

# The Role of EVA in Enhancing Corporate Value and Sustainability: a Case Study Approach

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## ABSTRACT

*Applied financial position of corporates and calculate their actual economic profit take into account the Economic Value Added (EVA) methodology. The objective of this paper is to apply the EVA methodology to real-world corporate data, presenting a comprehensive case study that illustrates the creation of corporate value. This study is grounded in extensive literature review, including research publications and studies related to sustainability, corporate social responsibility, the sustainable value concept, and the EVA methodology itself. Additionally, the analysis draws on the corporation's financial statements, including accompanying notes, to ensure a thorough examination. Various analytical methods were employed throughout the study, including analysis, comparison, selection, abstraction, induction, deduction, determination, and statistical techniques. These methods were crucial in accurately interpreting the data and deriving meaningful insights regarding the corporation's economic performance. While the EVA methodology offers significant advantages in evaluating a corporation's value by focusing on economic profit and cost of capital, it is also subject to certain limitations and challenges. These include potential difficulties in obtaining accurate cost of capital estimates and the complexity of adjusting accounting figures to reflect true economic realities. Despite these challenges, EVA remains a powerful tool for understanding and enhancing corporate value creation..*

**Keywords:** *Financial Performance, Economic Value Added, Eva Methodology, Corporate Value*

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## 1. INTRODUCTION

Topic about corporate's value and value creation is currently being widely discussed in management strategy and sustainability performance literature (Jankalová & Kurotová, 2020; Kassem et al., 2016). Value creation is reflected in Shareholders value, which consists of economic, environmental, social, and governance aspects (Kazakova & Lee, 2022; Salvioni & Gennari, 2020). In this context, the ability of governance to develop the company sustainably, with a focus on increasing value and reducing risk in the long term, is strongly influenced by the implementation of policies that emphasize the principles of integrated social responsibility (Mähönen, 2020), positive and fair interaction with stakeholders, and respect for the environment (Li et al., 2021). So, Corporate value is not just market capitalization where its theoretical value lies in the number of outstanding shares multiplied by the current stock price (Jankalová & Kurotová, 2020). It is in-depth business analysis and evaluation. To support corporate value, aspect sustainability is very important for business focus (Cho, 2022). The sustainability aspect consists on economic and non-economic aspects like environment, social, and governance (ESG) (Abdi et al., 2022). This is the idea of sustainable value creation (Aagaard, 2019).

Nevertheless, determining indicators for environmental, social, and governance aspects is not an easy task (Rohendi et al., 2024). If implemented, some indicators will have

significant limitations (Jankalová & Kurotová, 2020). Edmans (2023) states that there are only two approaches that can be used to reduce quantification in research related to Environmental, Social, and Governance (ESG). First, keep using numerical data in the form of ESG ratings or scores and second, qualitative assessment of ESG through market surveys. According to Edmans (2023) an ESG rating isn't fact; it's opinion. ESG measurement is unclear what is being measured and is easily politicized for specific interests. Meanwhile, the second method is not easy to do for both practitioners and academics because it must involve investors, institutions and companies (Rau & Yu, 2024). Therefore, many of them take over ESG calculations into first way which does not provide a real picture of the company's situation.

In facing this issue, Jankalová and Kurotová (2020) suggest considering the efficiency and effectiveness of the three sustainability dimensions into the economic study. ESG did not have the same impact on sustainability, on the contrary, the economic aspect had a positive effect (Kocmanová et al., 2016). According to (Edmans, 2023), investors need great companies, not just good at ESG. ESG is just one of the information that supports investors to sell or buy stocks based on financial statements and brokerage reports in rational decision making. Moreover, companies can only be considered as contributors to sustainability if the benefits they create outweigh the harm they cause to the environment; although they also advocated of eco-efficiency (Figge & Hahn, 2004). This means that the company's good performance and has survived for a long period of time has implicitly applied ESG principles. Therefore, that corporate sustainability can be reduced to economic calculations through financial performance.

From the financial performance perspective, economic value added (EVA) is the best financial metric for maximizing corporate value and measuring shareholders' value added (Dobrowolski et al., 2022; Kassem et al., 2016; Tripathi et al., 2022). According to Kassem et al. (2016), although non-financial aspects are required to evaluate overall sustainability performance, EVA should be calculated first because it is the backbone of corporate value. By calculating EVA, companies have already gone halfway through the process of evaluating corporate sustainability performance. According to Sanga, Kefi, and Sanam (2024) value added metrics show the urgency of its application in Indonesia for evaluation financial performance and shareholder value creation. In this paper, EVA is modified into a methodology used to determine corporate value.

The objective of the paper is to utilize the economic value added methodology to analyze actual corporate data and illustrate a corporate's worth using a case study. The EVA method for evaluating a corporate's value assumes that it comprises two fundamental components: one represents the amount of money invested by shareholders and creditors, while the other is the current value of future economic value added. The paper is structured as follows: Section 2 outlines the research method; Section 3 presents the concept of Economic Value Added and explains how to calculate it; Section 4 examines the relationship between the findings and the corporate's Sustainable Value; and Section 5 summarizes the primary conclusions and implications.

## 2. METHODS

Because of this study helps in the practical application of EVA in real-life companies, some of the criteria used to be employee for corporate data. Firstly, the corporate has been a listed issuer on the Indonesia Stock Exchange for over 20 years. Secondly, the corporate has implemented a sustainability report for approximately 20 years. Thirdly, the corporate is part of an international group. Based on these three criteria, the corporate data used is the issuer PT Astra International Tbk for the years 2020 to 2022.

EVA is calculated as a difference between the net operating profit after taxes (NOPAT) and the capital charges (Invested Capital  $\times$  WACC). Generally accepted accounting principles (GAAP) for the EVA's calculation (Equation 1):

$$\text{EVA} = \text{NOPAT} - (\text{Invested Capital} \times \text{WACC}) \quad (1)$$

Where, NOPAT: net operating profit after taxes; Invested capital: long-term debt + shareholders' equity; capital invested: total capital invested through equity or debt in a given corporate; WACC: weighted average cost of capital.

#### *Calculation of Invested Capital*

Invested capital refers to the total amount of capital that a corporate has invested in its operations, which may include both equity and debt financing. Invested capital is calculated by net operating assets where non-operating assets removed from total assets.

#### *Calculation of Net Operating Profit After Tax (NOPAT)*

Net Operating Profit After Tax (NOPAT) represents a corporate's performance in its fundamental operations, taking into account taxes. Essentially, it is the profit amount generated by a corporate's operations after taxes, disregarding interest payments.

The formula of NOPAT (Equation 2):

$$\text{NOPAT} = \text{operating profit} * (1 - T) \quad (2)$$

Operating profit refers to EBIT (earnings before interest and taxes). The formula of EBIT (Equation 3):

$$\text{EBIT} = \text{Revenue} - \text{Operating Expenses} \quad (3)$$

Where, Revenue = Total sales revenue generated by the corporate; Operating Expenses = Total operating expenses incurred by the corporate, including cost of goods sold, selling and administrative expenses, and depreciation and amortization expenses.

#### *Calculation of Weighted Average Cost of Capital (WACC)*

The cost of capital includes both the cost of debt and the cost of equity and represents the minimum return that investors require to finance a corporate's operations. The formula of WACC (Equation 4):

$$\text{WACC} = (rd(1-T) \times D/V) + (re \times E/V) \quad (4)$$

Where, E represents the market value of the corporate's equity, D represents the market value of the corporate's debt, V represents the total value of the corporate (E + D), re represents the cost of equity, rd represents the cost of debt. T represents the corporate's income tax rate. re represents the cost of equity, equation (5).

$$re = rf + \beta * (E(rm) - rf) \quad (5)$$

where, rf (Risk-Free Rate) rate of return on a risk-free investment using coupon SUN (Surat Utang Negara) Indonesia,  $\beta$  = beta investment (A measure of the volatility of a corporate's stock relative to the overall market),  $E(rm) - rf$  = Market Risk Premium (The additional return investors require for investing in the overall market as opposed to a risk-free investment).

rd represents the cost of debt, equation (6).

$$\text{Cost of Debt} = \text{Interest Expense} / \text{Long-term Debt} \quad (6)$$

#### *Using EVA Methodology to calculate corporate's value*

To calculate corporate's value, we employ EVA valuation which takes into account the total amount of capital invested in the business and the cost of capital used to fund its operations. EVA valuation can provide a useful framework for understanding a corporate's financial performance and value creation. It takes into account both the amount of capital invested in the business and the cost of financing its operations, providing a more comprehensive picture of the corporate's value compared to other financial metrics.

Calculation of the Corporate's Value through the Economic Value Added Methodology uses formula below (Jankalová & Kurotová, 2020; Kassem et al., 2016) (Equation 7).

$$\text{Corporate value} = \text{NOA}_0 + \sum_{t=1}^T \left( \frac{\text{EVA}_t}{(1+\text{WACC})^t} + \frac{\text{EVA}_{t+1}}{\text{WACC} \cdot (1+\text{WACC})^T} \right) - D_0 + A_0 \quad (7)$$

Where,  $\text{NOA}_0$  = net operating assets at the assessment date; EVA = Economic value added in the year "t"; WACC = weighted average cost of capital;  $D_0$  = value of total debt at the valuation date;  $A_0$  = non-operative assets at the valuation date; T = number of years explicitly planned EVA.

### 3. RESULTS AND DISCUSSION

Economic Value Added (EVA) is calculated by subtracting the cost of capital from a corporate's net operating profit after tax (NOPAT) (Marius Daraban, 2017). The steps to get EVA is shown in the figure 1.

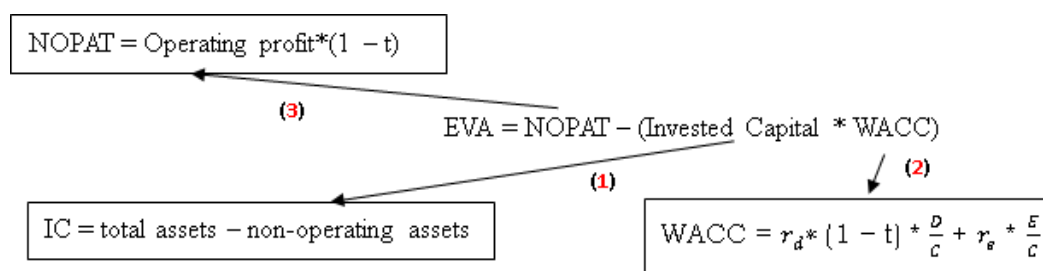


Figure 1. The steps of calculation EVA

Source: (Jankalová & Kurotová, 2020)

#### Calculation of invested capital

Invested capital is calculated by making several adjustments to assets. Some non-operating assets that need to be removed from PT Astra International are inventories, receivables\*), Investment property, other investments, Goodwill, other Intangible assets. Several accounts receivable of PT Astra are classified as operational assets, therefore it is necessary to make adjustments (receivables\*). Table 1 show the data for calculation net operating assets.

Table 1. Net operating assets (NOA) in million rupiah

Item	2022	2021	2020
total assets	413.297.000	367.311.000	338.203.000
- inventories	4.303.000	3.529.000	3.705.000
- receivables*)	2.509.000	969.000	1.132.000
- investment property	7.172.000	7.550.000	7.507.000
- other investment	19.140.000	16.406.000	14.321.000
- goodwill	5.016.000	4.767.000	4.844.000
- other intangible assets	1.811.000	1.711.000	1.774.000
- non-operating assets	39.951.000	34.932.000	33.283.000
<b>net operating assets</b>	<b>373.346.000</b>	<b>332.379.000</b>	<b>304.920.000</b>

Source: Author, 2024

#### Calculation of Weighted Average Cost of Capital (WACC)

The WACC is calculated by multiplying the cost of each component of capital (i.e., the cost of debt and the cost of equity) by its respective weight in the corporate's capital structure, and then summing these values. PT Astra has various types of debt such as loans, lenders and bonds. The cost of debt is the average of the debt interest on the amount of total

long-term debt. Cost of debt is calculated according to equation (6). Table 3 show the data for calculation cost of debt ( $r_d$ ).

Table 2. The data entered to calculate cost of debt ( $r_d$ ) in million rupiah

Item	2022		2021		2020	
	interest	amount	interest	amount	interest	amount
Loan	1.214.384	25.661.000	912.315	25.550.000	736.806	33.423.000
Lenders	13.876	117.000	2.288	22.000	5.959	59.000
Bond	599.435	9.308.000	497.210	7.673.000	937.517	13.374.000
<b>Total</b>	<b>1.827.695</b>	<b>35.086.000</b>	<b>1.411.813</b>	<b>33.245.000</b>	<b>1.680.282</b>	<b>46.856.000</b>

Source: Author, 2024

Calculation of cost of debt ( $r_d$ ) 2022:

$$r_d 2022 = 1.827.695 / 35.086.000 = 5,21\%$$

Calculation of cost of debt ( $r_d$ ) 2021:

$$r_d 2021 = 1.411.813 / 33.245.000 = 4,25\%$$

Calculation of cost of debt ( $r_d$ ) 2020:

$$r_d 2020 = 1.680.282 / 46.856.000 = 3,59\%$$

Based on Government Regulation Perpu Number 1 of 2020 in the notes to the corporate's financial statements, PT Astra applies a tax rate of 22% for 2020 and 2021 and 20% for 2022. The cost of debt used is the cost of debt after tax. This is because interest on debt is a tax deduction (Houston, 2019).

Cost of debt after tax 2022:

$$r_d(1-t) = 5,21\% \times (1 - 0,20) = 4,17\%$$

Cost of debt after tax 2021:

$$r_d(1-t) = 4,25\% \times (1 - 0,22) = 3,31\%$$

Cost of debt after tax 2020:

$$r_d(1-t) = 3,59\% \times (1 - 0,22) = 2,80\%$$

Cost of equity is calculated by Capital Assets Pricing Model (CAPM) according to equation (5). The risk-free rate of return ( $r_f$ ) used comes from Indonesian government bond coupons. While, beta of the investment ( $\beta$ ) was obtained from PEFINDO (PT Pemeringkat Efek Indonesia), a credit rating agency in Indonesia that provides credit rating and research services related to the capital markets, finance, and economy. In determining the expected return on a market portfolio ( $E(r_m)$ ), we used the history market return IHSG (Indeks Harga Saham Gabungan) on 10 years. Tabel 4 present the data for cost of equity's calculation.

Table 3. the data entered to calculate cost of equity ( $r_e$ )

Item	2022	2021	2020
Risk-free rate of return ( $r_f$ )	5,7%	4,95%	5,95%
beta of the investment ( $\beta$ )	1,328	1,326	1,363
expected return on a market portfolio ( $E(r_m)$ )	6,44%	5,66%	6,71%

Source: Author, 2024

Calculation of cost of equity ( $r_e$ ) 2022:

$$\begin{aligned} r_e 2022 &= 5,70\% + 1,328 \times (6,44\% - 5,70\%) \\ &= 6,68\% \end{aligned}$$

Calculation of cost of equity ( $r_e$ ) 2021:

$$\begin{aligned} r_e 2021 &= 4,95\% + 1,326 \times (5,66\% - 4,95\%) \\ &= 5,89\% \end{aligned}$$

Calculation of cost of equity ( $r_e$ ) 2020:

$$\begin{aligned} r_e 2020 &= 5,95\% + 1,363 \times (6,71\% - 5,95\%) \\ &= 6,99\% \end{aligned}$$

The total capital used by PT Astra comes from financial reports published for 2020, 2021 and 2022. Equity uses book value while the liabilities employee long term debt. Table 5 show the data to calculate WACC PT Astra for years 2020, 2021 and 2022.

Table 4. The data entered to calculated weighted average cost of capital (WACC), in million rupiah

Item	2022	2021	2020
cost of debt after tax $\{r_d(1 - t)\}$	4,17%	3,31%	2,80%
value of total debt (D)	Rp 35.086.000	Rp 33.245.000	Rp 46.856.000
cost of equity ( $r_e$ )	6,68%	5,89%	6,99%
value of total equity (E)	Rp 243.720.000	Rp 215.615.000	Rp 195.454.000
total capital of the corporate (D + E)	Rp 278.806.000	Rp 248.860.000	Rp 242.310.000

Source: Author, 2024

Based on the data, we calculate WACC for year 2020, 2021 and 2022 use the equation (4).

Calculation of WACC 2022:

$$\begin{aligned} WACC_{2022} &= 4,17\% \times 35.086.000 / 278.806.000 + 6,88\% \times 243.720.000 / 278.806.000 \\ &= 6,37\% \end{aligned}$$

Calculation of WACC 2021:

$$\begin{aligned} WACC_{2021} &= 3,31\% \times 33.245.000 / 248.860.000 + 5,89\% \times 215.615.000 / 248.860.000 \\ &= 5,55\% \end{aligned}$$

Calculation of WACC 2020:

$$\begin{aligned} WACC_{2020} &= 2,80\% \times 46.856.000 / 242.310.000 + 6,99\% \times 195.454.000 / 242.310.000 \\ &= 6,18\% \end{aligned}$$

The WACC of PT Astra for the years 2022, 2021, and 2020 are 6.37%, 5.55%, and 6.18% respectively. A higher WACC indicates that a corporate has a higher cost of capital, which can make it more expensive for the corporate to raise funds for new investments or expansion. A lower WACC indicates that the corporate has a lower cost of capital, which can make it easier and less expensive for the corporate to raise funds.

*Calculation of Net Operating Profit After Tax (NOPAT)*

Net Operating Profit After Tax (NOPAT) is a financial metric used to measure a corporate's operating profitability after accounting for taxes. It is calculated by subtracting all operating expenses, including taxes, from the operating profit of a corporate. The term used to describe the profit a corporate generates from its operations, prior to taking into account any interest or tax expenses, is known as Earnings Before Interest and Taxes (EBIT). Table 2 show the EBIT of PT Astra on year 2020, 2021, 2022.

Table 5. the data to calculate EBIT in million rupiah

Item	2022	2021	2020
profit before tax	50.390.000	32.350.000	15.557.000
+ interest expense	133.000	139.000	135.000
+ other interest expense	288.000	379.000	371.000
+ exchange rate losses	0	0	99.000
- interest income affiliated entities	35.000	222.000	336.000
- interest income	2.535.000	2.553.000	1.953.000
- exchange rate gains	188.000	57.000	0
<b>EBIT</b>	<b>53.769.000</b>	<b>35.700.000</b>	<b>20.729.000</b>

Source: Author, 2024

Based on the data, NOPAT is calculated by equation (2).

Calculation of WACC 2022:

$$\text{NOPAT}_{2022} = 53.769.000 \times 0,80 = 43.015.200$$

Calculation of WACC 2021:

$$\text{NOPAT}_{2021} = 35.700.000 \times 0,78 = 27.846.000$$

Calculation of WACC 2020:

$$\text{NOPAT}_{2020} = 20.729.000 \times 0,78 = 16.168.620$$

*Calculation of Economic Value Added (EVA)*

After obtaining the value of invested capital, WACC and NOPAT, the task is to calculate the EVA. Summary of the data required for EVA calculation is showed on the table 6.

Table 6. the data entered to calculate economic value added (EVA) in million rupiah

Item	2022	2021	2020
NOPAT	Rp 43.015.200	Rp 27.846.000	Rp 16.168.620
Invested capital	Rp 373.346.000	Rp 332.379.000	Rp 304.920.000
WACC	6,37%	5,56%	6,23%

Source: Author, 2024

Calculation of EVA 2022:

$$\begin{aligned} \text{EVA}_{2022} &= 43.015.200 - (373.346.000 \times 6,37\%) \\ &= 19.251.222 \end{aligned}$$

Calculation of EVA 2021:

$$\begin{aligned} \text{EVA}_{2021} &= 27.846.000 - (332.379.000 \times 5,56\%) \\ &= 9.413.599 \end{aligned}$$

Calculation of EVA 2020:

$$\begin{aligned} \text{EVA}_{2020} &= 16.168.620 - (304.920.000 \times 6,23\%) \\ &= - 2.677.578 \end{aligned}$$

Based on the calculation, EVA for 2022 is Rp 19.251.222, for 2021 it is Rp 9.413.599 and for 2020 it is - Rp 2.677.578. A positive EVA indicates that a corporate is generating returns in excess of its cost of capital, while a negative EVA indicates that the corporate is not generating returns sufficient to cover the cost of capital (Balážová & Luptáková, 2016). In 2022, the EVA is calculated to be Rp 19.251.222, which means that PT Astra has generated value in excess of its cost of capital. In 2021, the EVA was 9.413.599, indicating a similar trend of value creation. However, in 2020, the EVA was negative, indicating that PT Astra did not generate enough value to cover its cost of capital. This may suggest that the corporate experienced financial difficulties or faced challenges in that year.

*Calculation Corporate's Value using EVA Methodology*

The valuation of EVA is determined by combining the invested capital and the future EVAs, considering their present value. By applying the specified parameters, the corporate's value can be calculated using the Economic Value Added methodology, as described in Equation (7). This calculation involves three significant components: determining the average WACC over a two-year period (2020-2021 and 2021-2022), evaluating the total debt at the valuation date ( $D_0$ ), and assessing the non-operating assets at the valuation date ( $A_0$ ).

Calculation of average WACC 2020 – 2021:

$$\text{Average WACC}_{2020-2021} = (6,18 + 5,55) / 2 = 5,87\%$$

Calculation of average WACC 2021 – 2022:

$$\text{Average WACC}_{2021-2022} = (5,55 + 6,37) / 2 = 5,96\%$$

Calculation Table 7 show data entered to calculate non-operating assets at the valuation date ( $A_0$ ).

Table 7. the data entered to calculate non-operating assets at the valuation date ( $A_0$ ) in million rupiah

Item	2022	2021
inventories	4.303.000	3.529.000
receivables*)	2.509.000	969.000
investment property	7.172.000	7.550.000
other investment	19.140.000	16.406.000
goodwill	5.016.000	4.767.000
other intangible assets	1.811.000	1.711.000

Source: Author, 2024

Calculation of non-operating assets at the valuation date ( $A_0$ ) 2022:

$$A_0 \text{ 2022} = 4.303.000 + 2.509.000 + 7.172.000 + 19.140.000 + 5.016.000 + 1.811.000$$

$$A_0 \text{ 2022} = 39.951.000$$

Calculation of non-operating assets at the valuation date ( $A_0$ ) 2021:

$$A_0 \text{ 2021} = 3.529.000 + 969.000 + 7.550.000 + 16.406.000 + 4.767.000 + 1.711.000$$

$$A_0 \text{ 2021} = 34.932.000$$

Table 8. the data entered to calculate value corporate through EVA methodology (2021) in million rupiah

Item	Result
average EVA for 2020 and 2021	5,87%
net operating assets at the valuation date ( $NOA_0$ )	Rp 332.379.000
EVA 2020	-Rp 2.677.578
EVA 2021	Rp 9.411.216
Total debt at the valuation date ( $D_0$ )	Rp 46.856.000
non-operating assets at the valuation date ( $A_0$ )	Rp 34.932.000

Source: Author, 2024

$$V = 332.379.000 + \frac{-2.677.578}{(1+5,87)^1} + \frac{9.411.216}{(1+5,87)^2} - 46.856.000 + 34.932.000$$

$$V = 320.264.641$$

Table 9. the data entered to calculate value corporate through EVA methodology (2022) in million rupiah

Item	Result
average EVA for 2021 and 2022	5,97%
net operating assets at the valuation date ( $NOA_0$ )	Rp 373.346.000
EVA 2021	Rp 10.446.120
EVA 2022	Rp 19.251.222
Total debt at the valuation date ( $D_0$ )	Rp 35.086.000
non-operating assets at the valuation date ( $A_0$ )	Rp 39.951.000

Source: Author, 2024

$$V = 373.346.000 + \frac{10.446.120}{(1+5,97)^1} + \frac{19.251.222}{(1+5,97)^2} - 35.086.000 + 39.951.000$$

$$V = 380.106.005$$

## Discussion

By deducting the capital cost from the NOPAT, EVA provides a measure of the value created by the corporate's operations. Corporate aim to increase shareholder value over the long term by focusing on maximizing EVA. This can be achieved through strategies that improve profitability, increase operational efficiency, optimize capital allocation, and



enhance the overall performance of the business (Sanga et al., 2024). Maximizing EVA is a way to enhance shareholder value by ensuring the corporate generates returns that exceed investor expectations (Houston, 2019). The basic idea of shareholder value is centered around the principle that a corporate's primary objective should be to maximize the wealth of its shareholders (Chen et al., 2023). Shareholder value refer to the increase in the value of the corporate's stock or the value of the shareholders' equity over time. Shareholder value can be measured through various financial indicators, such as stock price appreciation, dividends, or total shareholder return (Puspitasary et al., 2022).

The concept of Economic Value Added (EVA) is closely related to shareholder value (Zumente & Bistrova, 2021). EVA is a financial metric that quantifies the value created by a corporate above its cost of capital. By subtracting the cost of capital from the operating income, EVA represents the residual income generated by the corporate after accounting for the opportunity cost of the capital invested. Cost of equity is very important to calculate in the EVA's calculation (Faysal, 2021).

The relationship between shareholder value and EVA lies in the fact that EVA directly reflects the value created or destroyed by a corporate's operations. A positive EVA indicates that the corporate is generating returns that exceed its cost of capital, resulting in value creation for shareholders. This value creation is reflected in the increase in the corporate's stock price and the overall wealth of its shareholders. On the other hand, a negative EVA suggests that the corporate's returns are lower than the cost of capital (Istan, 2023). In this case, the corporate is not creating sufficient value to compensate for the capital invested, leading to a decrease in shareholder value (Dewri, 2022). Shareholders may experience a decline in the stock price or a reduction in the overall value of their investment (Balážová & Luptáková, 2016). Therefore, the goal of maximizing shareholder value aligns with the objective of achieving a positive EVA. By focusing on generating returns that exceed the cost of capital, companies can create value for their shareholders and enhance their long-term financial performance. Therefore, EVA must be calculated carefully (Guermat et al., 2019; Sanga et al., 2024). It is worth noting that while EVA provides a useful measure of value creation, it is not the only factor that influences shareholder value. Other factors, such as environment social and government, can also impact long - term of shareholder value (Zumente & Bistrova, 2021). According to Maaloul et al. (2023) ESG disclosure can even increase competitive advantage where companies able to outperform competitors that do not or pay less attention to the implementation of ESG (Rabaya & Saleh, 2022).

In summary, shareholder value represents the increase in the value of a corporate's stock or the value of shareholders' equity. Economic Value Added (EVA) measures the value created by a corporate above its cost of capital and directly relates to shareholder value (Sulimany et al., 2021). By focusing on achieving a positive EVA, companies can enhance shareholder value and deliver long-term financial success.

*Difficulties found in calculating EVA:*

- a. Calculation of net operating assets (NOA)  
the assets used are adjustment assets, namely cleaning non-operating assets from operational assets. The accounting of non-operating assets may vary among companies, even within the same industry, due to differences in their business portfolios. PT Astra International serves as an example of a corporate with a diverse portfolio. For instance, the accounts receivable is adjusted to reflect items that are integral to the corporate's operations.
- b. Calculation of weight average of cost capital (WACC)  
The first difficulty is determining the true cost of debt of the corporate are interest rate, variable interest rate and debt structure. PT Astra has multiple debts with

different terms, interest rates, and maturity dates. Some debt instruments, such as adjustable-rate loans or floating-rate bonds, has interest rates that fluctuate over time based on changes in reference rates like LIBOR (London Interbank Offered Rate) and JIBOR (Jakarta Interbank Offered Rate). These variable interest rates add complexity to calculating the cost of debt. The second difficulty is cost of equity determination. In calculating the cost of capital, we use the CAPM model. This involved determining the values of certain indicators: the risk-free rate of return, the investment's beta, and the expected return on a market portfolio. The risk-free rate of return was derived from analyzing government bond in Indonesia (Surat Utang Negara), specifically focusing on bond values as of the last day of the years 2020, 2021, and 2022. Expected return on a market portfolio were obtained from average return realized for 10 years. While beta's investment was employee from beta's listing of PEFINDO.

Although EVA has many advantages over other financial profitability metrics, there are several barriers to its application in the business world (Jankalová & Kurotová, 2020; Petravičius & Tamošiuniene, 2008).

(1) Dealing with private owned firms.

When dealing with privately owned firms that do not have publicly traded stocks, determining the cost of equity becomes a significant challenge. Tax considerations become particularly crucial in such cases. While the principles of estimating the cost of capital generally apply to both privately held and publicly owned companies, obtaining the necessary input data presents somewhat different difficulties for each type.

(2) Cost of equity for small business.

Estimating the cost of equity for small businesses, which are typically privately owned, poses considerable challenges. It is included in determining the cost of capital for MSMEs.

(3) The difficulties involved in estimating the cost of equity should not be underestimated. Obtaining accurate input data for the Capital Asset Pricing Model (CAPM), as well as for the risk premium in the bond yield and risk premium method, proves to be extremely challenging.

#### 4. CONCLUSION

Shareholder value is the primary objective for companies, aiming to maximize the wealth of shareholders over time. It is measured through financial indicators such as stock price appreciation, dividends, or total shareholder return. Economic Value Added (EVA) is a metric closely related to shareholder value, quantifying the value created by a corporate above its cost of capital. By subtracting the cost of capital from operating income, EVA represents the residual income generated after accounting for the opportunity cost of invested capital.

The relationship between shareholder value and EVA lies in the fact that a positive EVA indicates that the corporate is generating returns that exceed its cost of capital, creating value for shareholders. Conversely, a negative EVA suggests that returns are lower than the cost of capital, resulting in a decrease in shareholder value. Maximizing shareholder value aligns with the objective of achieving a positive EVA by focusing on generating returns that exceed the cost of capital.

While EVA provides a valuable measure of value creation, it is not the sole determinant of shareholder value. Other factors such as market conditions, industry dynamics, competitive positioning, and management decisions also influence shareholder value. Nonetheless, EVA serves as an essential tool to assess a corporate's ability to generate returns above its cost of capital and contribute to shareholder wealth.

The next research, we need to:

First, calculate others factor that effected EVA such as market conditions, industry dynamics, competitive positioning, and management decisions. Second, calculate ESG to long - term shareholder's value. In this point, we need to asses sustainable value added. Sustainable Value Added has a limitation in that it does not determine the sustainability of a corporate. However, it does demonstrate the extent of a corporate's contribution towards promoting sustainability. This contribution can be measured in economic, environmental, or social terms. When expressed in economic terms, Sustainable Value Added quantifies the sustainable performance of the corporate compared to a benchmark, representing it in absolute monetary terms. By establishing this connection between micro and macro levels, it indicates the degree to which a corporate contributes to enhancing sustainability at the benchmark level (Kocmanová et al., 2016).

In conclusion, shareholder value represents the increase in a corporate's stock value or shareholders' equity. EVA measures the value created economic profit - one perspective sustainability of corporate's measure that must be calculated clearly and distinctly.

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