

## **The Effect of Human Capital Efficiency (HCE), Return on Assets (ROA), Earnings Per Share (EPS), and Debt-to-Equity Ratio (DER) on Market Value Added (MVA) in IDX30 Companies**

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**ABSTRACT**

This study aims to analyze the influence of Human Capital Efficiency (HCE), Return on Assets (ROA), Earnings per Share (EPS), and Debt-to-Equity Ratio (DER) on Market Value Added (MVA) in companies listed in the IDX30 index for the period 2020–2024. The phenomenon of negative MVA among large-capitalization companies underscores the importance of integrating financial and non-financial (human capital) performance indicators in corporate valuation. This research employed a quantitative approach using multiple linear regression analysis. The sample was selected using purposive sampling from IDX30 companies that consistently published financial statements throughout the observation period. The results indicate that Return on Assets (ROA) has a positive and significant effect on MVA. Conversely, Human Capital Efficiency (HCE) and Earnings per Share (EPS) have a negative and significant effect on MVA, while Debt-to-Equity Ratio (DER) shows no significant influence. These findings suggest that Indonesian capital market investors respond more favorably to profitability based on operational asset management (ROA) rather than human capital efficiency or the magnitude of earnings per share. The negative results for HCE and EPS signal that high human capital efficiency or earnings per share, if not accompanied by revenue growth, may be perceived negatively by the market. This study implies that management should prioritize operational asset optimization and long-term human capital investment rather than merely pursuing cost efficiency ratios.

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### **INTRODUCTION**

The IDX30 Index represents the 30 companies with the highest liquidity and largest market capitalization on the Indonesia Stock Exchange (IDX, 2024). Despite being the primary barometer of the market, strong financial performance does not necessarily reflect a company's success in creating value for shareholders (Brigham & Houston, 2018). The 2024 data show the notable finding that 47% of IDX30 companies recorded a negative Market Value Added (MVA) (IDX30 Data Summary, 2024). This condition indicates that these companies' market values are lower than the total capital invested by shareholders, suggesting that they have failed to maximize investor wealth (Gitman & Zutter, 2015).

The negative MVA phenomenon is thought to be related to the inefficiency of internal resource management and corporate strategies (CAI, 2025; Hutahayan, 2020; Quintiliani, 2018; Yaman & Topal, 2024). Conventional financial ratios such as Return on Assets (ROA), Earnings Per Share (EPS), and Debt-to-Equity Ratio (DER) are often the primary indicators of investor evaluation (Tandelilin, 2010). However, in the era of the knowledge-based economy,

these indicators are considered unable to capture the contribution of intangible assets, especially human capital. The efficiency of human resource management, as measured through Human Capital Efficiency (HCE) based on the Value-Added Intellectual Coefficient (VAIC™) model, is considered a crucial factor contributing to the creation of firm value (Marzo, 2022; Xu & Liu, 2020).

Previous studies on the influence of HCE and financial ratios on MVA have shown inconsistent results. Some studies have found positive effects, while others have reported the opposite or insignificant effects (Yousaf et al., 2024). In addition, studies that integrate the perspective of Strategic Human Resource Management (SHRM) through HCE with conventional financial indicators within a single research framework in the Indonesian market remain limited (Napitupulu & Darmawan, 2021). Therefore, this study aims to re-examine the influence of HCE, ROA, EPS, and DER on MVA in IDX30 companies for the 2020–2024 period to provide more current and comprehensive empirical evidence (Sugiyono, 2019).

## **METHOD**

### **Research Methods**

This study used a quantitative approach with a type of comparative causal research. This approach was chosen to test the influence of independent variables on dependent variables to answer the formulation of the problem and test the hypothesis that has been proposed (Sugiyono, 2019). The design of this study explains the cause-and-effect relationship between Human Capital Efficiency (HCE), Return on Assets (ROA), Earnings Per Share (EPS), and Debt to Equity Ratio (DER) on Market Value Added (MVA) through inferential statistical analysis.

### **Data Collection Techniques**

The data used in this study are secondary data collected through documentation methods. Data sources were obtained from:

1. IDX30 company's annual financial report downloaded through the official website of the Indonesia Stock Exchange or the website of each company.
2. Historical price data of stocks accessed through capital market data portals (such as Yahoo Finance or IDX.co.id).

Data collection was carried out in a five-year observation period, namely from 2020 to 2024.

### **Hypothesis:**

1. t-test (Partial): Tests the influence of each independent variable individually on MVA (H1–H4). The hypothesis is accepted if the significance value is  $< 0.05$ .
2. F test (Simultaneous): Tests the influence of all independent variables together on MVA (H5). The hypothesis is accepted if the significance of  $F < 0.05$ .
3. Coefficient of Determination ( Measures how much variation in MVA can be explained by independent variables (Ghozali, 2021). $R^2$ )

## **RESULTS AND DISCUSSION**

The data processing is based on secondary data from the company's financial statements listed in the IDX30 index for the period 2020–2024. The systematics of presenting the results of this study are as follows:

1. Descriptive Statistical Presentation of Research Variables: Presents an overview of the data characteristics of all variables.
2. Classical Assumption Testing: Perform tests to ensure that the regression model used is BLUE (Best Linear Unbiased Estimator) qualified.
3. Multiple Linear Regression Analysis: Describes the results of a regression model that examines the effect of Human Capital Efficiency (HCE), Return on Assets (ROA), Earnings per Share (EPS), and Debt to Equity Ratio (DER) on Market Value Added (MVA).
4. Hypothesis Testing: Presenting the results of simultaneous (F test) and partial (t test) hypothesis testing as well as determination coefficient testing.
5. Discussion of Research Results: Interpret the results of hypothesis testing and relate them to theories that have been studied and findings from previous studies.

Through this presentation and discussion, this research is expected to provide accurate and data-based answers to the research questions that have been formulated in Chapter I.

### Hypothesis Test Results

The hypothesis test was carried out to determine the influence of each independent variable, namely Human Capital Efficiency (HCE), Return on Assets (ROA), Earnings per Share (EPS), and Debt to Equity Ratio (DER) on the dependent variable Market Value Added (MVA). The test was carried out using the F test and the T test at a significance level of 5% ( $\alpha = 0.05$ ).

#### 1. Statistics Descriptive

Descriptive statistics are used to provide an overview of the characteristics of the data used in this study. Descriptive statistics include the minimum, maximum, mean, and standard deviation values of each variable: *Human Capital Efficiency (HCE)*, *Return on Assets (ROA)*, *Earnings per Share (EPS)*, *Debt to Equity Ratio (DER)*, and *Market Value Added (MVA)*. The results of the calculation can be seen in the following Table 1:

**Table 1. Descriptive Statistical Results**

Variable	N	Minimum	Maximum	Mean	Hours of deviation
<i>HCE</i>	10 0	0,511	20,983	3,070	2,543
<i>LENGT H</i>	10 0	-3,320	34,890	7,496	7,018
<i>EPS</i>	10 0	-39,460	5590,870	523,186	964,760
<i>THE</i>	10 0	0,130	16,080	1,903	3,131
<i>MVA</i>	10 0	IDR (140.984.082.000.000 )	IDR 275.359.000.000.00 0	IDR 25.250.954.320.00 0	IDR 63.082.258.386.72 8

Source: Microsoft Excel Analysis Results processed by researchers (2025)

From the table above, the descriptive statistical results of this study can be explained as follows:

**1. Human Capital Efficiency (HCE):**

An average HCE of 3,070 indicates that in general, the company is able to create added value of 3.07 times the labor cost used. A minimum value of 0.511 (TLKM in 2020) indicates very low HR efficiency, while a maximum value of 20,983 (ADRO in 2022) indicates very high HR efficiency. The data spread is quite large with a standard deviation of 2,543, indicating significant variation between companies.

**2. Return on Assets (ROA):**

An average ROA of 7.496% indicates that most companies in the IDX30 are able to generate a net profit of 7.496% of their total assets. A minimum value of -3.320% (MAPI of 2020) indicates a condition of loss, while a maximum value of 34.890% (UNVR of 2020) reflects high profitability. The standard deviation of 7.018 indicates a large variation in the efficiency of asset use between companies.

**3. Earnings per Share (EPS):**

The average EPS is IDR 523,186, with a high standard deviation (IDR 964,760), reflecting the inequality of earnings performance between companies. A minimum EPS of -IDR 39,460 (MDKA in 2024) indicates a significant loss per share, while a maximum of IDR 5,590,870 (UNTR in 2024) indicates extraordinary gains for shareholders.

**4. Debt to Equity Ratio (DER):**

An average DER of 1.903 means that in general, the company has debt of almost twice the capital it owns. The highest DER of 16.080 (BBTN in 2020) reflects a capital structure that is heavily dependent on debt, while the lowest value of 0.130 (INCO in 2022) indicates very minimal use of debt.

**5. Market Value Added (MVA):**

MVA has an average value of IDR 25.25 trillion, but the spread of value is very large with a standard deviation of IDR 63.08 trillion. The minimum value of IDR 140.98 trillion (BMRI in 2021) indicates a significant impairment of the value of the shareholders' capital, while the maximum value of IDR 275.36 trillion (TLKM in 2020) indicates a huge value creation for investors.

The results of descriptive statistics show that there are large disparities between companies in terms of human capital efficiency, financial performance, and resulting market value. This suggests that the influence of each independent variable on MVA needs to be further tested through regression analysis, as will be discussed in the next section.

## **2. Classic Assumption Test**

Before multiple linear regression testing is carried out, it is important to ensure that the data used meets the classical assumptions that are prerequisites in the regression model. The classical assumption test aims to avoid bias or inaccuracies in the interpretation of the results of statistical analysis. In this study, the classical assumption test is carried out through several stages, namely the normality test, the multicollinearity test, and the heteroscedasticity test.

Each test provides an overview of the quality and feasibility of the data to be further analyzed using the regression model.

a. Normality Test

The normality test is performed to test whether the data is normally distributed in the regression model. The normality test is performed using the Kolmogorov Smirnov test. The test results can be seen in the following table 2.

**Table 2. Normality Test Results**

<b>n</b>	<b>x</b>	<b>s</b>	<b>D</b>	<b>Table KS</b>	<b>Conclusion</b>
<b>100</b>	IDR 25,250,954,320,000	IDR 63,082,258,386,728	0,118	0,134	Data Normal

Source: Microsoft Excel Analysis Results processed by researchers (2025)

The above data yields a Table KS value of 0.118. Therefore, from these results, it can be concluded that this regression model is normally distributed because the Table KS value is below 0.134.

b. Multicollinearity Test

The Multicollinearity test is used to test whether there is a correlation between independent variables in the regression model. A good regression model has no correlation. If there is a correlation, it can be interpreted that there is a multicollinearity problem. The results of the multicollinearity test can be seen in table 3 below:

**Table 3. Multicollinearity Test Results**

	<b>HCE</b>	<b>LENGTH</b>	<b>EPS</b>	<b>THE</b>
<b>HCE</b>	1,000			
<b>LENGTH</b>	0,407	1,000		
<b>EPS</b>	0,216	0,184	1,000	
<b>THE</b>	-0,098	-0,153	-0,108	1,000
	<b>r<sup>2</sup></b>	<b>Tolerance</b>	<b>LIVE</b>	<b>Ket</b>
<b>HCE-ROA</b>	0,166	0,834	1,199	<10
<b>HCE-EPS</b>	0,047	0,953	1,049	<10
<b>HCE-DER</b>	0,010	0,990	1,010	<10
<b>ROA-EPS</b>	0,034	0,966	1,035	<10
<b>TWO-ER</b>	0,023	0,977	1,024	<10
<b>EPS DER</b>	0,012	0,988	1,012	<10

Source: Microsoft Excel Analysis Results processed by researchers (2025)

From the test results, a tolerance value and a VIF value of < 10 were generated. Therefore, it can be concluded that in this regression model there is no problem of multicollinearity and this regression model can be used for further analysis.

c. Heteroscedasticities Test

The heteroscedasticity test is a test that is required to see if there is an inequality of variance from the residue of one observation to another. The heteroscedasticity test is carried out using the glacial test. The decision making in this Glajser Test is when the Sig value > 0.05,

it can be interpreted that there are no symptoms of heteroscedasticity in the regression model. A good regression model is if the data do not have symptoms of heteroscedasticity. The results of the heteroscedasticity test can be seen in the following table 4:

**Table 4. Heteroscedasticity Test Results**

	Coefficients	Standard Error	t Stat	P-value
<i>HCE</i>	IDR (1.092.051.204.341)	IDR 1.733.680.799.850	-0,630	0,530
<i>LENGTH</i>	IDR 522.570.720.844	IDR 628.065.029.307	0,832	0,407
<i>EPS</i>	IDR (808.199.069)	IDR 4.257.829.284	-0,190	0,850
<i>THE</i>	IDR (143.803.132.740)	IDR 1.289.616.006.987	-0,112	0,911

Source: Microsoft Excel Analysis Results processed by researchers (2025)

In the table above, the Sig value of *HCE* is 0.530, the value of Sig *ROA* is 0.407, the value of Sig in *EPS* is 0.850, the value of Sig in *DER* is 0.911 of the result, it can be concluded that all variables  $X > 0.05$  which means that in this regression model there are no symptoms of heteroscedasticity.

#### d. Multiple Regression Analysis

Multiple linear regression analysis was performed to determine the simultaneous and partial influence of independent variables on dependent variables. In this study, the independent variables consist of *Human Capital Efficiency (HCE)*, *Return on Assets (ROA)*, *Earnings per Share (EPS)*, and *Debt to Equity Ratio (DER)*, while the dependent variable is *Market Value Added (MVA)*.

**Table 5. Multiple Linear Regression Test Results**

Variable	Coefficients	Standard Error	t Stat	P-value	Remarks
<i>HCE</i>	IDR (8.286.457.174.604)	IDR 2.373.005.638.310	- 3,49	0,00	Significant Negatives
<i>LENGT H</i>	IDR 4.595.482.479.573	IDR 859.674.892.807	5,35	0,00	Significant Positives
<i>EPS</i>	IDR (16.037.511.013)	IDR 5.827.977.618	- 2,75	0,01	Significant Negatives
<i>THE</i>	IDR (1.649.079.610.357)	IDR 1.765.184.257.737	- 0,93	0,35	Insignificant Negatives

Source: Microsoft Excel Analysis Results processed by researchers (2025)

1. *ROA* ( $\beta = +4.595$  trillion) *ROA* is the only variable that has a significant positive effect on *MVA*. This means that the higher the company's profitability level, the greater the added value created for shareholders. This is consistent with the theory that investors value profitability as a strong signal of the company's value
2. *HCE* ( $\beta = -8.286$  trillion) *HCE* shows a significant negative influence on *MVA*. This means that an increase in human capital efficiency is followed by a decrease in the company's market value. This result contradicts the *basic theory of VAIC™* and suggests that labor

efficiency is not necessarily appreciated by the market, or that there are other factors such as short-term efficiency that come at the expense of long-term innovation.

3. *EPS* ( $\beta = -16.03$  billion) *EPS* also has a significant negative influence on *MVA*. This result is inconsistent with conventional financial theory that high earnings per share should increase the value of a company. One possibility is that high earnings per share are not followed by effective dividend distributions or reinvestments. *DER*
4. *DER* ( $\beta = -1.649$  trillion) *DER* shows a negative but not significant influence on *MVA*. This means that debt-based capital structure cannot be used as the main factor determining changes in the company's market value in this study.

e. Coefficient of Determination

The Determination Coefficient ( $R^2$ ) is used to measure how capable the regression model is in explaining the variation of dependent variables. The results of the determination coefficient test can be seen from table 6 as follows:

**Table 6. Determination Coefficient Results**

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
<b>0,541</b>	0,293	0,263	IDR54.143.390.144.226	100

Source: Microsoft Excel Analysis Results processed by researchers (2025)

In accordance with table 4.8 above, it can be seen that the correlation ( $R$ ) between the independent variable and the dependent variable in this study is 0.263 the regression test results show an  $R^2$  value of 0.263 or 26%. This illustrates that 26% of *MVA* can be explained by independent variables (*HCE*, *ROA*, *EPS*, and *DER*). While 0.740 or 74% is explained by other factors outside the model of this study.

f. Test F

The F test is used to test the feasibility of the research model. The significance level in this study is set at 5%. If the results of the F test have a significance level of less than 0.05, then the regression model is considered feasible. The results of the F test can be seen in table 7 as follows:

**Table 7. F Test Results**

	df	SS	MS	F	Significance F
<b>Regression</b>	4	1.15465E+29	2.88662E+28	9,847	0,000
<b>Residual</b>	95	2.78493E+29	2.93151E+27		
<b>Total</b>	99	3.93958E+29			

Source: Microsoft Excel Analysis Results processed by researchers (2025)

In table 7, it is known that the significance value obtained from the F test is 0.000 where the number shows less than 0.05. Therefore, it can be concluded that this regression research model is feasible.

Based on Table 7, a significance value (Sig.) of 0.000 is obtained. This value is smaller than the significance level used, which is  $\alpha=0.05$  ( $0.000 < 0.05$ ). In addition, the calculated F value of 9.847 is greater than the F of the table (about 2.44 at the significance level of 5%).

Because the Significance value is  $0.000 < 0.05$ ,  $H_0$  is rejected and  $H_a$  is accepted. This means that the variables Human Capital Efficiency (HCE), Return on Assets (ROA), Earnings Per Share (EPS), and Debt to Equity Ratio (DER) simultaneously (together) have a significant effect on Market Value Added (MVA) in IDX30 companies for the 2020–2024 period.

This proves that the combination of financial performance indicators (ROA, EPS, DER) and human capital efficiency indicators (HCE) is able to explain variations in market value added (MVA) fluctuations in top companies in Indonesia.

g. T Test

The t-test is used to measure the influence of each independent variable individually on the dependent variable with a significance level of 5% ( $\alpha = 0.05$ ). This test refers to the P-value and regression coefficient listed in Table IV.7 (Multiple Linear Regression Test Results). The following are the results of the hypothesis testing partially:

1. First Hypothesis Test (H1): The Effect of Human Capital Efficiency (HCE) on Market Value Added (MVA). Based on Table IV.7, the HCE variable has a regression coefficient of  $-8,286,457,174,604$  with a significance value (P-value) of 0.00. Because the significance value is  $0.00 < 0.05$ , HCE has a statistically significant effect on MVA. However, the direction of the negative coefficient shows that the effect is contrary to the initial hypothesis. Thus, H1 stating that HCE has a significant positive effect on MVA is rejected, but the results of the study show that HCE has a negative and significant effect on MVA.
2. Second Hypothesis Test (H2): The Effect of Return on Assets (ROA) on Market Value Added (MVA). Based on Table IV.7, the ROA variable has a regression coefficient of  $+4,595,482,479,573$  with a significance value (P-value) of 0.00. Because the significance value is  $0.00 < 0.05$  and the direction of the positive coefficient, H2 stating that ROA has a significant positive effect on MVA is accepted. This result shows that ROA has a positive and significant effect on MVA.
3. Third Hypothesis Test (H3): The Effect of Earnings Per Share (EPS) on Market Value Added (MVA). Based on Table IV.7, the EPS variable has a regression coefficient of  $-16,037,511,013$  with a significance value (P-value) of 0.01. Because the significance value is  $0.01 < 0.05$ , statistically EPS has a significant effect on MVA. However, the direction of the negative coefficient shows that the effect is contrary to the initial hypothesis. Thus, H3 which states that EPS has a significant positive effect on MVA is rejected, but the results of the study show that EPS has a negative and significant effect on MVA.
4. Fourth Hypothesis Test (H4): The Effect of Debt to Equity Ratio (DER) on Market Value Added (MVA). Based on Table IV.7, the DER variable has a regression coefficient of  $-1,649,079,610,357$  with a significance value (P-value) of 0.35. Because the significance value is  $0.35 > 0.05$ , H4 stating that DER has a significant negative effect on MVA is rejected. This result shows that DER has no significant effect on MVA.

Based on the results of multiple linear regression testing, it was found that only the *Return on Assets (ROA)* variable had a positive and significant effect on *Market Value Added (MVA)*. This finding strengthens the view that a company's profitability is the main fundamental factor that investors pay attention to in assessing the added value of a company in the capital market. The high *ROA* reflects the efficiency of asset management, which ultimately increases investor confidence in the company's performance.

Meanwhile, the variables *Human Capital Efficiency (HCE)* and *Earnings per Share (EPS)* actually showed a significant negative influence on *MVA*. These results contradict the basic theory, especially on *HCE*, which according to the *VAIC™ approach* should have a positive impact on the market value of the company. These findings can be interpreted as an indication that the efficiency of human resources in the company has not been able to be appreciated by the market, or it could be because the efficiency is only short-term and comes at the expense of long-term investments such as training, innovation, and human resource development. Similarly, in *EPS*, although in theory *EPS* reflects earnings per share, an increase in *EPS* in the context of this study does not automatically increase *MVA*. This can happen if profits are not accompanied by attractive distribution strategies or growth expectations that are convincing to investors.

The *Debt to Equity Ratio (DER)* showed a negative relationship with *MVA*, but the effect was not statistically significant. This indicates that the debt-based corporate funding structure has not yet become the dominant factor influencing the market's perception of the company's added value in the *IDX30* index in this study period.

Overall, these findings imply that investors tend to be more responsive to direct profitability indicators (such as *ROA*) than to other indicators of efficiency or funding structure. The market value of companies in the *IDX30* index is influenced more by actual operating results than by conceptual or indirect financial ratios.

#### **Influence of HCE on MVA**

Based on the results of multiple linear regression, a coefficient value ( $\beta$ ) for the *Human Capital Efficiency (HCE)* variable was -8.29 trillion with a significance level of 0.00, which means that *HCE* has a significant negative influence on *Market Value Added (MVA)*. This result is not in line with the initial hypothesis that *HCE* has a positive effect on *MVA*.

In theory, *HCE* is expected to make a positive contribution to the company's value because efficiency in managing human resources is a form of the company's competitive advantage that is not easy to imitate. However, the results of this study show that the increase in HR efficiency goes hand in hand with a decrease in the company's market value.

These findings can be interpreted from two perspectives. First, the efficiencies achieved by companies may be short-term, such as reduced labor or training costs, which can lower the potential for long-term innovation and growth. Second, the market has not fully understood or appreciated the *HCE indicator* as a positive signal, especially in industries that are still oriented towards physical assets and conventional financial performance.

A decline in market value due to an increase in *HCE* may also reflect an imbalance between internal efficiency and external perception. Investors may consider that the efficiency carried out has not had a real impact on the company's profitability or growth prospects, so it is not reflected in the stock price.

These results are also reinforced by the research of Ghosh and Mondal (2009), which found that *HCE* does not always have a significant influence on market performance in the context of developing countries. This indicates that the influence of *HCE* on market value is highly dependent on different industry contexts and investor perceptions.

Thus, although *HCE* is theoretically an important intellectual asset, its application in business practices and investor perceptions is still a challenge, especially in a capital market environment such as Indonesia.

### **Effect of ROA on MVA**

The regression results show that the *Return on Assets (ROA)* variable has a coefficient of +4.595 trillion with a significance value of 0.00, which means that *ROA* has a positive and significant influence on *Market Value Added (MVA)*. These findings strengthen the hypothesis that a company's profitability directly increases the company's market value.

Conceptually, *ROA* measures a company's ability to generate profits from the total assets it owns. The higher *the ROA*, the more effective the company is in managing assets to create profits. This effectiveness is a positive signal to investors that the company is able to provide good returns, thereby increasing demand for the company's shares and driving the market value up.

This result is in line with the signaling theory as explained by Brigham and Houston (2001), that companies that show good financial performance will give a positive signal to the market. In this case, the high *ROA* serves as a signal that management is carrying out business activities efficiently, thereby increasing investor confidence in the company's prospects.

In addition, these findings are supported by several previous studies such as Rahmawati and Yunita (2018), and Aisyana and Sun (2012), which also found that *ROA* has a positive influence on *MVA*. This shows consistency that *ROA* is the main indicator that the market pays attention to in assessing the performance and prospects of companies.

Thus, it can be concluded that the increase in profitability reflected from *ROA* not only improves internal financial performance, but also significantly strengthens the market's perception of the added value that a company can provide to shareholders.

### **Effect of EPS on MVA**

The results of the regression test showed that the *Earnings per Share (EPS) variable* had a coefficient of -16.03 billion with a significance value of 0.01. This means that *EPS* has a negative and significant influence on *Market Value Added (MVA)*, which is contrary to the initial hypothesis as well as conventional financial theory that assumes that high earnings per share will increase the market value of the company.

Theoretically, *EPS* is one of the most widely used indicators of financial performance by investors in assessing the net profit available to shareholders. However, in the context of this study, the increase *in EPS* actually goes hand in hand with the decrease *in MVA*. This can be explained through several possibilities. First, high *EPS* may not be followed by attractive dividend distribution policies or reinvestment strategies that are considered effective by the market. Second, the market may be more focused on future growth prospects than historical performance reflected in *EPS*.

In other words, while *EPS* provides an overview of a company's profitability historically, *MVA* more reflects investors' expectations of the company's future value-added, including innovation, expansion, and strategic management. The mismatch between historical performance (*EPS*) and future expectations (*MVA*) may explain why the relationship between the two in this study is negative.

This result is in line with the opinion of Steward and Stern (1991), who stated that traditional financial ratios such as *EPS* are not always relevant in explaining the overall market value of a company. This study also supports a study by Sitorus & Pangestuti (2016), which

found that *EPS* does not have a significant effect on *MVA* in manufacturing companies in Indonesia.

Thus, it can be concluded that *EPS* as a single financial indicator is not strong enough to explain changes in the market value of companies, especially in the context of large companies that are members of the IDX30 index.

### **Effect of DER on MVA**

The regression results showed that the *Debt-to-Equity Ratio (DER)* variable had a coefficient of  $-1.649$  trillion with a significance value of  $0.35$ . This means that although the relationship between *DER* and *Market Value Added (MVA)* is negative, it is statistically insignificant. This shows that the debt-based capital structure has not been the main factor influencing the market's perception of company value in this study.

Theoretically, *DER* reflects the extent to which a company uses funding from debt compared to equity. A high *DER* generally indicates a large level of leverage, which can increase financial risk and lower investor confidence. However, in practice, not all increases in *DER* negatively impact market value, depending on how the debt is used, as well as industry conditions and macroeconomic stability.

In the context of IDX30s which are generally composed of large and established companies, the market may already have stable expectations of their risk profiles. Therefore, fluctuations in *DER* within reasonable limits are not strong enough to significantly affect market value. These results are in line with the findings of Aisyana and Sun (2012), who also found that *DER* has a negative but not significant influence on *MVA*.

These findings also suggest that investors tend to consider factors such as profitability (*ROA*) and management quality in asset management, rather than just looking at debt-to-equity ratios. This supports the view that *MVAs* reflect future value-added expectations rather than short-term capital structures.

Thus, it can be concluded that although *DER* has a negative relationship direction to *MVA*, this variable does not significantly affect the perception of company value, and its influence is still inferior to other indicators of profitability and efficiency.

### **Simultaneous Effects of HCE, ROA, EPS, and DER on MVA**

The results of the F test show that the four independent variables, namely Human Capital Efficiency (*HCE*), Return on Assets (*ROA*), Earnings Per Share (*EPS*), and Debt to Equity Ratio (*DER*), together have a significant influence on Market Value Added (*MVA*). These findings reinforce the view that the market valuation of a company is not based on a single factor, but rather a complex combination of historical financial performance and the efficiency of internal resource management.

Simultaneously, the regression model explains that the Indonesian capital market represented by the IDX30 index is very responsive to the information published by the company. This is in line with the Signaling Theory put forward by Spence. The company's management through its financial statements and dividend policy (*EPS*), as well as operational performance (*ROA*), sends signals to investors regarding the company's health. When these signals are combined with HR efficiency indicators (*HCE*), investors compile perceptions that are then reflected in stock prices and create *MVAs*.

Although simultaneously the four variables are significant, the results of the study show an interesting phenomenon where not all variables have a positive influence according to the initial hypothesis.

**Dominance of Asset Profitability (ROA):** Among the four variables, ROA has the strongest and most positive contribution in this simultaneous model. This indicates that investors in the Indonesian capital market still view the effectiveness of corporate asset management as the main benchmark in creating added value. A high ROA provides confidence that management is able to generate profits from the assets owned, thereby lowering investment risk.

**The Dilemma of HR Efficiency (HCE) and Earnings per Share (EPS):** The finding that HCE and EPS have a simultaneous negative influence on MVA requires in-depth evaluation. Simultaneously, an increase in HR efficiency costs or an increase in EPS has the potential to reduce the perception of market value if it is not balanced with proportionate revenue growth.

Increased HCE (often accompanied by increased employee costs or large training investments in the short term) may be judged by the market as an expense that reduces short-term profits, thus negatively impacting the current MVA.

Similarly to EPS, the increase in EPS may be due to stock buybacks or dividend policies that are not fully appreciated by the market as fundamental growth.

**The Role of DER as a Control Variable:** In the simultaneous model, the DER does not show a significant influence partially, but remains part of the overall model. This suggests that the capital structure is not the main factor that investors consider in assessing the MVA of an IDX30 company, compared to its operational performance and profitability.

Thus, the significant simultaneous influence of these variables confirms the importance of a Strategic Human Resource Management (SHRM) approach that is integrated with financial strategy. Companies cannot rely solely on HR efficiency (HCE) or only the pursuit of profitability (ROA), but must be able to align the two in order to create a perception of positive value in the eyes of capital market investors.

## **CONCLUSION**

Human Capital Efficiency (HCE) has a negative and significant effect on Market Value Added (MVA). This finding contradicts the initial hypothesis, indicating that in IDX30 companies, the high efficiency of using HR costs is inversely proportional to the market's perception of the company's value. This signals that investors may value HR cost savings (efficiency) as an act that sacrifices the quality of talent or long-term innovation. Return on Assets (ROA) has a positive and significant effect on Market Value Added (MVA). This finding is in line with the hypothesis and proves that the operational profitability that can be generated from effective asset management is the main factor driving the increase in market value in the eyes of investors. Earnings per Share (EPS) has a negative and significant effect on Market Value Added (MVA). This rejects the hypothesis. Investors in the major indices (IDX30) are not fully interested in the current high earnings per share, perhaps because they perceive it as short-term profit (mathematically affected by a stock buyback that reduces the divider) or because they judge that the profit is not supported by sustained revenue growth. Debt to Equity Ratio (DER) does not have a significant effect on Market Value Added (MVA). The company's capital structure, both debt and equity dominance, is not the main consideration

for the market in assessing IDX30 companies, considering the risk profiles of these large companies are relatively stable and well known. Simultaneously, Human Capital Efficiency (HCE), Return on Assets (ROA), Earnings per Share (EPS), and Debt to Equity Ratio (DER) have a significant effect on Market Value Added (MVA). This shows that the combination of financial and non-financial performance remains the main determinant of company value in the Indonesian capital market.

## REFERENCE

- Aisyana, F., & (2012). Analisis pengaruh likuiditas, solvabilitas, dan profitabilitas terhadap market value added (MVA). *Jurnal Ekonomi dan Bisnis*, 45–57.
- Brigham, E. F. (2018). *Fundamentals of financial management* (15th ed.). Cengage Learning.
- CAI, X. (2025). The impact of EVA performance evaluation system on market value management of state-owned listed companies.
- Gitman, L. J. (2015). *Principles of managerial finance*. Pearson.
- Harahap, S. S. (2013). *Analisis kritis atas laporan keuangan*. RajaGrafindo Persada.
- Hery. (2021). *Analisis laporan keuangan*. Grasindo.
- Hutahayan, B. (2020). The mediating role of human capital and management accounting information system in the relationship between innovation strategy and internal process performance and the impact on corporate financial performance. *Benchmarking: An International Journal*, 27(4), 1289–1318.
- Jogiyanto, H. M. (2010). *Teori portofolio dan analisis investasi*. BPFE Yogyakarta.
- Khan, M. A. (2023). The role of human capital efficiency in value creation: A meta-analysis across Asia and Europe. *Journal of Business Research*, 165, 114005.
- Marzo, G. (2022). A theoretical analysis of the value added intellectual coefficient (VAIC). *Journal of Management and Governance*, 26(2), 551–577.
- Nguyen, T. T. (2022). Human capital efficiency and firm value in emerging markets: Empirical evidence from Vietnam. *Emerging Markets Finance and Trade*, 58(12), 3500–3517.
- Quintiliani, A. (2018). The relationship between the market value added of SMEs listed on AIM Italia and internal measures of value creation: The role of corporate strategic planning. *International Journal of Financial Research*, 9(1), 121–131.
- Rizkiyah, N. S. (2025). Pengaruh ROA, DER, dan EPS terhadap return saham pada perusahaan makanan dan minuman di BEI (2020–2022). *Jurnal Ekonomi dan Keuangan Indonesia*, 12(1), 45–60.
- Selfiani, R. (2024). Pengaruh human capital efficiency terhadap kinerja keuangan pada perusahaan properti di BEI dengan moderasi pertumbuhan berkelanjutan. *Jurnal Manajemen dan Akuntansi*, 18(2), 210–225.
- Sitorus, T. J. (2016). Pengaruh EPS dan EVA terhadap MVA pada perusahaan sektor manufaktur. *Jurnal Ilmu Manajemen*, 4(2), 123–134.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif dan R&D*. Alfabeta.
- Sugiyono. (2020). *Statistika untuk penelitian*. Alfabeta.
- Xu, J., & Liu, F. (2020). The impact of intellectual capital on firm performance: A modified and extended VAIC model. *Journal of Competitiveness*, 1.
- Yaman, K., & Topal, S. (2024). Effect of EVA, CFROI, MVA and CVA methods on

shareholders value maximization and financial performance estimation: An empirical study. *Journal of Applied and Theoretical Social Sciences*, 6(3), 247–263.

Yousaf, M. Z. (2024). Intellectual capital and financial performance: Evidence from EFQM certified firms in Europe. *Journal of Intellectual Capital*, 25(2), 310–330.

IDX (Indonesia Stock Exchange). (2024). *Ringkasan kinerja keuangan emiten IDX30*. <https://www.idx.co.id/>