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**VALUE-BASED FIRM PERFORMANCE ANALYSIS USING EVA, MVA, AND FVA:  
EVIDENCE FROM PT ADHI KARYA (PERSERO) TBK****Oleh****Sani Haryati<sup>1</sup>, Agoes Hari Edy Wibowo<sup>2</sup>, Fajri Ramadhani<sup>3</sup>**<sup>1,2,3</sup>**Program Studi Manajemen, STIE Latifah Mubarakiyah, Tasikmalaya****Email: <sup>1</sup>[sani.stielm@gmail.com](mailto:sani.stielm@gmail.com), <sup>2</sup>[agusheri1961@gmail.com](mailto:agusheri1961@gmail.com), <sup>3</sup>[Fajrirmdhan04@gmail.com](mailto:Fajrirmdhan04@gmail.com)****Abstract**

Firm value creation constitutes a central objective of modern financial management, particularly for publicly listed companies operating in capital-intensive industries. This study aims to examine firm value creation at PT Adhi Karya (Persero) Tbk by applying value-based performance measurement indicators, namely Economic Value Added (EVA), Market Value Added (MVA), and Financial Value Added (FVA). The research employs a quantitative descriptive approach using secondary data derived from audited annual financial statements and stock market information over the 2021–2023 period. The findings reveal that EVA and FVA values remain consistently positive, indicating that the company has been able to generate internal economic and financial value. However, MVA values are persistently negative, suggesting that the capital market has not fully recognized the firm's internal value creation. These results imply a divergence between internal performance and market perception. This study contributes to the literature on value-based financial management by providing empirical evidence from Indonesia's construction sector and highlights the importance of integrating internal value creation with effective market communication strategies.

**Keywords:** Firm Value Creation, EVA, MVA, FVA, Value-Based Performance, Construction Industry

**INTRODUCTION**

Firm value creation has become an increasingly important issue in financial management, particularly in the context of publicly listed companies facing heightened competition and capital market scrutiny. Firm value represents the market's overall assessment of a company's ability to generate sustainable economic benefits for shareholders over time. In capital markets, firm value is often reflected in stock prices, which incorporate investors' expectations regarding future cash flows, risk, and growth prospects.

Traditionally, corporate performance evaluation relied heavily on accounting-based indicators such as net profit, return on assets (ROA), and return on equity (ROE). Although these measures provide useful information regarding profitability, they suffer from fundamental limitations. Most importantly,

they fail to explicitly consider the cost of capital employed to generate profits. Consequently, firms may appear financially successful based on accounting profits while, in reality, destroying shareholder value when returns fall below the cost of capital. From a corporate finance perspective, the primary objective of the firm is to maximize shareholder value through optimal investment and financing decisions.

In response to these shortcomings, value-based performance measurement approaches have gained prominence in both academic research and managerial practice. Value-based management emphasizes that true value creation occurs only when a firm generates returns exceeding the opportunity cost of capital invested by shareholders and creditors. This approach aligns corporate decision-

making with the objective of shareholder value maximization, which is widely regarded as the primary goal of financial management.

Economic Value Added (EVA) is one of the most widely used value-based performance indicators. EVA measures economic profit by subtracting the cost of capital from net operating profit after tax (NOPAT). Unlike accounting profit, EVA explicitly accounts for the cost of both debt and equity capital, thereby providing a more accurate assessment of internal value creation. A positive EVA indicates that a firm has generated returns above its cost of capital, while a negative EVA signals value destruction.

However, internal value creation does not always translate directly into favorable market valuation. Market Value Added (MVA) complements EVA by capturing the market's perception of a firm's performance. MVA is defined as the difference between the market value of a firm's equity and the total equity invested by shareholders. A positive MVA suggests that investors believe the firm has created value, whereas a negative MVA indicates unfavorable market assessment influenced by expectations, risk perception, and market conditions.

In addition to EVA and MVA, Financial Value Added (FVA) has been developed as an alternative value-based indicator focusing on the contribution of fixed assets to value creation. FVA is particularly relevant for capital-intensive industries, such as construction, where fixed assets play a critical role in supporting operational activities and project execution.

PT Adhi Karya (Persero) Tbk is one of Indonesia's major state-owned construction companies and plays a strategic role in national infrastructure development. Despite its importance, the company has experienced fluctuations in financial performance and market valuation in recent years. This condition raises questions regarding the extent to which

the firm has successfully created value and how such value is perceived by the capital market.

Accordingly, this study aims to analyze firm value creation at PT Adhi Karya (Persero) Tbk using EVA, MVA, and FVA during the 2021–2023 period. By integrating internal and market-based value measures, this research seeks to provide a comprehensive evaluation of firm value creation in the Indonesian construction sector.

### **Research Problems**

Based on the background and the issues discussed above, this study is formulated to address the following research problems:

1. Does PT Adhi Karya (Persero) Tbk create economic value during the 2021–2023 period as measured by Economic Value Added (EVA)?
2. How is the market's assessment of firm value creation at PT Adhi Karya (Persero) Tbk reflected through Market Value Added (MVA) during the observation period?
3. To what extent does PT Adhi Karya (Persero) Tbk create financial value through the utilization of fixed assets as measured by Financial Value Added (FVA)?
4. Is there a discrepancy between internal value creation and market valuation at PT Adhi Karya (Persero) Tbk during the 2021–2023 period?

## **THEORITICAL FRAMEWORK**

### **Firm Value Creation**

Firm value refers to the overall worth of a company as perceived by investors, which is commonly reflected in its market capitalization. From a financial management perspective, firm value creation is closely associated with the concept of shareholder value, which emphasizes maximizing returns to shareholders over the long term.

Shareholder value creation depends on managerial decisions related to investment, financing, and operational efficiency. Firms that allocate capital efficiently, manage risk effectively, and pursue profitable growth

opportunities are more likely to achieve sustainable value creation. Consequently, performance measurement systems must be capable of capturing both profitability and capital efficiency.

#### **Economic Value Added (EVA)**

Economic Value Added (EVA) measures a firm's economic profit by considering the cost of capital. EVA is calculated as follows.

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

Where NOPAT represents net operating profit after tax, WACC is the weighted average cost of capital, and invested capital refers to the total capital employed in the firm. EVA provides a direct measure of internal value creation and aligns managerial incentives with shareholder interests.

#### **Market Value Added (MVA)**

Market Value Added (MVA) reflects the market's evaluation of a firm's performance and future prospects. MVA is formulated as:

$$MVA = \text{Market Value of Equity} - \text{Total Equity}$$

MVA captures investors' collective assessment of managerial performance and expected future value creation. Negative MVA indicates that the market values the firm below the capital invested by shareholders, often due to unfavorable expectations or perceived risk.

#### **Financial Value Added (FVA)**

Financial Value Added (FVA) focuses on the contribution of fixed assets to value creation. The formula for FVA is:

$$FVA = NOPAT - (WACC \times \text{Fixed Assets})$$

FVA is particularly relevant for capital-intensive firms, where efficient utilization of fixed assets significantly influences financial performance and long-term value creation.

### **RESEARCH METHODOLOGY**

This study employs a quantitative descriptive research design to examine firm value creation at PT Adhi Karya (Persero) Tbk using value-based performance measurement

indicators. A quantitative approach is considered appropriate because the analysis relies on numerical financial data derived from audited financial statements and market information. The descriptive nature of the study aims to provide a comprehensive depiction of the firm's value creation performance without testing causal relationships.

#### **Research Object and Scope**

The object of this research is PT Adhi Karya (Persero) Tbk, a state-owned construction company listed on the Indonesia Stock Exchange. The company was selected due to its strategic role in national infrastructure development and its capital-intensive business characteristics, which make value-based performance analysis particularly relevant.

The scope of the study is limited to a single-firm case study over a three-year observation period from 2021 to 2023. Focusing on one company allows for an in-depth evaluation of value creation dynamics and minimizes distortions that may arise from inter-firm differences in size, capital structure, and business models.

#### **Data Type and Sources**

This research utilizes secondary data, which include:

1. Audited annual financial statements (statement of financial position, income statement, and cash flow statement)
2. Market data related to stock prices and outstanding shares.

The data were obtained from publicly available sources, including the company's annual reports and official publications of the Indonesia Stock Exchange. The use of audited financial data enhances the reliability and validity of the research findings.

#### **Data Collection Technique**

Data were collected using a documentation method, which involves systematically recording and organizing financial and market data relevant to the calculation of EVA, MVA, and FVA. This

technique ensures consistency and accuracy in data processing and analysis.

### Research Variables and Measurement

The main variable in this study is firm value creation, which is measured using three value-based indicators:

1. Economic Value Added (EVA)

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

2. Market Value Added (MVA)

$MVA = \text{Market Value of Equity} - \text{Total Equity}$

3. Financial Value Added (FVA)

$FVA = NOPAT - (WACC \times \text{Fixed Assets})$

These indicators were selected because they represent complementary perspectives of value creation: internal economic performance (EVA), market perception (MVA), and asset-based financial efficiency (FVA).

### Data Analysis Technique

The data analysis process involves several stages:

1. Calculating NOPAT, WACC, invested capital, market value of equity, and fixed assets
2. Computing EVA, MVA, and FVA for each year
3. Interpreting the results descriptively by comparing trends across the observation period.

This approach enables a comprehensive evaluation of firm value creation from both internal and external perspectives.

### Interpretation of Results

The calculated values of EVA, MVA, and FVA are analyzed by comparing results across the observation period. This analysis is used to draw conclusions regarding the firm's internal value creation and the extent to which such value is reflected in market perceptions.

## RESULT AND DISCUSSION

### Results of EVA, MVA, and FVA Analysis

The assessment of firm value creation at PT Adhi Karya (Persero) Tbk was conducted using Economic Value Added (EVA), Market Value Added (MVA), and Financial Value

Added (FVA) for the 2021–2023 period. These indicators provide complementary perspectives on internal economic performance, market valuation, and asset-based financial efficiency.

**Table 1. EVA, MVA, and FVA of PT Adhi Karya (Persero) Tbk (2021–2023)**

Year	EVA (Rp)	MVA (Rp)	FVA (Rp)
2021	708,355,072,121	(2,470,747,010,905)	1,761,485,129,832
2022	529,519,978,075	(7,057,965,730,416)	1,580,896,142,652
2023	678,603,873,107	(6,595,618,379,629)	1,853,850,717,083

Source : data processed (2025)

Table 1 presents the calculated EVA, MVA, and FVA values over the three-year observation period. The results reveal contrasting patterns between internal value creation indicators (EVA and FVA) and market-based valuation (MVA), indicating a divergence between internal performance and market perception.

### Analysis of Economic Value Added (EVA)

Economic Value Added (EVA) reflects the firm's ability to generate economic profit after accounting for the cost of capital. As shown in Table 1, EVA values for PT Adhi Karya (Persero) Tbk were consistently positive throughout the study period.

In 2021, EVA amounted to Rp708.36 billion, indicating strong economic value creation. This suggests that the company successfully generated returns exceeding its weighted average cost of capital (WACC). The positive EVA reflects effective operational performance and efficient capital utilization during the year.

In 2022, EVA declined to Rp529.52 billion, representing a decrease of approximately 25.2% compared to the previous year. This decline may be attributed to increased capital costs, pressure on operating margins, or inefficiencies in project execution. Nevertheless, the EVA value remained positive, indicating that the firm continued to create economic value despite less favorable conditions.

In 2023, EVA improved to Rp678.60 billion, reflecting a recovery in economic value creation. This increase suggests improved

operational efficiency, better cost control, and more effective capital management. Overall, the positive EVA trend confirms that PT Adhi Karya (Persero) Tbk consistently generated economic profit during the observation period, supporting the relevance of EVA as a robust indicator of internal value creation.

#### **Analysis of Market Value Added (MVA)**

Market Value Added (MVA) represents the market's assessment of a firm's value creation by comparing the market value of equity with the total equity invested by shareholders. In contrast to EVA, the MVA values in Table 1 are consistently negative.

In 2021, MVA was recorded at Rp(2.47 trillion), indicating that the market valued the company below the total equity invested. This suggests unfavorable market perception despite positive internal economic performance.

The MVA position deteriorated significantly in 2022, reaching Rp(7.06 trillion). This sharp decline reflects heightened market pessimism, which may be influenced by macroeconomic uncertainty, industry risk, and investor concerns regarding long-term profitability. The magnitude of negative MVA suggests a substantial gap between internal value creation and market valuation.

In 2023, MVA slightly improved to Rp(6.60 trillion); however, it remained negative. This marginal improvement indicates a modest recovery in market perception, although it was insufficient to offset the overall undervaluation of the firm's equity. The persistently negative MVA highlights that positive internal performance, as indicated by EVA, did not translate into favorable market valuation.

#### **Analysis of Financial Value Added (FVA)**

Financial Value Added (FVA) focuses on the contribution of fixed assets to value creation, which is particularly relevant for construction companies. As shown in Table 1, FVA values for PT Adhi Karya (Persero) Tbk were consistently positive throughout the observation period.

In 2021, FVA amounted to Rp1.76 trillion, indicating that the firm effectively utilized its fixed assets to generate financial value. In 2022, FVA declined to Rp1.58 trillion, reflecting reduced asset productivity or increased capital costs. However, in 2023, FVA increased significantly to Rp1.85 trillion, representing the highest value during the study period.

The positive FVA values indicate that fixed assets played a substantial role in supporting value creation. The increase in FVA in 2023 suggests improved asset utilization and enhanced efficiency in managing capital-intensive resources.

#### **Integrated Discussion of EVA, MVA, and FVA**

The combined analysis of EVA, MVA, and FVA provides a comprehensive understanding of firm value creation at PT Adhi Karya (Persero) Tbk. EVA and FVA consistently show positive values, indicating strong internal economic and financial performance. These results demonstrate that the company effectively managed its operations, capital, and fixed assets to generate value internally.

However, the persistently negative MVA values reveal a significant disconnect between internal value creation and market perception. This divergence suggests that market valuation is influenced not only by internal financial performance but also by external factors such as industry volatility, project risk, government policy, and investor sentiment toward state-owned enterprises.

Therefore, while PT Adhi Karya (Persero) Tbk successfully created internal value, the firm faces challenges in translating this performance into favorable market valuation. This finding underscores the importance of integrating internal performance improvement with effective communication strategies and risk management to enhance investor confidence and market appreciation.

#### **Discussion of Firm Value Creation**

The consistently positive EVA values demonstrate that PT Adhi Karya (Persero) Tbk was able to generate economic profits above its cost of capital. This finding indicates effective internal financial management and supports the argument that EVA is an appropriate measure for evaluating internal value creation. Although EVA declined in 2022, the recovery observed in 2023 suggests improvements in operational efficiency and capital management.

However, the negative MVA values reveal a discrepancy between internal performance and market valuation. Despite positive EVA and FVA results, the capital market did not reflect these achievements in the company's market value. This divergence implies that investors may perceive higher risk associated with the construction industry, long project cycles, or macroeconomic uncertainty, which can overshadow positive internal performance. Consequently, internal value creation does not automatically translate into market value enhancement.

The positive FVA values further indicate that the company effectively utilized its fixed assets to generate financial returns. This is particularly relevant for construction firms, which rely heavily on fixed assets to support project execution. The increase in FVA in 2023 suggests improved efficiency in asset management and capital allocation, reinforcing the importance of FVA as a complementary indicator to EVA in asset-intensive industries.

Overall, the combined analysis of EVA, MVA, and FVA provides a comprehensive assessment of firm value creation. EVA and FVA capture the company's internal economic and financial performance, while MVA reflects external market perceptions. The findings highlight that strong internal value creation must be supported by effective communication with investors and strategic risk management to enhance market valuation. Therefore, the simultaneous use of value-based performance measures is essential for evaluating the

sustainability of firm value creation in construction companies.

## CONCLUSION

Based on the research problems formulated in this study, the conclusions are presented as follows:

1. Economic Value Creation (EVA)  
PT Adhi Karya (Persero) Tbk was able to create economic value during the 2021–2023 period, as indicated by consistently positive Economic Value Added (EVA). This finding confirms that the company generated operating returns exceeding its cost of capital, thereby achieving internal economic value creation.
2. Market-Based Value Assessment (MVA)  
The market assessment of firm value creation, as measured by Market Value Added (MVA), remained negative throughout the observation period. This result indicates that the market value of the company's equity was consistently lower than the total equity invested by shareholders, reflecting unfavorable market perception.
3. Financial Value Creation through Fixed Assets (FVA)  
PT Adhi Karya (Persero) Tbk successfully created financial value through the utilization of fixed assets, as evidenced by consistently positive Financial Value Added (FVA). This finding highlights the effectiveness of asset management in supporting value creation in a capital-intensive industry.
4. Discrepancy between Internal Performance and Market Valuation  
A clear discrepancy exists between internal value creation and market valuation at PT Adhi Karya (Persero) Tbk during the 2021–2023 period. While internal economic and financial performance indicators (EVA and FVA) show positive results, market valuation as reflected by MVA does not fully recognize this performance.

### Recommendation

Based on the conclusions of this study, the following recommendations are proposed:

1. Improving Economic Value Creation (EVA-Oriented Strategy)

To sustain and enhance economic value creation, PT Adhi Karya (Persero) Tbk should continue to strengthen operational efficiency and capital management. Management is encouraged to optimize project execution, control operating costs, and improve return on invested capital in order to maintain consistently positive EVA.

2. Enhancing Market Perception and Firm Valuation (MVA-Oriented Strategy)

Given the persistently negative MVA values, the company should improve transparency and communication with investors. Clear disclosure of strategic plans, risk management practices, and long-term growth prospects is expected to help align internal performance with market valuation and enhance investor confidence.

3. Strengthening Fixed Asset Utilization (FVA-Oriented Strategy)

Considering the positive contribution of fixed assets to value creation, management should further improve asset utilization and productivity. Strategic investment planning and regular evaluation of asset performance can help maximize financial value creation, particularly in capital-intensive projects.

4. Bridging the Gap between Internal Performance and Market Valuation

To reduce the discrepancy between internal value creation and market perception, the company should integrate value-based performance indicators into managerial decision-making and investor reporting. Aligning internal performance improvement with effective market communication may help translate internal value creation into favorable market valuation.

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