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Shareholder Value Creation Measurement Analysis in Healthcare, Materials, and Real Estate Industry in Indonesia

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***Abstract*—The measurement of shareholder value creation has not been accurately and consistently explained. Several studies have been conducted to measure shareholder value creation, based on both accounting and economics. However, the results obtained from these studies are confusing and do not have the same results universally. This research is designed by grouping the companies according to the industry. The results of the study show that the appropriate measure in the healthcare industry is represented by accounting measurements, whereas in the materials and real estate industry, it is represented by economy measurements. In the healthcare industry, the trigger factor is Cash Flow from Operating Activity, but in the materials and real estate industry, the trigger factor is Economic Value Added. In the healthcare industry, management can optimize the company's operational scheduling and maximize the use of facilities in hospitals and minimize errors caused by healing and patient care activities. In the materials industry, management must focus on product quality, corporate profitability, and capital management. In the housing industry, management must evaluate projects, manage an effective supply chain system, and focus on real estate development planning, sales strategies, and an attractive credit strategy.**

Keywords—shareholder value creation, health care industry, materials industry, real estate industry

I. INTRODUCTION

The increase in shareholder wealth is very closely related to maximization of corporate value. Thus, the concept of maximization of shareholder value becomes the main goal of corporate management. The concept of shareholder value maximization has become important for the following three reasons: for the welfare of the social environment, to provide benefits to consumers, and to provide benefits for employees [1].

In Indonesia, the stock market continues to grow positively. The IDX and Indonesian Kustodian Sentral Stock (KSEI) data show an increase of 14.7% single investor identification in July 2017 with 96% of local investors. In terms of ownership, the current ownership of local investors is influenced by 52.65% compared to 47.35% foreign ownership. In addition, the dominance of local investor ownership of corporate bonds is 92% as of July 31, 2017 [2]. This indicates that the community, whether directly or indirectly, is a shareholder of the company. In addition, consumers are long-term beneficiaries of the company and will indirectly contribute continuously to the sustainability of the company. Therefore, the company must be able to provide maximum benefits to consumers so as to maximize stock prices and provide maximum returns for shareholders. In general, as successful companies grow, the number of employees will increase, which will be beneficial to the community at large by increasing the number of jobs [1].

Based on the description above, the concept of shareholder value maximization is an urgent and crucial issue to be observed by company management. The question that often arises is how shareholder value creation can be accurately measured and described. The measure that is considered capable of explaining shareholder value creation is essentially divided into two—accounting-based measurement and economics-based measurement [3]. Accounting-based measurement is a traditional measurement to determine shareholder value creation through data on financial statements, such as Earning per Share (EPS), Return on Equity (ROE), Return on Assets (ROA), Dividend Per Share (DPS), and Cash Flow Return on Investment (CFOI). However, more recently, this measure has been compared to economics-based measurements, which focus on added value for companies, such as Economic Value Added (EVA), Market Value Added (MVA), Cash Value Added (CVA), and Refined Economic Value Added (REVA).

Various studies have been conducted in recent decades to measure shareholder value creation. In this regard, eight studies have suggested accounting-based measurement and ten have recommended economics-based measurement to be more appropriate to describe shareholder value creation. Some possible causes for the inconsistency of the outcome

are the compilation of company-wide samples, the state of the research, and the statistical techniques used [3]. These confounding results can lead many to question whether the benchmark for measuring shareholder value creation is appropriate and can cause management to make wrong decisions focusing on the concept of maximizing shareholder value. In addition, the investor, as part of a company's shareholders, can misinterpret any value driver that contributes most to themselves. Furthermore, this can also have an impact on analysts who have the potential to give wrong views to their clients in stock and corporate valuation calculations [3].

The author realizes that this gap is a considerably decisive issue to be studied. Therefore, this study intends to provide a new view of the measurement of shareholder value creation by grouping companies on the basis of industry types. In shareholder value creation studies, the selection of samples using this method was done only by some researchers, namely, studies by Biddle and Seow [4] and Lee and Kim [5] on the hospital industry as well as a study by John Henry Hall [3]. In essence, this study aims to expand the limited research, with a selection of companies in Indonesia. The selected sectors as research objects are those that have very different characteristics, including the healthcare industry, the materials industry, and the real estate industry. The study clearly shows the creation of shareholder value in industries with different and unique characteristics.

II. LITERATURE REVIEW

The shareholder value approach is created by arguing that the shareholders are "residual claimants." This means that shareholders only get a share after every other stakeholder has earned his share. Maximizing corporate value is a company's primary objective [6]. This is because the company is seen as an instrument controlled by the owner (in this case a shareholder or shareholders), who assume a unified risk in capital or investment in the company. The argument that the main purpose of a company is shareholder value maximization is supported by the fact that each stakeholder has been compensated, but the lost opportunity costs are the responsibility of the shareholders. All stakeholders have the opportunity to negotiate the value earned on a periodic basis. This, however, does not apply to shareholders. There is no special right whereby shareholders may negotiate for a given dividend. In fact, when a company does not pay dividends, shareholders have no chance to change the decision.

2.1 Hypothesis Development

Many studies have examined shareholder value creation by comparing measurements based on accounting and economics. An economics indicator used in the measurement of shareholder value creation is Economic Value Added. Economic Value Added is suggested to be the best indicator to describe shareholder value creation with a coefficient of determination of 50% [7]. This is also supported by a study of 241 companies in the United States, where two-thirds belong to the manufacturing sector. Through this study, it was concluded that businesses that focus their activities on good corporate management will increase their Economic Value Added component. Furthermore, Economic Value Added will increase Market Value Added in the same direction. In other words, Economic Value Added and Market Value Added are the appropriate measurements to assess strategic decisions and give a signal to shareholders for changes in corporate strategy [8]. In a study of companies in Australia, Economic Value Added explains significantly about value creation of shareholders [9-13]. Nevertheless, there are some studies of Economic Value Added that do not more accurately explain the value creation of shareholders compared with accounting measurement. This is because the measure of profitability (which is an accounting measure) is considered to reflect the profitability and performance of a real company [4, 14-16]. However, based on the pattern from some previous research, Economic Value Added is a better measurement to describe a company's performance compared with accounting-based measurements. The greater the value of Economic Value Added, the greater the value the company creates to shareholders [10]. Meanwhile, Economic Value Added has the highest correlation with Market Value Added [17]. Therefore, the first hypothesis in this study is formulated thus:

H1: Economic Value Added has a significant effect on Market Value Added

Cash Flow from Operating Activities is an accounting measure that can explain shareholder value creation. In the testing of several companies in India, Cash Flow from Operating Activities has a coefficient of determination of 17.5% regarding the explanation of shareholder creation represented by the market value of some companies in India [16]. Therefore, the second hypothesis in this study is as follows:

H2: Cash Flow from Operating Activities has a significant effect on Market Value Added

Return on Assets has a significant relationship in explaining shareholder value creation. The study of 566 Merika companies concluded that 80% of shareholder value creation changes are explained by a 25% profitability ratio of Return on Asset. This study also concluded that accounting-based measurements further explain shareholder value creation as compared to economics-based measurements [15]. Therefore, the third hypothesis in this study is as follows:

H3: Return on Asset has a significant effect on Market Value Added

High Return on the Capital Employed reflects good company performance in managing its working capital to generate operating profit for the company [3]. Return on the Capital Employed is better judged to explain shareholder value creation than economics-based measurement in case of Indian companies in the manufacturing sector [16]. Therefore, the fourth hypothesis in this study is as follows:

H4: Return on Capital Employed has a significant effect on Market Value Added

Return on Equity is one of the profitability ratios that measure the efficiency of capital management invested by investors in a company by generating profits for the company [18]. Return on Equity, which is an accounting measure, is considered to better explain the creation of shareholder value than the economics-based measurement in case of Indian companies in the manufacturing sector [16]. Therefore, the fifth hypothesis in this study is as follows:

H5: Return on Equity has a significant effect to Market Value Added

Positive spreads describe the condition of the rate of return compared to the cost of capital owned by the company. If the spread is higher, the shareholder value creation is also higher [10]. Therefore, the final hypothesis in this study is as follows:

H6: Spread has a significant effect on Market Value Added

III. RESEARCH METHODOLOGY

3.1 Research Objects and Time Research Horizon

The scope of the sample taken in this study is limited to a few industry sectors in Indonesia, namely, the healthcare, materials, and real estate industry in Indonesia. In general, the selection of the industry aims to identify different value triggers in industries with distinct and unique characteristics. Thus, it can be determined whether the value creation factors of shareholders in companies with unique industry characteristics are related [3].

3.2 Data Collection

The data used in this study are secondary data obtained from Data Stream Thomson Reuters. Other data supporting the formation of dependent and independent variables are secondary data obtained from www.waccexpert.com.

3.3 Variable Measurement and Data Processing

The variable measurement is shown in Table 1. Data processing is done with panel data regression. To find the best estimation, the following three tests are conducted. The Likelihood Ratio (Chow) Test is used to select one model of panel data regression between the Fixed Effect Model and the Fixed Coefficient Model. If the probability value of chi-square is greater than the level of significance α used, then the Fixed Coefficient Model is better than the Fixed Effect Model. The Hausman Test is used to select one model of panel data regression between the Fixed Effect Model and the Random Effect Model. If the probability value of chi-square is greater than the level of significance α used, then the Random Effects Model is better than the Fixed Effects Model. Finally, the Lagrange Multiplier Test is used to select one model of panel data regression between the Fixed Coefficient Model and the Random Effect Model.

TABLE 1. VARIABLE MEASUREMENT

Variable	Definition	Measurement Scale
Market Value Added (MVA)	Market Value Added is an indicator of shareholder wealth measurements popularized by Stern Steward (1991). It measures what value a market perceives of a company and the potential wealth that a company will generate.	$MVA = Total\ Market\ Value\ of Equity - Total\ Book\ Value\ of\ Equity$
Economic Value Added (EVA)	Economic Value Added is an economic measurement indicator of value creation of shareholders.	$EVA = NOPAT - (Invested\ Capital \times WACC)$
Cash Flow from Operating Activities (CFO)	Cash Flow from Operating Activities is an indicator of accounting measurement of value creation of shareholders. It provides a view of how the company finances short-term capital and describes how much cash flow the company generates from its core operations, but not on investment activities and financing activities.	$CFO = EBIT + Depreciation - Taxes + Change\ in\ Net\ Working\ Capital$
Return on Asset (ROA)	Return on Assets is an indicator of accounting measurement of value creation of shareholders. It is one of the profitability ratios that measure the efficiency of the use of company assets in generating profits for the company.	$ROA = \frac{Net\ Income}{Total\ Asset}$
Return on Capital Employed (ROCE)	Return on Capital Employed is an accounting measurement indicator of value creation of shareholders. It is used to determine the effectiveness of the company managing its working capital to generate operating profit of the company.	$ROCE = \frac{NOPAT}{Total\ Capital}$
Return on Equity (ROE)	Return on Equity is an indicator of accounting measurement of value creation of shareholders. It is one of the profitability ratios that measure the efficiency of capital management invested by investors in a company to generate profits for the company	$ROE = \frac{Net\ Income}{Total\ Equity}$
Spread	Spread is an indicator of accounting measurement of value creation of shareholders.	$SPREAD = ROCE - WACC$

The hypothesis used as a Lagrange Multiplier's testing procedure is as follows [19]: If the significance value of Breusch–Pagan probability is greater than the level of significance α used, then the test procedure fails to reject H0. In other words, the Fixed Coefficient Model is better than the Random Effect Model.

IV. RESULT AND ANALYSIS

According to the classification of the Global Industry Classification Standard (GICS), 78 companies are used as research objects. These are divided into 9 companies in the healthcare industry, 38 companies in the materials industry, and 26 companies in the real estate industry.

4.1 Healthcare Industry

- *Multicollinearity Testing*

At the beginning of the multicollinearity test, there are variables that have a correlation coefficient of more than 0.90. This indicates that the data contain multicollinearity problems. Thus, it is necessary to make improvements to eliminate multicollinearity so that data are considered feasible for regression estimates. The multicollinearity test is improved by eliminating ROCE and ROE variables that have the highest correlation coefficient; therefore, there is no correlation coefficients exceeding 0.90 between two variables. Thus, the model with the above independent variable is declared free of the multicollinearity problem.

- *Best Regression Estimation Model*

Based on the Likelihood Ratio test, the critical values of chi-square with a degree of freedom of 8 at α = 1% and 5% are 20.09 and 15.51, respectively. The test procedure concluded that the Fixed Effect Model is better than the Fixed Coefficient Model. Next, based on the Hausman test, the critical values of chi-square with a degree of freedom of 4 at α = 1% and 5% are 13.28 and 9.49, respectively. The test procedure concluded that the Fixed Securities Model is better than the Random Effect Model. Thus, the best model for the regression estimation for the healthcare industry is the Fixed Effect Model.

- *Hypothesis Testing*

Hypothesis testing is performed on the Fixed Coefficient Model as it is the best regression estimation model for the healthcare industry. Two-tailed hypothesis testing performed by T-test will accept the research hypothesis if the t-statistic value is less than the negative t-Stat value or greater than the positive t-Stat value at a certain α. The critical value of t-statistic with a degree of freedom of 4 at α = 5% is 2,776. The second hypothesis is accepted within the specified limit; that is, *Cash Flow from Operating Activities* has a significant effect on *Market Value Added.*

4.2 Materials Industry

- *Multicollinearity Testing*

At the beginning of the multicollinearity test, there are variables with a correlation coefficient exceeding 0.90. This is improved by eliminating ROE variable that has the highest correlation coefficient. Therefore, there will no longer be a correlation coefficient exceeding 0.90 between two variables.

- *Best Regression Estimation Model*

Based on the Likelihood Ratio test, the critical values of chi-square with a degree of freedom of 37 at α = 1% and 5% are 50.89 and 43.77, respectively. The test procedure concluded that the Fixed Effect Model is better than the Fixed Coefficient Model. Next, based on the Hausman test, the critical values of chi-square with a degree of freedom of 5 at α = 1% and 5% are 15.09 and 11.07, respectively. The test procedure concluded that the Fixed Securities Model is better than the Random Effect Model. Thus, the best model for the materials industry is the Fixed Effect Model.

- *Hypothesis Testing*

Hypothesis testing is performed on the Fixed Coefficient Model as it is the best regression model for the materials industry. The critical value of t-Statistic with a degree of freedom of 32 at α = 5% is 2,038. Within the specified limits, the first hypothesis is accepted; that is *Economic Value Added* has a significant effect on *Market Value Added.*

4.3 Real Estate Industry

- *Multicollinearity Testing*

At the beginning of the multicollinearity test, there are variables having a correlation coefficient exceeding 0.90, indicating multicollinearity problems of data. This is improved by eliminating the ROE variable having the highest correlation coefficient. Therefore, no correlation coefficient exceeding 0.90 exists between two variables.

- *Best Regression Estimation Model*

Based on the Likelihood Ratio test, the critical values of chi-square with a degree of freedom of 25 at α = 1% and 5% are 44.31 and 37.65, respectively. The test procedure concluded that the Fixed Effect Model is better than the Fixed Coefficient Model. Next, based on the Hausman test, the critical values of chi-square with a degree of freedom of 5 at α = 1% and 5% are 15.09 and 11.07, respectively. The test procedure concluded that the Fixed Coefficient Model is better than the Random Effect Model. Next, based on the Lagrange Multiplier test, the probability value of Breusch–Pagan statistic 0.0000 is smaller than the level of significance α of 1%. The test procedure concluded that the Random Effects Model is better than the Fixed Coefficient Model.

- *Hypothesis Testing*

Hypothesis testing is performed on the Random Effects Model as it is the best regression estimation model for the

real estate industry. The critical value of t-Statistic with a degree of freedom of 20 at $\alpha = 5\%$ is 2.086. Within the specified limits, the first hypothesis is accepted; that is *Economic Value Added* has a significant effect on *Market Value Added.*

4.4 Discussion

The discussion of the study is presented below:

- Healthcare industry

The healthcare industry is a unique industry as unlike other industry sectors, it focuses on services and products. The healthcare industry sector has a secular and defensive aspect in the economy. Every product in this industry, such as medicines, treatments, and medical facilities, are a necessity whose cost must be met by the patient. However, the industry also suffers from extremely high volatility with regard to industry sensitivity because the industry relies heavily on strict and vulnerable government policies [20]. Based on the tests conducted, it can be concluded that the best estimation model in terms of the test procedure is the Fixed Effect Model. The Fixed Effect model shows that there is an intercept in each company, but the regression coefficient (slope) is maintained between companies and between time. This implies that the contribution of each variable to the change in Market Value Added in the healthcare industry is the same. However, the constants on the regression model may differ with each company [21].

In this study, the creation of shareholder value in the healthcare industry measured by Market Value Added is strongly influenced by Cash Flow from Operating Activities. In this research, Cash Flow from Operating Activities is an accounting measurement indicator of shareholder value creation. This result is in line with a study conducted for companies in India; the study states that accounting measurements can better explain the creation of shareholder value with a significantly differentiated Market Value Added variable [4, 10, 15, 16, 22-24]. Economic Value Added is not fully able to explain and influence shareholder value creation and has little effect and no significant return on shareholder value creation [16].

In the hypothesis test results, the coefficient of Cash Flow from Operating Activities is negative. This implies that at every decline in Cash Flow from Operating Activities resulted in the addition of Market Value Added for healthcare industry companies. These results are supported by research conducted on several companies in India, which also showed a negative coefficient for Cash Flow from Operating Activities [16]. This is because almost all of the available data show an opposite relationship direction. The data clutter in this industry shows that almost 50% of Cash Flow from Operating Activities has the opposite sign to Market Value Added. Based on this model, 61.97% of the variables that explain shareholder value creation in the healthcare industry can be explained, whereas 38.03% of the determinant variable of shareholder value creation in the healthcare industry cannot be explained by this model.

The function of the healthcare industry has expanded, not just the healing of the sick but also the treatment for healing and illness prevention. Thus, management of every company in the healthcare industry must have good effectiveness and efficiency in its core business. Companies can run businesses effectively and efficiently by carrying out meaningful activities (in this case, reflecting a company's vision and mission) with clear and measurable performance in the healthcare industry. This includes management governance as well as healthcare quality, which includes customer satisfaction, good financial planning, and efficient labor and supply [28].

Cash Flow from Operating Activities of a company shows whether the company is able to create and manage enough revenue to cover the entire operating expenses of the company. If cash flow from the company's operation is negative, then the company cannot cover the cost of operating expenses by running its business. Some expenses included in the category of operating expense are the cost of building insurance, the cost of hospital equipment, and utility costs [29]. This shows that the facilities used to conduct the company's operational activities is of critical concern. The cost of insurance for employee pension contributions is also an operating expense [29]. In some cases, negative cash flow from operations can be an indication of a growing company (Wright).

If a company can maintain good conditions by its growth, then the market will appreciate the company, thereby increasing Market Value Added for the company. Therefore, under favorable conditions, even if the company generates a negative cash flow from its operations, the company can still gain access to external financing through debt and liabilities [30]. In this regard, management can improve the optimization of planning and scheduling of medical personnel and support staff, so that the company's condition can still improve performance. Then, management and employees can maximize the use of hospital facilities, such as improving the efficiency of operating and maintenance activities while not reducing the benefits to patients as consumers of the healthcare industry. In addition, both management and employees can eliminate errors in maintenance that may incur costs to the companies within the healthcare industry, thereby increasing shareholder value creation [31].

- Materials Industry

The materials industry is one of the most complex industries, which deals with the processing of chemicals such as fertilizers, steel, glass, paper, aluminum, iron, gold, and forest products. The tests show that the best estimation model in terms of the test procedure is the Fixed Effect Model.

In the study, the creation of shareholder value in the materials industry as measured by Market Value Added is significantly influenced by Economic Value Added. In this

study, Economic Value Added is an indicator of economics-based measurement of shareholder value creation. These results are in line with the study conducted on the food process industry in the Czech Republic; in that study, Economic Value Added reflected changes in shareholder wealth consistently and better than traditional measures [32]. These results are also supported by various studies on indicators that influence shareholder wealth creation in other industries in the United States [7, 11-13, 15, 33-37]. Based on this model, 75.3%of the variables describing shareholder value creation in the materials industry can be explained, while 24.7% of the determinant variables of shareholder value creation in the materials industry cannot be explained by the model.

The hypothesis testing results show that the effect of Economic Value Added on the creation of shareholder value has a positive coefficient. This means that every increase of Economic Value Added will direct increase Market Value Added. Conversely any decrease in Economic Value Added will also direct decrease Market Value Added. Economic Value Added generated through good managerial practices will have an impact on increasing Market Value Added. When expanded in relation to the business of the company, management that focuses on the core business of the company are then able to diversify and become a conglomeration company as one of the efforts to increase the company's economic scale. Therefore, Economic Value Added and Market Value Added are performance measurements that also contain information about the direction and quality of strategic decisions and can serve as signals when a strategy shift [8].

Companies that are able to double their Economic Value Added are also shown to have a positive correlation with the market price of the company's stock. This is because through good performance, the positive investor expectations will give a direct impact on the company's stock price and increase the company's Market Value Added [37]. Meanwhile, corporate profits can be measured relative to the capital required by companies based on their level of profitability (Grant, 1996) [36]. In addition, the increase in corporate income is not enough to generate shareholder value, but management must pay attention to the returns the company can afford to the shareholders [13]. Therefore, to generate positive economic added value, management must be able to manage capital well and always improve its performance. There are basically three ways to increase Economic Value Added: by investing in a business with a positive rate of return, by expanding a business that generates positive economic added value for the company, and by reducing or eliminating a business that generates negative economic value added [38].

Unlike the healthcare industry, the materials industry has a very complex process. The function of the materials industry is closely related to the processing of chemicals that are often used as the beginning of the next production process or made as an early component for more complex products. Production of steel, aluminum, iron, and so on is indispensable for manufacturing activities. In addition, forest products and fertilizers make Indonesia an attractive country for investment and trade [39]. This is evidenced by the increasing export of Indonesian commodities. Accordingly, management must pay attention to the quality of each product produced in this industry. In addition, management should focus on the profitability of the company and to manage the capital given by shareholders effectively and efficiently. This can be done to ensure that the production process runs optimally. In addition, if the company does not operate well based on its financial performance, the company can review the proportion of capital so that the capital structure becomes optimal [39]. Thus, the market can appreciate the company's performance through increasing share prices, thereby increasing shareholder value creation.

- Real Estate Industry

The real estate industry is basically a very broad industry characteristic, ranging from product segmentation that must focus on investor needs to very high debt ratios to fund projects in this industry activity. In addition, the housing industry has high transaction costs, needs continuous and sustained improvement, and has minimal response to supply and demand changes. The characteristics of this industry make this industry have a close relationship to the selection of places (physical), use of assets (capital), and development process [40].

The tests conducted concluded that the best estimation model based on the testing procedure is the Random Effect Model. The Random Effects Model is actually a model that arises from a deficiency in the Fixed Effects Model. The Fixed Effect Model using dummy variables aims to represent the researchers' ignorance of the variables that make up the actual model. This problem is then resolved by assuming an interference variable as a random effect. The assumptions used in this model are interference variables that may be related between time and between individuals [21].

Similar to the materials industry, the creation of shareholder value in the real estate industry as measured by Market Value Added is significantly influenced by Economic Value Added. In this study, Economic Value Added is an indicator of economic measurement (economic based) of shareholder value creation. The Return on Assets also significantly affects a higher level of significance, equal to 10%. In a study of 100 banks in the United States, Return on Assets has the second highest correlation after Economic Value Added [11]. Based on this model, only 23.6% of the variables describing shareholder value creation in the housing industry can be explained, whereas 76.4% of the determinant variables of shareholder value creation in the housing industry cannot be explained by the model. The results of hypothesis testing indicate that the effect of Economic Value Added on value creation shareholders has a positive coefficient.

Having such complex industrial characteristics, management in this housing industry must have good effectiveness and efficiency within its core business. Given the huge project funding needs, management must pay close attention to every project handled by the company. Management should be able to assess projects that generate economic value-added for the company and evaluate the capital allocation within the company. In addition, management should also efficiently manage assets by setting up an effective supply chain system, which can also provide competitive advantage to shareholder value creation [3].

In this industry, supply and demand will determine the price consumers are willing to pay, which is usually in the form of credit. Meanwhile, the focus of asset usage describes investment activity taken by investors based on the buying and selling decision. This will, of course, be assessed based on future cash flows that can be offered from residential projects based on location focus. Associated with the buyers' credit, management must implement sales strategies and appropriate credit strategies for consumers so that consumers can benefit from the purchase of such housing. In addition, development decisions are critical to the industry, where such development decisions will impact on the quality of life of the population. Thus, the creation of shareholder value will be maximized [40].

V. CONCLUSION

The study can be concluded as below:

- The most appropriate measures for describing shareholder value creation in the healthcare industry, the materials industry, and the housing industry in Indonesia are different. In the healthcare industry, accounting-based measurements represented by value have significant results on shareholder value creation. Meanwhile, economics-based measurements represented by having more significant results on the creation of shareholder value in the materials and housing industries.
- In the healthcare industry, the trigger factor of the main shareholder value is Cash Flow from Operating Activities. Meanwhile, in the materials industry, the trigger factor of the main shareholder value is Economic Value Added. In contrast, in the housing industry, triggering factors that have a significant impact on the level of alpha significance of 10% is Return on Assets.
- In general, management must make efficiency and effectiveness a priority in each of their business activities, oriented toward the company's vision and mission, and continue to adhere to shareholder values. In the healthcare industry, management can optimize the company's operational scheduling and maximize the use of facilities in hospitals and minimize errors caused in healing and patient care activities. In the materials industry, management must focus on product quality, corporate profitability, and capital management. In the housing industry, management must evaluate projects that generate economic value added, manage an effective supply chain system, and focus on real estate development planning, sales strategies, and an attractive credit strategy.

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