymeh et al., (2019)
Profitability based on comprehensive income	The ability of total assets to generate comprehensive income (ROA CI).	$\frac{\text{Comprehensive income}}{\text{Total assets}}$	Marchini & D'Este (2015)
	The ability of total equity to generate comprehensive income (ROE CI).	$\frac{\text{Comprehensive income}}{\text{Total equity}}$	Marchini & D'Este (2015)
	Ability of assets to generate net income & OCI reclassification (ROA OCIR).	$\frac{\text{(NI + OCI reclassification)}}{\text{Total asset}}$	Būmane (2018)

Variable	Indicator	Measurement	Reference
	Ability of equity to generate net income & OCI reclassification (ROE OCIR).	(NI + OCI reclassification) / Total equity	Būmane (2018)
Firm size	Firm size	Log N total assets	Kusuma (2021)
Type of industry	Type of industry	Dummy : 1 = manufacture 0 = otherwise	Kusuma (2021)
Firm value	Firm value in period t (Tobin's Q).	BV asset – BV equity + Market Value of Asset / Book Value of asset (BV)	Rahayu (2019) Pradana & Naomi (2018)

This study uses data on financial statements and stock prices of companies listed on the Indonesia Stock Exchange in 2016 – 2020 with a population of 674 companies, and with the purposive sampling method selected a sample of 504 companies (504 times 5 years = 2,520 observations) with the following criteria:

Table 2. Sampling Techniques

Sample Selection Criteria	Company Quantity
Population quantity	674
Reduced by:	
1. Listed on IDX after 2016.	(17)
2. Not regularly publishing financial reports.	(12)
3. Presenting financial statements in USD.	(44)
4. Does not present detailed and reclassified other comprehensive income.	(87)
5. Doesn't present net profit attribution and comprehensive income attribution.	(10)
Sample quantity	504 (74,7%)
Observe quantity (504 company x 5 years).	2.520

Source: Investment Gallery, Universitas Merdeka Malang, 2021.

The financial statements and stock prices are then processed to obtain variable data with the size mentioned in table 1. Before the data is used to test hypotheses, descriptive statistical tests, correlation analysis, and classical assumption tests are carried out. Hypothesis testing with multiple linear regression analysis and path analysis assisted by statistical applications. For hypothesis testing, the equation model is built as follows:

The effect of asset utilization on financial performance based on net income (NI), as shown in equation 1 and 2 :

$$ROA\ NI = \beta_0 + \beta_1 FITO + \beta_2 ITO + \beta_3 RTO + \beta_4 FATO + \beta_5 TATO + \beta_6 SIZE + \beta_7\ ND + \varepsilon \quad (Eq.1)$$

$$ROE\ NI = \beta_0 + \beta_1 FITO + \beta_2 ITO + \beta_3 RTO + \beta_4 FATO + \beta_5 TATO + \beta_6 SIZE + \beta_7 IND + \varepsilon \quad (Eq.2)$$

The effect of asset utilization on financial performance based on comprehensive income (CI), as shown in equation 3 and 4:

$$\text{ROA CI} = \beta_0 + \beta_1\text{FITO} + \beta_2\text{ITO} + \beta_3\text{RTO} + \beta_4\text{FATO} + \beta_5\text{TATO} + \beta_6\text{SIZE} + \beta_7\text{IND} + \varepsilon \quad \text{(Eq.3)}$$

$$\text{ROE CI} = \beta_0 + \beta_1\text{FITO} + \beta_2\text{ITO} + \beta_3\text{RTO} + \beta_4\text{FATO} + \beta_5\text{TATO} + \beta_6\text{SIZE} + \beta_7\text{IND} + \varepsilon \quad \text{(Eq.4)}$$

The effect of asset utilization on financial performance based on comprehensive income (CI) only with reclassified OCI (OCIR), as shown in equation 5 and 6:

$$\text{ROA OCIR} = \beta_0 + \beta_1\text{FITO} + \beta_2\text{ITO} + \beta_3\text{RTO} + \beta_4\text{FATO} + \beta_5\text{TATO} + \beta_6\text{SIZE} + \beta_7\text{IND} + \varepsilon \quad \text{(Eq.5)}$$

$$\text{ROE OCIR} = \beta_0 + \beta_1\text{FITO} + \beta_2\text{ITO} + \beta_3\text{RTO} + \beta_4\text{FATO} + \beta_5\text{TATO} + \beta_6\text{SIZE} + \beta_7\text{IND} + \varepsilon \quad \text{(Eq.6)}$$

The effect of financial performance on firm value, as shown in equation 7a, 7b, 7c, 7d, 7e, and 7f :

$$\text{Tobin's Q} = \beta_0 + \beta_1\,\text{ROA NI} + \beta_2\,\text{SIZE} + \beta_3\,\text{IND} + \varepsilon \quad \text{(Eq.7a)}$$

$$\text{Tobin's Q} = \beta_0 + \beta_1\,\text{ROE NI} + \beta_2\,\text{SIZE} + \beta_3\,\text{IND} + \varepsilon \quad \text{(Eq.7b)}$$

$$\text{Tobin's Q} = \beta_0 + \beta_1\,\text{ROA CI} + \beta_2\,\text{SIZE} + \beta_3\,\text{IND} + \varepsilon \quad \text{(Eq.7c)}$$

$$\text{Tobin's Q} = \beta_0 + \beta_1\,\text{ROE CI} + \beta_2\,\text{SIZE} + \beta_3\,\text{IND} + \varepsilon \quad \text{(Eq.7d)}$$

$$\text{Tobin's Q} = \beta_0 + \beta_1\,\text{ROA OCIR} + \beta_2\,\text{SIZE} + \beta_3\,\text{IND} + \varepsilon \quad \text{(Eq.7e)}$$

$$\text{Tobin's Q} = \beta_0 + \beta_1\,\text{ROE OCIR} + \beta_2\,\text{SIZE} + \beta_3\,\text{IND} + \varepsilon \quad \text{(Eq.7f)}$$

The mediating role of financial performance on the effect of asset utilization on firm value, as equation 8:

$$\begin{aligned}\text{Tobin's Q} = {} & \beta_0 + \beta_1\,\text{FITO} + \beta_2\,\text{ITO} + \beta_3\,\text{RTO} + \beta_4\,\text{FATO} + \beta_5\,\text{TATO} \\ & + \beta_6\,\text{ROA NI} + \beta_7\,\text{ROE NI} + \beta_8\,\text{ROA CI} + \beta_9\,\text{ROE CI} \\ & + \beta_{10}\,\text{ROA OCIR} + \beta_{11}\,\text{ROE OCIR} + \beta_{12}\,\text{SIZE} + \beta_{13}\,\text{IND} + \varepsilon \quad \text{(Eq.8)}\end{aligned}$$

H1 states that the assumption that asset utilization has a positive effect on firm value is accepted if the regression coefficients β_1 FITO, β_2 ITO, β_3 RTO, β_4 FATO, and β_5 TATO in equation 8 are significant at 5% level. H2 asset utilization has a positive effect on financial performance based on net income, accepted if the regression coefficients β_1 FITO, β_2 ITO, β_3 RTO, β_4 FATO, and β_5 TATO in equations 1 and 2 are significant at 5% level. H3 asset utilization has a positive effect on financial performance based on comprehensive income, accepted if the regression coefficients β_1 FITO, β_2 ITO, β_3 RTO, β_4 FATO, and β_5 TATO in equations 3 and 4 are significant at the 5% level. H4 financial performance based on net income is able to mediate the effect of asset utilization on firm value; the path coefficient through net income-based ROA ROE is greater than the direct influence coefficient on firm value (Tobin's Q). H5 financial performance based on comprehensive income is able to mediate the effect of asset utilization on firm value; the path coefficient through ROA ROE based on comprehensive income is greater than the coefficient of direct influence on firm value (Tobin's Q).

4. RESULTS

Financial Performance Based on Comprehensive Income

The measurement of financial performance based on comprehensive income is a modification of the formulation of ROA and ROE by adding net income to other comprehensive income. This addition is to follow the change in the format of the income statement after SAK converges with IFRS since June 1, 2012, and at the same time knowing the impact of changes in the fair value of assets as unrealized gains (losses) on financial performance in a comprehensive manner, wherein other comprehensive income there is a separation of items. Based on the possibility of unrealized gains (losses) to be realized and increase net income.

Table 3 shows the average financial performance based on comprehensive income before and during Covid-19. The average ROA and ROE for the period before Covid are calculated from the 2016 – 2019 financial statements and the current period for Covid from the 2020 financial statements. ROA and ROE based on comprehensive income are better able to represent the impact of changes in the external environment that affect the fair value of company assets and liabilities. The Covid-19 pandemic caused most companies (321 companies or 63.7% of the 504 sample companies) to experience a negative ROA and ROE of comprehensive income due to a significant decline in sales.

The results of this study are in line with the results of research by Būmane (2018) and Marchini & D'Este (2015) that comprehensive income is able to represent the impact of the global economic crisis that hit Italy, Lativa, and other European countries in 2008 on company performance. Business sectors that experienced comprehensive negative performance included real estate, infrastructure, construction, mining and energy, textile, paper, plastic, alumni, steel, transportation and port services, hospitality and tourism, and media. Types of business sample companies that generate positive ROA and ROE based on comprehensive income are information and communication technology, food and beverage, hospitals, pharmaceuticals, other health services, banking and other financial services, as well as other retail trades, a total of 183 companies or 36, 3% of the 504 sample companies.

Table 3. Average Financial Performance Based on Comprehensive Profit Before and During Covid-19

No.	The main areas of operation of the sample company	Quantity	Financial Performance Based on Comprehensive Income			
			Average ROA		Average ROE	
			2016-2019	2020	2016-2019	2020
Group of companies with positive performance in 2020:						
1.	Information and communication technology	42	.056	.059	.061	.063
2.	Food and beverage	28	.047	.048	.052	.052
3.	Hospitals, pharmacy, other health services	25	.043	.045	.048	.050
4.	Other banking and financial services	67	.038	.039	.041	.044
5.	Other retail trade	21	.037	.038	.040	.041
		183 (36.3%)				

No.	The main areas of operation of the sample company	Quantity	Financial Performance Based on Comprehensive Income			
			Average ROA		Average ROE	
			2016-2019	2020	2016-2019	2020
Group of companies with negative performance in 2020:						
6.	Real estate, infrastructure and construction	65	.056	-.038	.058	-.034
7.	Mining and energy	42	.043	-.022	.045	-.018
8.	Textiles, paper, plastics, aluminum, steel	31	.057	-.021	.058	-.017
9.	Transport and port services	28	.052	-.025	.056	-.023
10.	Hospitality and tourism	26	.043	-.026	.047	-.022
11.	Media	10	.044	-.029	.049	-.025
12.	Other types of business	119	.041	-.033	.046	-.029
	Total	321 (63.7%)				
		504				

Source: Data Processed from Financial Reporting 2016 – 2020.

Descriptive Statistics Results

Table 4 shows the results of descriptive statistics. The mean value of all asset utilization indicators shows a positive value, this means that most companies during the study period were able to utilize their assets effectively and efficiently, also supported by ROA and ROE values, both net income, comprehensive income, and comprehensive income with OCI reclassification, and Tobin's Q also shows a positive mean. Most of the data in this study were obtained from financial reports for 2016 – 2019, which have not been affected by the Covid-19 pandemic, while financial reports affected by the Covid-19 pandemic were only obtained from one period, namely 2020, so the mean values of all the variables and indicators of this study were obtained. Does not yet represent the impact of the pandemic on the decline in sales and financial performance of most business sectors.

Correlation Analysis Results

Table 4 shows the results of the correlation analysis. Utilization of financial assets is negatively correlated with inventories (-0.551**) and fixed assets (-0.529**), this is in line with the concept of limited resources making economic actors have to choose from alternative options, the more companies invest in financial assets, minimize the potential for investing in the purchase of inventories and fixed assets. ITO is positively correlated with ROA NI (0.719***), ROE NI (0.668**), ROA CI (0.432*), ROE CI (0.421*), ROA OCIR (0.537**), and ROE OCIR (0.511**), this means that the greater the investment in raw material inventory, production, the more capable of increasing sales turnover of goods, so that it has the potential to increase net profit, consequently affecting financial performance and company value.

The increase in sales has an impact on the emergence of trade receivables from credit sales transactions, in line with the findings of a positive correlation between RTO and ROA NI (0.565**), ROE NI (0.521**), ROA CI (0.377*), ROE CI (0.311*), ROA OCIR (0.675**), and ROE OCIR (0.578**).

Table 4. Results of Descriptive Statistics and Correlation Analysis

Variable	Mean	Min	Max	SD	Variable	Mean	Min	Max	SD
Panel A: Descriptive statistical results for n = 2,520 (data for 504 companies during the 2016 – 2020 financial reporting period).									
FITO	.043	-.178	1.213	.0281	ROA CI	.024	-.019	.079	.0171
ITO	1.071	.223	1.547	.1752	ROE CI	.028	-.056	.113	.0153
RTO	.051	-.061	.551	.0714	ROA OCIR	.037	-.024	.076	.0169
FATO	.349	-1.248	2.815	.4118	ROE OCIR	.031	-.038	.045	.0124
TATO	.041	.000	.319	.0443	Size	6.3144	1.869	18.221	.8819
ROA NI	.052	-.021	.085	.0176	Industry	.5629	0	1	.0566
ROE NI	.048	-.077	.078	.0121	Tob.Q	308.663	-329	64,000.000	3,227.516

Panel B: Results of correlation analysis for n = 2,520 (data for 504 companies during the 2016 – 2020 financial reporting period).

Variable	FITO	ITO	RTO	FATO	TATO	ROA NI	ROE NI	ROA CI	ROE CI	ROA OCIR	ROE OCIR	Size	Indus	Tob Q
FITO	1.000													
ITO	-.551**	1.000												
RTO	.351*	.453*	1.000											
FATO	-.529**	.241	.114	1.000										
TATO	.091	.287	.208	.453*	1.000									
ROA NI	.671**	.719***	.565**	.448*	.418*	1.000								
ROE NI	.611**	.668**	.521**	.411*	.425*	.317*	1.000							
ROA CI	.785***	.432*	.377*	.372*	.281	.387*	.227	1.000						
ROE CI	.791***	.421*	.311*	.325*	.329*	.226	.349*	.453*	1.000					
ROA.OCIR	.678**	.537**	.675**	.583**	.312*	.348*	.214	.317*	.231	1.000				
ROE.OCIR	.701***	.511**	.578**	.436*	.328*	.336*	.246	.445*	.342*	.443*	1.000			
Size	.554**	.612**	.508**	.665**	.564**	.557**	.529**	.318*	.297	.468*	.355*	1.000		
Industry	.411*	.389*	.306*	.287	.244	.081	.056	.033	.014	.087	.014	.007	1.000	
Tob.Q	.509**	.533**	.389*	.371*	.291	.288	.421*	.088	.611**	.781***	.782***	.411*	.081	1.000

Notes: The significance level of the correlation coefficient ***, **, * is at the level of 1%, 5%, and 10%, respectively.
Source: Results of Statistical Data Processing.

All indicators of asset utilization and company size are positively correlated with all indicators of measuring financial performance and company value, both based on net income and based on comprehensive income. This means that the larger the company size, the more capable it is to invest in financial assets and the more capable it is to operate in production and the procurement of factory and other non-manufacturing assets. The high production capacity is in line with the ability to expand a business, increase sales, and increase economic transactions, thereby affecting net income, ROA, and ROE based on net income and stock prices in the market (company value). The larger the assets owned, the greater the value of other comprehensive income and comprehensive income from adjustments to the historical value of assets to their fair values, such as adjustments to financial assets and revaluation of property, plant, and equipment. The more economic transactions, including export-import activities and business expansion in overseas associates, the more cash flow hedging contracts occur and the translation of business unit financial statements when preparing consolidated financial statements with overseas subsidiaries, thus affecting comprehensive income, ROA, and ROE based on comprehensive income, as well as share price in the market (company value).

Multiple Linear Regression Analysis Results

Table 5 presents the results of multiple linear regression analysis. All indicators of asset utilization have a positive effect on net profit-based financial performance (equations 1 and 2), and on firm value (equation 8); this finding is in line with the research of Rahayu (2019). This study develops Rahayu's (2019) research by adding a comprehensive profit base to measure financial performance, ROA, and ROE of the comprehensive profit base. Equation 3 proves that FIT0 (0.798***), ITO (0.466*), RTO (0.375*), FATO (0.381*) has a positive effect on ROA CI, as well as ROE CI in equation 4. The FITO coefficient is the highest among indicators of the use of other assets; this shows that the return on investment assets in the form of bond interest income, dividend income, and realized price difference gains is proven to increase net income and comprehensive income, which leads to ROA and ROE values. The strength of the model in explaining the effect of asset utilization on net income-based financial performance increases when other comprehensive income items in the "not to be reclassified" group are not included in the calculation of comprehensive income, as can be seen from the adjusted R2 values of equations 5 (61%) and 6 (60%) higher than equations 3 (57%) and 4 (56%). Equation 8 shows that all indicators of asset utilization have a positive effect on firm value, with the highest coefficients being FITO (0.511**) and ITO (0.537**). Return on investment in financial assets and sales of finished product inventories can increase operating profit and are perceived by investors as a signal of the company's ability to provide investment returns in the future, thereby increasing the company's market value.

Financial performance based on net income has a positive effect on firm value; the results of this study support many of the findings of previous research (Mai, 2017; Utomo et al., 2017; Oktavina & Manalu, 2018; Siregar et al., 2018; Rahayu, 2019). Likewise, financial performance based on comprehensive income, as the development of this research, equation 7.c – 7.f proves that ROA and ROE as measured by comprehensive income positively affect firm value. This shows that Indonesian investors are now accustomed to interpreting income statement information in a new format. Comprehensive income as a reflection of revenue recognition and changes in equity as a

whole is a gain from an increase in the fair value of assets that has the potential to increase profits and cash flows in the next period. This expectation is reflected in the adjusted R2 value of equations 7 e and 7 f (78%) which is greater than equations 7 c (69%) and 7 d (70%), when only items that have the potential to be realized and increase net income are included in ROA ROE, the ability of the model to explain the effect of financial performance on firm value increases.

Table 5. Results of Multiple Linear Regression Analysis

Variable	Eq.1 Y = ROA NI	Eq.2 Y = ROE NI	Eq.3 Y = ROA CI	Eq.4 Y = ROE CI	Eq.5 Y = ROA OCIR	Eq.6 Y = ROE OCIR	Eq.8 Y = Tobin's Q
FITO	.682**	.617**	.798***	.792***	.682**	.714***	.511**
ITO	.723***	.672**	.466*	.427*	.548**	.516**	.537**
RTO	.573**	.524**	.375*	.315*	.676**	.583**	.409*
FATO	.451*	.428*	.381*	.331*	.592**	.438*	.381*
TATO	.422*	.411*	.293	.204	.314*	.326*	.309*
Size	.568**	.532**	.324*	.305*	.471*	.352*	.418*
Industry	.082	.061	.031	.011	.093	.013	.082
F-Statistic	12.438	11.976	7.631	7.239	9.342	10.671	9.553
Adjusted R2	77.436	76.828	57.281	56.956	61.488	60.232	69.712
				Y = Tobin's Q			
	Eq. 7.a	Eq. 7.b	Eq. 7.c	Eq. 7.d	Eq. 7.e	Eq. 7.f	Eq.7
ROA NI	.963***	-	-	-	-	-	.963
ROE NI	-	.942***	-	-	-	-	.942
ROA CI	-	-	.688**	-	-	-	.688
ROE CI	-	-	-	.675**	-	-	.675
ROA OCIR	-	-	-	-	.804***	-	.804
ROE OCIR	-	-	-	-	-	.795***	.795
F-Statistic	14.887	13.289	9.422	10.117	12.435	12.564	
Adjusted R2	89.625	88.581	69.458	70.712	78.492	78.452	

Notes :
The significance level of the regression coefficients ***, **, * is at the level of 1%, 5%, and 10%, respectively.

Source: Results of Statistical Data Processing.

Path Analysis Results

Table 6 presents the results of the path analysis. ROA and ROE based on net income are able to mediate the effect of all asset utilization indicators on firm value, which is indicated by the path coefficient value being greater than the direct effect coefficient. The path coefficient through ROA NI of all asset utilization indicators FITO (0.657), ITO (0.696), RTO (0.552), FATO (0.434), TATO (0.406) is greater than the direct effect on Tobin's Q.

Table 6. Path Analysis Results

Variable	Direct effects	Indirect effects through ROA NI			Conclusion	Indirect effects through ROE NI			Conclusion
	X --> Y Eq. 8	X --> Z Eq. 1	Z --> Y Eq.7.a	Koef. Path		X --> Z Eq. 2	Z --> Y Eq.7.b	Koef. Path	
Mediation through profitability based on NI									
FITO	.511	.682	.963	.657	Can mediate	.617	.942	.581	Can mediate
ITO	.537	.723	.963	.696	Can mediate	.672	.942	.633	Can mediate
RTO	.409	.573	.963	.552	Can mediate	.524	.942	.494	Can mediate
FATO	.381	.451	.963	.434	Can mediate	.428	.942	.403	Can mediate
TATO	.309	.422	.963	.406	Can mediate	.411	.942	.387	Can mediate
Variable	**Direct effects**	**Indirect effects through ROA CI**			**Conclusion**	**Indirect effects through ROE CI**			**Conclusion**
	X --> Y Eq. 8	X --> Z Eq. 3	Z --> Y Eq.7.c	Koef. Path		X --> Z Eq. 4	Z --> Y Eq.7.d	Koef. Path	
Mediation through profitability based on CI									
FITO	.511	.798	.688	.549	Can mediate	.792	.675	.535	Can mediate
ITO	.537	.466	.688	.321	Cannot	.427	.675	.288	Cannot
RTO	.409	.375	.688	.258	Cannot	.315	.675	.213	Cannot
FATO	.381	.381	.688	.262	Cannot	.331	.675	.223	Cannot
TATO	.309	.293	.688	.202	Cannot	.204	.675	.138	Cannot
Variable	**Direct effects**	**Indirect effects through ROA OCIR**			**Conclusion**	**Indirect effects through ROE OCIR**			**Conclusion**
	X --> Y Eq. 8	X --> Z Eq. 5	Z --> Y Eq.7.e	Koef. Path		X --> Z Eq. 6	Z --> Y Eq.7.f	Koef. Path	
Mediation through profitability based on CI with reclassification of OCI									
FITO	.511	.682	.804	.548	Can mediate	.714	.795	.568	Can mediate
ITO	.537	.548	.804	.441	Cannot	.516	.795	.410	Cannot
RTO	.409	.676	.804	.544	Can mediate	.583	.795	.463	Can mediate
FATO	.381	.592	.804	.476	Can mediate	.438	.795	.348	Cannot
TATO	.309	.314	.804	.252	Cannot	.326	.795	.259	Cannot

Notes:

ROA ROE is able to mediate if the path coefficient through ROA ROE is greater than the direct influence coefficient (Eq. 8). The path coefficient is the product of the effect of X to Z (ROA ROE) with the effect of Z to Y.

Source: Results of Statistical Data Processing.

ROA and ROE based on comprehensive income are not able to mediate the effect of most asset utilization indicators on firm value, only FITO. This is because FITO is very reactive to changes in the fair value of financial assets. When ROA and ROE based on comprehensive income do not involve other comprehensive income items that will not be reclassified, it causes the number of asset utilization indicators mediated by ROA and ROE, namely FITO, RTO, and FATO. This means that other comprehensive income items in the group that will be reclassified are related to net income and cash flows in the period when the realization occurs, thereby affecting ROA and ROE, FITO is related to the fair value adjustment of financial assets, and RTO is related to the settlement contract of hedging receivables, and both are often presented as groups to be reclassified.

5. DISCUSSION

The effect of asset utilization on firm value.

The most influential non-financial assets are inventories and receivables related to the sale of goods. The more assets are used optimally, the more effective the use of assets as seen from the ratio of profit to assets. Cash invested in inventories, fixed assets, and financial assets are able to provide returns in the right amount and time. The faster it turns back into cash, the more it adds to the profit and is perceived well by the market so that the value of the company increases. Investors perceive optimal asset utilization and impact on good financial performance that the company has good cash flow and future earnings prospects so that the company is able to provide investors with good future investment returns (dividends, interest, share price differences). So that the company's stock price will rise, many investors are scrambling to own, ultimately impacting the company's value. Asset utilization positively affects firm value, in line with the findings of (Rahayu 2019).

This study finds evidence that companies go public in Indonesia during 2016 – 2020 in comprehensive income, the proportion of net income is greater than other comprehensive income in forming comprehensive income so that net income plays a more important role in causing comprehensive income to affect firm value, and other comprehensive income, the proportion of items in the "to be reclassified" group is greater than the group "that will not be reclassified," so it is the items in the "to be reclassified" group (along with net income) that play a more important role in causing comprehensive income to affect firm value, rather than items that will not be reclassified.

The effect of asset utilization on financial performance based on net income.

Asset utilization has an effect on financial performance based on net income. This is because the more assets are used for operational activities, the more they are able to increase income from the sale of goods and services and income from investment returns (interest, bonds, price differences), so that the net profit is greater, and ultimately has an impact on the value of ROA ROE based on net income. The key to the effectiveness and efficiency of asset utilization is optimizing the sale of goods and services for non-financial assets (trade receivables, inventories, fixed assets) and optimizing investment returns for financial assets. Likewise, financial performance based on net income is also closely related to income from the sale of goods and services, interest income, and dividends. Asset utilization positively affects financial performance based on net income, in line with the findings of (Rahayu 2019).

Financial performance based on comprehensive income means that it includes net income and other comprehensive income. Net income is the result of operating performance as realized income and other comprehensive income from gains (losses) adjusting the fair value of assets (liabilities) from their historical values, which are recognized as unrealized income. Although not yet realized, the items presented in the group that will be reclassified have the potential to be realized and increase net income and cash flows in the next period. The existence of groupings in the presentation of other comprehensive income that will and will not be reclassified can help users to predict the profit and cash flow from the realization, thus affecting the share price and company value.

The effect of asset utilization on financial performance based on comprehensive income.

Asset utilization has an effect on financial performance based on comprehensive income. This is because the more assets are used for operational activities, the more they are able to increase income from the sale of goods and services and income from investment returns (interest, bonds, price differences), so that the net profit is greater, and ultimately has an impact on the value of ROA ROE based on net income. The more assets owned, the greater the adjustment of the historical value of the asset to fair value, so that the value of other comprehensive income is greater. The greater the other comprehensive income, the greater the comprehensive income, and ultimately the impact on the value of ROA ROE based on comprehensive income. The most influential financial assets are fixed assets, related to revaluation, and financial assets related to adjustments to the fair value of financial assets.

The use of financial performance based on comprehensive income measures will be more relevant if it only involves other comprehensive income items presented in the group to be reclassified, rather than using all other comprehensive income components in aggregate. The group of other comprehensive income items that will be reclassified is more related to profitability because it will be realized in the next period so that it affects net income and cash flows. Realized means that assets valued at fair value have been sold (cash-in), and liabilities have been settled (cash out), resulting in a gain or loss from the real difference between realizable value and carrying amount, and the gain or loss is part of net income (profitability). Meanwhile, the group of other comprehensive income items that will not be reclassified means that it will not be realized in the presentation period or future periods, so it is not related to cash flows and net income. This item is purely an adjustment of the value of assets at fair value, and there is no potential to be sold or paid off in the period after the presentation of the financial statements.

The moderating role of financial performance based on net incomw in the effect of asset utilization on firm value.

In the position of ROA NI as an intervening variable, ROA NI is able to mediate the effect of all indicators of asset utilization on firm value. Likewise, in the position of ROE NI as an intervening variable, ROE NI is able to mediate the effect of all indicators of asset utilization on firm value. This is because financial performance in this study is measured by profitability ratios, namely ROA and ROE. ROA is net income divided by total assets, reflecting the efficiency of using assets in generating profits, while ROE me is net income divided by total equity, reflecting the efficiency of using net assets in generating profits. The keywords of the two are efficiency, meaning that users (investors in the capital

market) in measuring performance achievements don't only focus on how much net income is obtained (stands alone without being associated with other variables), but is measured by connecting the net income obtained (as output), compared to how much assets and net assets are used to obtain it (as input).

Financial performance based on net income is a benchmark for the achievement of operational activities whose results influence users in making decisions, including investors in their decisions to buy, hold, or sell shares, which in turn has an impact on stock price movements and the company's market value. Asset utilization as measured by asset use activity ratios focuses more on the size of asset utilization operational process activities, while net profit-based financial performance ratios are the result of asset utilization operational process activities so that financial performance based on net income is able to act as a moderator in the effect of utilization assets to firm value.

The moderating role of comprehensive profit-based financial performance in the effect of asset utilization on firm value.

In the position of ROA CI as an intervening variable, ROA CI is only able to mediate one indicator of asset utilization, namely the effect of FITO on firm value. Likewise, in the position of ROE CI as an intervening variable, ROE CI is only able to mediate one indicator of asset utilization, namely the effect of FITO on firm value. FITO affects other comprehensive income items that adjust the fair value of financial assets available for sale, and these items are most often presented in the group to be reclassified (to be realized in the next period). In line with the investment objective of the available-for-sale category of financial assets, namely obtaining capital gains from the increase in market prices, the age of ownership is short-term. other comprehensive group to be reclassified.

In the position of ROA OCIR as an intervening variable, ROA OCIR is able to mediate three indicators of asset utilization, namely the effect of FITO, RTO, FATO on firm value. Meanwhile, in the position of ROE OCIR as an intervening variable, ROE OCIR is able to mediate two indicators of asset utilization, namely the effect of FITO and RTO on firm value. RTO affects other comprehensive income of cash flow hedged items, and this item is the second most frequently presented in the group that will be reclassified (to be realized in the next period) after the financial asset is available for sale. FATO is only able to be mediated by ROA OCIR, while ROE OCIR is not able to mediate, this is due to the revaluation of fixed assets as part of other comprehensive income items which occurs less frequently than the other five items, but although it occurs the least, its value is the largest and is very rarely presented in a group to be reclassified, because the revalued property, plant and equipment are not to be realized (sold), but to be used.

Financial performance based on comprehensive income can mediate the effect of asset utilization on firm value, if only net income and other comprehensive income items are included in the group to be reclassified. When involving group items that will not be reclassified, comprehensive income-based financial performance is not able to mediate the effect of asset utilization on firm value.

This is because the items of other comprehensive income groups that will be reclassified, in the period in which they occur are not related to cash, it is only the difference between the adjustment of the fair value of assets (liabilities), but this item will be realized (assets sold or liabilities paid off) in the next period, resulting in realized gains (losses) that affect net income, as well as the emergence of transactions involving cash flows, and ultimately affect the value of ROA and ROE.

This gives a theoretical meaning that the SAK policy which requires the presentation of other comprehensive income items by separating the groups that will be reclassified and those that will not be reclassified, greatly assists users in obtaining information on the potential for additional net income and cash flow prospects in the next period from the realization of comprehensive income. other. The reclassification presentation improves fair value accounting in the valuation of assets and liabilities, and improves the concept of "all inclusive income" which underlies the change of location for the presentation of other comprehensive income from the balance sheet to the income statement.

6. CONCLUSION, LIMITATIONS, AND SUGGESTIONS

Conclusion

The purpose of this study is to develop financial performance measures (ROA and ROE) based on comprehensive income, analyze the effect of asset utilization on firm value, analyze the effect of asset utilization on net income-based financial performance, analyze the effect of asset utilization on comprehensive income-based financial performance, analyze the role of mediation net profit-based financial performance on the effect of asset utilization on firm value, and analyze the mediating role of comprehensive income-based financial performance on the effect of asset utilization on firm value, with data on 504 companies on the Indonesia Stock Exchange for the period 2016 – 2020.

The results show that asset utilization has a positive effect on firm value, asset utilization has a positive effect on net profit-based financial performance, asset utilization has a positive effect on comprehensive income-based financial performance, net income-based financial performance is able to moderate the effect of asset utilization on firm value, and performance Comprehensive income-based finance is able to mediate the use of assets to firm value if only net income and other comprehensive income items are included in the group to be reclassified. When involving group items that will not be reclassified, comprehensive income-based financial performance is not able to mediate the effect of asset utilization on firm value.

The findings of this study have a theoretical meaning that the net income version of the ROA ROE and the comprehensive income version each have their respective advantages and disadvantages, and their use is adjusted for the purpose of evaluating performance. Suppose the focus is on evaluating operational performance. In that case, it is more appropriate to use the net income version of ROA ROE because it is superior in measuring the effectiveness of asset use in generating income that has been realized in operational activities. However, the net income version of ROA ROE does not involve comprehensive income from the increase in the fair value of assets as the comprehensive income version of ROA ROE, so it is not in line with the concept of fair value accounting and all-inclusive income. ROA ROE net income version cannot be used to measure the effectiveness of asset utilization in generating unrealized and potentially realized income in the next short-term period. Unfortunately, ROE ROE of comprehensive income includes all other comprehensive income items in aggregate, both unrealized and potential to be realized, so that it can obscure information related to the assessment of future cash flow prospects. Other comprehensive income items that fall into the "will not be reclassified" group both in the period it occurs and the next period, are not related to cash; during the 2016 – 2020 research period, other comprehensive income items that are most often included in this group in company presentation are asset revaluation and differences post-employment liability actuarial. This is in line with the purpose of

ownership of property, plant, and equipment purchased for use, that the asset is revalued not to be disposed of but not in proportion to the carrying amount with the physical value due to errors in the estimation of benefits and depreciation expense.

Comprehensive income is a combination of net income and other comprehensive income, so to increase the value of relevance in relation to cash flow predictions, as a middle ground if you want to use the ROA ROE version of comprehensive income, you should only use net income combined with other comprehensive income items in the "group" will be reclassified" because the company will realize this item, thus affecting the cash flows from the sale of assets and settlement of liabilities whose previous carrying amount is adjusted to fair value. During the 2016 – 2020 research period, other items of comprehensive income that most often fall into this group in the presentation of companies are adjustments to the fair value of financial assets, followed by adjustments to the fair value of cash flow hedging contracts and translation of financial statements of overseas business units. This is in line with the objective of ownership of financial assets in the available-for-sale category, which is to obtain capital gains from the increase in the fair value of financial assets. The use of the ROA ROE version of comprehensive income by only involving other comprehensive income groups that will be reclassified improves the weakness of the ROA ROE version of the comprehensive income version without obscuring the meaning of net income information.

This study supports the Indonesian SAK policy regarding the presentation of other comprehensive income items in groups that will and will not be realized (will be reclassified to net income), because it helps users to predict future net income and cash flows, measure financial performance with profitability ratios based on net income. And comprehensive income from other comprehensive income items. The regulation on the presentation of reclassification of other comprehensive income enhances the paradigm of fair value accounting and "all-inclusive income" income recognition because it links cash flows and net income with other comprehensive income. Other comprehensive income is not related to cash flows and net income in the period presented. It is only the difference in the valuation of assets and liabilities from historical value to fair value. Reclassification helps users of items that have the potential to be realized and increase or decrease cash and net income in the next period.

Limitation and suggestions

This study suggests to management that an in-depth analysis of profitability based on net income and comprehensive income, both in the short and long term, is required by management before making strategic investment decisions. Management really needs in-depth knowledge about the effective and efficient use of assets in carrying out the company's operational activities in order to obtain optimal returns on asset utilization. Suggestions for investors that insight into the measurement ratio of asset utilization is also very necessary for investors in assessing the performance of asset utilization by management, not only profitability. Effective and efficient use of assets has an impact on financial performance, so it is related to cash flow prospects and the ability to provide investment returns in the future. The use of profitability ratios by involving comprehensive income, especially other comprehensive income items that are grouped will be reclassified, can provide a more comprehensive measure of financial performance in a longer period of time. The involvement of other comprehensive income items that are grouped will be reclassified means assessing additional net income from the realization of other comprehensive income items. In evaluating financial performance, this study

advises users that it is advisable to continue using the ROA ROE measurement tool on a net profit basis when focusing on operational performance. However, if you want a comprehensive evaluation involving all income that causes an increase in equity, both realized and unrealized income, you can use a comprehensive income-based measurement, but it is recommended not to involve all other comprehensive income items in aggregate, but only group items that will be used reclassified only because this item has the potential to be realized and increase (decrease) net income and cash flow.

The government, especially the financial services authority (OJK) in Indonesia, should require issuers in preparing financial reports and prospectuses for the Indonesian capital market to include a calculation of the ROA and ROE ratios based on comprehensive income and comprehensive income for the group to be reclassified, along with the meaning of the results of these calculations. This is in line with the change in the format for presenting the income statement with additional information on other comprehensive income. The obligation to include the calculation of ROA and ROE ratios based on comprehensive income will provide broad and comprehensive information to users in measuring soundness, predicting investment returns, and comprehensive future cash flow prospects.

This study has limitations regarding financial report data affected by the Covid-19 pandemic, using only one financial reporting 2020 period. The Covid-19 pandemic certainly affects people's purchasing power and impacts the sale of goods and services, thus affecting the size of the asset utilization ratio. Further research is recommended to extend the period affected by Covid-19 to provide empirical evidence of the effect of Covid-19 on the relationship between asset utilization, comprehensive profit-based financial performance, and firm value.

ACKNOWLEDGMENT

Thanks to LPPM Uniska Kediri for the internal research grant. The author also expresses his deepest gratitude to the teachers and motivators: Prof. Grahita Chandrarin, Dr. Prihat Assih, and Dr. Diana Zuhroh, for their extraordinary knowledge.

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