



Determinants of Firm Value with Financial Performance as a Mediating Variable on the LQ 45 Index 2020-2023

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Abstract: This study examines the effect of intellectual capital, which includes human capital (VAHU), structural capital (STVA) and relational capital (VACA), on firm value (PBV), with financial performance (ROA) as the mediating variable. The population of this study consists of companies listed in the LQ45 index during the period 2020-2023. A total of 160 companies were selected as the sample using the purposive sampling method. The results show that human capital, structural capital and relational capital partially have a positive and significant effect on financial performance. Further tests show that structural capital has a positive and significant effect on firm value, while human and relational capital have a positive but insignificant effect. Financial performance mediates the relationship between human, structural and relational capital positively and significantly on firm value. In this research, the leverage variable (DER) and firm size are also used as control variables and the results obtained show that leverage has a positive and significant effect on firm value, while firm size has a negative effect on firm value.

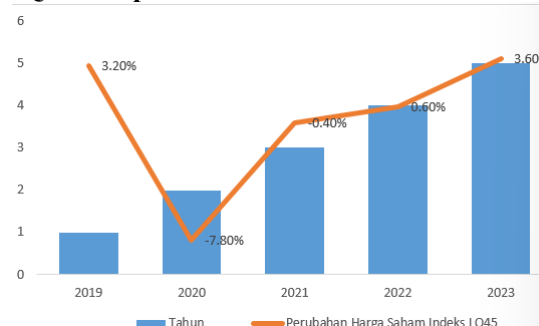
Keyword: Firm Value, Human Capital, Structural Capital, Relational Capital, Financial Performance.

INTRODUCTION

Companies that have go public will receive a general rating and be listed on the Indonesian Stock Exchange as a company categorized by stock indexes, one of which is LQ45 (Aristi & Supriyadi, 2019; Ismiati, 2020; Witjaksana et al., 2024). The LQ45 stock index is a stock index that ranks companies based on their liquidity value and considers market capitalization (Indrayana et al., 2020; Rudianto, 2023). The LQ45 index calculation is done by looking at the liquidity value index by taking the 45 companies that have the highest liquidity value. The Covid-19 pandemic that occurred resulted in the world economy, especially Indonesia, experiencing a decline due to preventing the spread of the Covid-19 virus. The entry of the Covid-19 virus pandemic in Indonesia was determined on March 31 2020 and became a national disaster on April 13 2020. The status of the Covid-19 pandemic ends on June 21 2023

as determined by Presidential Decree (<https://nasional.kompas.com>). Preventing the spread of the Covid-19 virus was carried out by temporarily stopping company activities, but this had an impact on the company's financial performance which resulted in a decrease in the value of the company's shares in the LQ45 index. Changes in the share value of LQ45 index companies can be seen in Table 1.

Table 1 LQ45 Composite Stock Price Index Table for 2019-2023.



Source: Indonesian Stock Exchange (2024)

Since the onset of Covid-19 in 2020, the LQ45 index has experienced fluctuations, starting with a 3.20% increase in 2019 due to the absence of the pandemic's effects. However, in 2020, the index dropped significantly by 7.80% as the impact of Covid-19 hit the market. Recovery efforts began in 2021, resulting in a smaller decline of 0.4%, followed by slight growth of 0.6% in 2022 and a significant rise of 3.60% in 2023. These fluctuations reflect the performance of the 45 most liquid companies on the Indonesian Stock Exchange, whose share prices collectively influence the LQ45 index. Share prices on this index represent company value, which is shaped by investor perception of the company's market value, including its debt and capital. A high company value indicates strong management performance and boosts investor, supplier, and creditor confidence (Elfiswandi et al., 2021).

Today's knowledge-based companies typically rely on science and technology to generate profits. Knowledge-based companies are companies that rely on the use of technology and human resource expertise to create superior products or services (Hodijah et al., 2023). intellectual capital (intellectual capital) is a collection of knowledge assets related to a company that contributes to the company's competitive advantage and increases the company's value for the company stakeholder (Anggraeni & Indarti, 2021). Widiatmoko et al. (2020) added that intellectual capital is an intangible asset, which is knowledge and information used to increase competitiveness and company performance. Indarti et al. (2023), explains that disclosure of intellectual capital is very much needed by stakeholders in the formation or creation of company value. Disclosure of intellectual capital can increase transparency, minimize gaps regarding important company information, increase prices, and reduce costs of capital. The components of intellectual capital consist of: human capital, structural capital, as well as relational capital.

Shulthoni & Rizkya (2023) stated that human capital (human capital) used to see the company's effectiveness in managing employee skills, knowledge and abilities in contributing to adding value to the company. The relationship between added value and employee expenses provides an illustration of the employee's ability to provide added value to the costs incurred by the company for employee needs (Aminda et al., 2022). Structural capital (structural capital) is the ability of a company to meet operational costs and non-operational costs including employee salaries in optimizing intellectual performance by taking into account added value (Aminda et al., 2022). Hodijah et al. (2023), added that the fulfillment of company routines in the form of industrial operations, manufacturing activities, organizational culture, and management philosophy is carried out to support employees in maximizing intellectual performance and maximizing overall business performance. Relational capital (Relational

capital) is a measurement of the added value of a company to determine the close relationship between the company and business relations (Hodijah et al., 2023). Shulthoni & Rizkya (2023), added that relational capital is used to see the extent to which business relationships can maintain cooperation with the company. Apart from that, the value of the company will increase if there are other factors as mediation or intermediaries. The mediator of company value in this research is financial performance. Financial performance is the achievement of a company based on the company's success in managing finances and business activities (Rahayu, 2020). Profitability according to Fauziah et al. (2023), is a ratio that functions as a measuring tool to measure the level of a company's ability to manage all funds and all other assets invested in generating profits.

The grand theory underlying this research is Stakeholder Theory and Resource-Based Theory (RBT). Stakeholder Theory emphasizes that companies not only operate in the interests of shareholders, but also to meet the expectations and interests of various stakeholders, such as employees, suppliers, customers, government and society at large (Barney & Harrison, 2020; Freeman et al., 2020). This theory is relevant in the context of this research because company value is greatly influenced by how the company manages its intellectual capital and how information regarding financial performance is disclosed to stakeholders. When companies are able to increase transparency and provide accurate information regarding financial performance, this will increase the confidence of investors and other stakeholders, which will ultimately have an impact on increasing company value.

Meanwhile, Resource-Based Theory (RBT) focuses on how companies gain competitive advantage through unique and difficult to imitate resources, including intellectual capital (Sony, 2019; Utami & Alamanos, 2022; Zhang et al., 2021). In this research, intellectual capital consisting of human capital, structural capital and relational capital is a valuable asset that can provide added value to the company if managed well. This theory asserts that companies that have rare and non-imitable resources will be able to create sustainable competitive advantages. Thus, effective intellectual capital management will improve financial performance, which in turn contributes to increasing company value. The combination of these two theories provides a strong conceptual basis in explaining how intellectual capital and financial performance interact in forming company value.

Previous research related to this research, among others, was carried out by Shulthoni & Rizkya (2023), that relational capital influences company value because of research which is implemented value added capital employed (VACA) has a good impact on changes in company value, while structural capital and human capital have no influence on company value because they have no impact (Shulthoni & Rizkya, 2023). In contrast to research results (Rabaya et al., 2019), that intellectual capital consisting of human capital, structural capital and relational capital influences company value well (Subagio, 2022).

Research conducted by Hodijah et al. (2023) that relational capital has a good impact on change Return on Assets (ROA) which can be used as a measure of a company's financial performance, while structural capital and human capital have no impact on ROA which can be used as a measure of a company's financial performance. Further research conducted by Acuña-Opazo & González (2019) proves that intellectual capital can influence a company's financial performance. Research on the influencing factors of company value using financial performance as an intermediary was carried out by Aminda et al. (2022), results that financial performance cannot bridge intellectual capital and company value (Kumalasari et al., 2023). Another research conducted by Prakasa (2022), stated that intellectual capital can influence a company's financial performance using ROA and financial performance using ROA can influence company value, and intellectual capital which is moderated by financial performance using ROA can influence company value. However, intellectual capital itself cannot directly influence company value.

Previous studies on the influence of intellectual capital on financial performance and firm value have shown inconsistent results, particularly regarding the direct or indirect effects through financial performance. This research addresses these gaps by analyzing the mediating role of financial performance in the relationship between intellectual capital comprising human capital (VAHU), structural capital (STVA), and relational capital (VACA) and firm value (PBV), specifically in LQ45 companies during the 2020–2023 period. The study introduces novelty by incorporating leverage (DER) and firm size as control variables to provide a more comprehensive understanding. Focusing on highly liquid and well-performing firms in the Indonesian capital market, this research offers valuable insights for corporate strategy and financial management, highlighting the importance of optimizing intellectual resources to enhance competitiveness, profitability, and firm value.

METHOD

The population in this study includes all companies listed on LQ45 of the Indonesia Stock Exchange (BEI) during the 2020-2023 period, with a total population of 180 companies. Sample selection was carried out using a purposive sampling method based on certain criteria, namely companies listed in Semesters 1 and 2 on the LQ45 index during the 2020-2023 period, companies that published financial reports during that period, as well as companies that did not have the data or negative ratios required in the research. Based on these criteria, a sample of 160 companies was obtained that met the requirements for further analysis. The hypothesis in this research consists of seven statements that test the influence of various variables on financial performance and company value. The first hypothesis (H1) states that human capital has a positive effect on financial performance. The second hypothesis (H2) states that structural capital has a positive effect on financial performance. The third hypothesis (H3) proposes that relational capital has a positive effect on financial performance. The fourth hypothesis (H4) states that human capital has a positive effect on company value. The fifth hypothesis (H5) reveals that structural capital has a positive effect on firm value. The sixth hypothesis (H6) proposes that relational capital has a positive effect on firm value. The seventh hypothesis (H7) states that financial performance has a positive effect on company value.

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistics that describe variables in the form of minimum values, maximum values, average values (mean) and standard deviation are presented in Table 3.

Table 2 Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|--------|----------------|
| PBV | 160 | .0005 | 56.79 | 3.14 | 6.94 |
| VACA | 160 | 1.010 | 25.80 | 3.51 | 3.36 |
| STVA | 160 | .0108 | .96 | .58 | .20 |
| VAHU | 160 | .0099 | 1.89 | .26 | .27 |
| ROA | 160 | .001 | .49 | .08 | .08 |
| DER | 160 | .010 | 16.07 | 1.71 | 2.65 |
| SIZE | 160 | 3.89 | 2174.21 | 223.94 | 445.15 |
| Valid N (listwise) | 160 | | | | |

Source: SPSS, processed by researchers

Is: PBV= price book value, VACA= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets, DER= debt to equity ratio, Size= total assets.

Based on the information in Table 3 of descriptive statistics, it can be seen that the firm value is proxied by PBV (price book value), has a minimum value of 0.005, namely PT Indika Energy Tbk in 2023 and the highest value of 56.79, namely PT Unilever Indonesia Tbk in 2020. The average PBV in this study is 3.14 and the spread of the average value is 6.94.

Human capital in this study is proxied by VAHU (value added human capital). In the statistical data above it can be seen that VAHU with a minimum value of 1.010 at PT Wijaya Karya (Persero) Tbk in 2022 and a maximum value of 25.80 at PT Adaro Energy Indonesia Tbk. in 2022. The average value of VAHU in this study is 3.51 with a standard deviation of 3.36. Structural capital is proxied by STVA (structural capital value added) in this study has a minimum value of 0.0108, namely PT Wijaya Karya (Persero) Tbk in 2022 and has a maximum value of 0.96 at PT Adaro Energy Indonesia in 2022. The average STVA is 0.58 with an average spread of 0.20.

Relational capital is proxied by VACA (value added capital employed) has a minimum value of 0.0099, namely PT Merdeka Copper Gold Tbk in 2023 and a maximum value of 1.89 for PT Unilever Indonesia Tbk in 2023. VACA has an average value of 0.26 with a standard deviation of 0.27 in this study. Financial Performance is proxied by ROA (return on assets) has a minimum value of 0.001 at PT Merdeka Copper Gold Tbk in 2023 and a maximum value of 0.49 at PT Bank Artos Indonesia Tbk in 2023. The average value for this ROA is 0.08 with a standard deviation of 0.08.

Leverage as variabel control in this study is proxied by DER (debt to equity ratio) which has a minimum value of 0.01 at PT Hanjaya Mandala Sampoerna Tbk in 2020 and 2021 and a maximum value of 16.07 at PT Bank Tabungan Negara (Persero) Tbk in 2020. The average DER value is 1.71 with a spread of the average value of 2.65.

Company size as variabel control is proxied by total assets where the minimum total assets in this study are at PT Industri Jamu and Farmasi Sido Muncul Tbk. in 2023 with a value of 3.89 trillion. The largest company size is PT Bank Mandiri (Persero) Tbk. in 2023, namely 2,174.21 trillion. The average company size is 223.94 trillion with a standard deviation of 445.150.

Normality Test

Table 3 Normality Test Table

| Model | Skewness | | | Kurtosis | | |
|-----------------------|-----------|-------|---------|-----------|-------|---------|
| | Statistic | SE | Results | Statistic | SE | Results |
| Regression Equation 1 | 2.721 | 0.192 | 14.186 | 13.129 | 0.381 | 34.417 |
| Regression Equation 2 | 1.356 | 0.192 | 7.071 | 9.046 | 0.381 | 23.715 |

Source: SPSS, processed by researchers

Based on Table 4, it can be seen that the skewness and kurtosis of Regression Equation 1 are 14.186 and 34.417. For Regression Equation 2, the skewness and kurtosis are 7.071 and 23.715. From this data, the skewness and kurtosis values are not between -2 to 2, so the data is not normally distributed. To overcome this, data transformation is carried out so that the data is transformed normally. The results of the normality test after data transformation are as follows:

Table 4 Normality Test Table

| Model | Skewness | | | Kurtosis | | |
|-----------------------|-----------|-------|---------|-----------|-------|---------|
| | Statistic | SE | Results | Statistic | SE | Results |
| Regression Equation 1 | 0.373 | 0.192 | 1.946 | 0.743 | 0.381 | 1.947 |
| Regression Equation 2 | -0.277 | 0.192 | -1.443 | -0.015 | 0.381 | -0.038 |

Source: SPSS, processed by researchers

In Table 5 above, in Regression Equation 1, it can be seen that the statistical value of skewness is 0.373 with a standard error of 0.192, resulting in a result of 1.946 and the statistical value of kurtosis is 0.743 with a standard error of 0.381, resulting in a result of 1.947. Thus, Regression Equation 1 is said to be normally distributed. In Regression Equation 2, it can be seen that the statistical comparison value of skewness and standard error, which respectively have a value of -0.227 and 0.192, is -1.443. The kurtosis value is -0.038 which is obtained from a statistical comparison of -0.015 with a standard error of 0.381 which is between -2 to 2 so it is said to have a normal distribution.

Classical Assumption Test

Multicollinearity Test

This test is carried out to find out whether in the regression model there is a correlation between the independent variables. If the tolerance value is < 0.1 with a VIP value > 10 , then the model is said to be free from multicollinearity.

Table 5 Multicollinearity Test Results

| Variable | Tolerance | VIF | Information |
|-----------------------|-----------|-------|----------------------------------|
| Regression Equation 1 | | | |
| VACA | 0.718 | 1.393 | Multicollinearity does not occur |
| STVA | 0.797 | 1.255 | Multicollinearity does not occur |
| VAHU | 0.847 | 1.181 | Multicollinearity does not occur |
| Regression Equation 2 | | | |
| VACA | 0.571 | 1.752 | Multicollinearity does not occur |
| STVA | 0.647 | 1.545 | Multicollinearity does not occur |
| VAHU | 0.265 | 3.773 | Multicollinearity does not occur |
| ROA | 0.180 | 5.563 | Multicollinearity does not occur |
| DER | 0.845 | 1.183 | Multicollinearity does not occur |
| SIZE | 0.805 | 1.242 | Multicollinearity does not occur |

Source: SPSS, processed by researchers

Is: PBV= PBV= price book value, VACA= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets, DER= debt to equity ratio, size= total assets.

In Table 5 above, in Regression Equation 1, it can be seen that the value of each variable has a tolerance value < 0.1 with a VIP value > 10 , so it can be concluded that the Regression Equation 1 model is free from multicollinearity problems. Regression Equation 2 table 6 can be seen that each variable has a tolerance value < 0.1 with a VIP value > 10 so it can be concluded that the regression model in this study is free from multicollinearity problems.

Heteroscedasticity Test

The heteroscedasticity test in this research used the Glejser test. The heteroscedasticity test uses the confidence level of the Glejser test which is carried out with the Chi probability value-Square greater than 5% to be said to be significant and heteroscedasticity does not occur (Nani, 2022).

Table 6 Heteroscedasticity Test Results

| Variable | Say | Law | Information |
|-----------------------|-------|---------|-----------------------------------|
| Regression Equation 1 | | | |
| VACA | 0.425 | $>0,05$ | Heteroscedasticity does not occur |
| STVA | 0.101 | $>0,05$ | Heteroscedasticity does not occur |
| VAHU | 0.259 | $>0,05$ | Heteroscedasticity does not occur |
| Regression Equation 2 | | | |
| VACA | 0.358 | $>0,05$ | Heteroscedasticity does not occur |
| STVA | 0.999 | $>0,05$ | Heteroscedasticity does not occur |
| VAHU | 0.673 | $>0,05$ | Heteroscedasticity does not occur |
| ROA | 0.402 | $>0,05$ | Heteroscedasticity does not occur |
| DER | 0.051 | $>0,05$ | Heteroscedasticity does not occur |
| SIZE | 0.111 | $>0,05$ | Heteroscedasticity does not occur |

Source: SPSS, processed by researchers

Is PBV= PBV= price book value, VACA= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets, DER= debt to equity ratio, size= total asseta.

In table 6, the results of Regression Equation 1 and Regression Equation 2 show that the residual absolute significance value in this study is above 0.05 for each variable, so it can be said to be free from heteroscedasticity.

Autocorrelation Test

The autocorrelation test was carried out to find out whether there was a correlation between the research year periods. Data is said to be free from autocorrelation if durbin – watson bernilai you $< dw < 4$ -you.

Table 7 Autocorrelation Test Results

| Model | OF | DW | (4-DU) | Information |
|-------|----|----|--------|-------------|
|-------|----|----|--------|-------------|

| | | | | |
|-----------------------|-------|-------|-------|-----------------------------|
| Regression Equation 1 | 1.780 | 1.981 | 2.220 | There is no autocorrelation |
| Regression Equation 2 | 1.806 | 2.058 | 2.194 | There is no autocorrelation |

Source: SPSS, processed by researchers

In Table 7, Regression Equation 1 is obtained above the value durbin watson is 1,981. The du value can be seen in the Durbin-Watson table. The du value is seen from the symbol 'k' which shows the number of independent variables and 'n' the number of observations. The values $k=3$ and $n=160$ in this study, so the du value is 1,780 and $4-du$ is 2,220. Thus, value durbin-watson is at $1.780 < 1.981 < 2.220$ which shows that the Regression Equation 1 model does not experience autocorrelation problems. In Regression Equation 2 above, the Watson Durbin value is 2.058. The du value can be seen in the table durbin-watson. The du value is seen from the symbol 'k' which shows the number of independent variables and 'n' the number of observations. The values $k=6$ and $n=160$ in this study, so the du value is 1.806 and $4-du$ is 2.194. It can be concluded that $1.806 < 2.058 < 2.194$ which shows that equation 2 does not experience autocorrelation problems.

Regression Equation 1

Uji Model

F Test (Goodness of Fit)

The results of the F test (goodness of fit) in regression equation 1 can be seen in Table 9.

Table 8 F Test Results (goodness of fit) Regression Equation 1

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|---------|-------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Say. |
| 1 | Regression | 1.862 | 3 | .621 | 226.338 | .000 ^b |
| | Residual | .428 | 156 | .003 | | |
| | Total | 2.290 | 159 | | | |

a. Dependent Variable: ROA

b. Predictors: (Constant): VAHU, STVA, VACA

Source: SPSS, processed by researchers

is VACA= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets.

Based on Table 8 above, the significance value is less than 0.000. This shows that Regression Equation 1 has a significance value smaller than 0.05, so this equation model is said to meet the goodness of fit test.

Coefficient of Determination Test

The results of the coefficient of determination in regression equation 1 can be seen in table 10.

Table 10 Test Results for the Determination Coefficient of Regression Equation 1

| Model Summary |
|---------------|
|---------------|

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .902 ^a | .813 | .810 | .05237 |

Source: SPSS, processed by researchers

Based on the data in table 10 above, it can be seen that Adjusted R Square has a value of 0.810 or 81%. This shows that human capital, structural capital, relational capital can explain 81% of the variation in financial performance, while 19% is explained by other variables.

Regression Analysis

Table 11 Regression Test Results Equation 1

| Variable | B | Beta | t count | Sig t |
|--------------------------|--------|-------|---------|-------|
| (Constant) | -0.145 | | | |
| VACA | 0.090 | 0.217 | 5.308 | 0.000 |
| STVA | 0.153 | 0.225 | 5.808 | 0.000 |
| VAHU | 0.316 | 0.695 | 18.475 | 0.000 |
| Dependent Variable : ROA | | | | |

Source: SPSS, processed by researchers

Is VACA= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets

Based on Table 11, it shows that the constant value (a) is -0.145, the VAHU coefficient (b₁) namely 0.090, STVA coefficient (b₍₂₎) namely 0.153 and the VACA coefficient (b₃) which is 0.316.

Partial Test (t Test)

The partial test (t test) is used to determine the effect of each independent variable on the dependent variable separately. This research uses one-way hypothesis testing (one way) with a significance level of 5%.

Table 12 Results of t Test Equation 1

| Coefficients ^a | | | | | | |
|---------------------------|------------|-----------------------------|------------|---------------------------|--------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.145 | .017 | | -8.456 | .000 |
| | VACA | .090 | .017 | .217 | 5.308 | .000 |
| | STVA | .153 | .026 | .225 | 5.808 | .000 |
| | VAHU | .316 | .017 | .695 | 18.475 | .000 |

a. Dependent variable: ROA

Source: SPSS, processed by researchers

Is VACA= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets

VAHU has a coefficient b value of 0,090 and a significance value of 0.000 (sig. 0.000 < 0.05) on ROA. Therefore, it can be concluded that against humans have a positive and significant effect on financial performance so that hypothesis one is accepted. STVA has a coefficient b value of 0,153. This shows that the influence of structural capital on financial performance is positive, which means that the better the structural capital it will improve financial performance, and vice versa. The significance value is 0.000 (sig. 0.000 < 0.05) which means that there is a significant influence so that hypothesis two is accepted.

VACA shows a b coefficient value of 0.316. This shows that the effect of relational capital on financial performance is positive, which means that the better the relational capital, the better the performance, and vice versa. The significance value is 0.000 (sig. 0.000 < 0.05) which means that there is a significant influence, so the third hypothesis is accepted.

Regression Equation 2

Uji Model

F Test Goodness of Fit)

The results of the F test (goodness of fit) in Regression Equation 2 can be seen in Table 13 below.

Table 13 F Test Results (goodness of fit) Regression Equation 2

| ANOVA ^a | | | | | | |
|---|------------|----------------|-----|-------------|--------|-------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 6.132 | 6 | 1.022 | 19.770 | .000 ^b |
| | Residual | 7.910 | 153 | .052 | | |
| | Total | 14.042 | 159 | | | |
| a. Dependent Variable: PBV | | | | | | |
| b. Predictors: (Constant), VAHU, STVA, VACA, ROA, DER, Size | | | | | | |

Source: SPSS, processed by researchers

Is. PBV= price book value, VACA= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets, DER= debt to equity ratio, Size= total assets.

Based on Table 13, the significance of the F value is smaller than 0.000. This explains that Regression Equation 1 is fulfilled goodness of fit because it has a significance value smaller than 0.05.

Coefficient of Determination

The results of the coefficient of determination in Regression Equation 2 can be seen in Table 14.

Table 14 Test Results for the Determination Coefficient of Regression Equation 2

| Model Summary | | | | |
|---------------|---|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | | | | |

| | | | | |
|---|-------------------|------|------|--------|
| 1 | .661 ^a | .437 | .415 | .22737 |
|---|-------------------|------|------|--------|

Source: SPSS, processed by researchers

Based on Table 14 values Adjusted R Square has a value of 0.415 or 41.5%. This shows that human capital, structural capital, relational capital as independent variables, financial performance as a mediator as well delivery and company size can explain 41.5% of the variation in company value, while 58.5% is explained by other variables.

Regression Analysis

Table 15 Regression Test Results for Equation 2

| Variable | B | Beta | t count | Sig t | Information |
|--------------------------|--------|--------|---------|-------|-----------------|
| (Constant) | 4.506 | | | | |
| COW | 0.059 | 0.057 | 0.707 | 0.481 | Not Significant |
| STUFF | 0.297 | 0.176 | 2.336 | 0.021 | Significant |
| FOAM | 0.003 | 0.003 | 0.025 | 0.980 | Not Significant |
| LONG | 0.929 | 0.375 | 2.623 | 0.010 | Significant |
| THE | 0.165 | 0.234 | 3.548 | 0.001 | Significant |
| UP | -2.569 | -0.300 | -4.437 | 0.000 | Significant |
| Dependent variable : PBV | | | | | |

Source: SPSS, processed by researchers

Is. PBV= price book value, VAHU= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets, DER= debt to equity ratio, UP= company size.

The data in Table 15 shows that the constant value (a) is 4.506, the VAHU coefficient (b₁) namely 0.059, STVA coefficient (b₍₂₎) namely 0.297 and the VACA coefficient (b₃) which is 0.003. For the ROA variable (b₄) has a coefficient value of -0.929 and the variable DER (b₅) has a coefficient of -0.165 as well as a company size coefficient (b₆) is -0.2569 .

Hypothesis Testing

Table 16 Results of the t test for Equation 2

| Coefficients ^a | | | | | | |
|---------------------------|------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 4.506 | .882 | | 5.106 | .000 |
| | FOAM | .059 | .083 | .057 | .707 | .481 |
| | STUFF | .297 | .127 | .176 | 2.336 | .021 |
| | COW | .003 | .133 | .003 | .025 | .980 |
| | LONG | .929 | .354 | .375 | 2.623 | .010 |

| | | | | | |
|-----|--------|------|-------|--------|------|
| THE | .165 | .047 | .234 | 3.548 | .001 |
| UP | -2.569 | .579 | -.300 | -4.437 | .000 |

a. Dependent Variable: PBV

Source: SPSS, processed by researchers

Is. PBV= price book value, VAHU= value added human capital, STVA= structural capital value added, VACA= value added capital employed, ROA= return on assets, DER= debt to equity ratio, UP= company size.

VAHU has a b coefficient value of 0.059 and a significance value of 0.481 for the company value which is less than 0.05. Therefore, it can be concluded that human capital has a positive and insignificant effect on company value. The greater the human capital, the greater the company value, but not significantly so the fourth hypothesis is rejected. STVA has a b coefficient value of 0.297 and a significance value of 0.021 for a company value smaller than 0.05. Therefore, it can be concluded that structural capital has a positive and significant effect on company value so that the fifth hypothesis is accepted. VACA has a coefficient value of 0.003 and a significance value of 0.980 for company value greater than 0.05. Therefore, it can be concluded that relational capital has a positive and insignificant effect on financial value so that hypothesis six is rejected.

Sobel Test/ Mediation Test

The Relationship between Human Capital and Company Value through Financial Performance

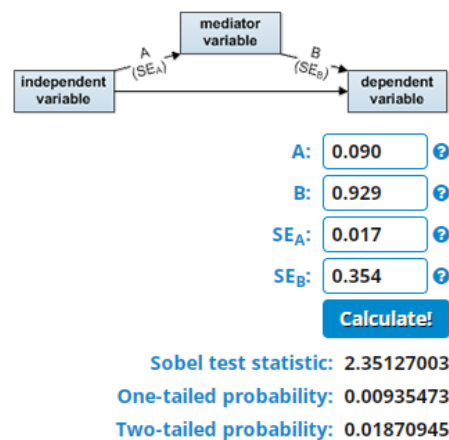


Figure 1 Sobel calculator test results

The results of the Sobel calculation show a calculated statistical value of 2.351 and a significance value of 0.018 (sig. 0.018 < 0.05) which means that there is a significant influence. This shows that financial performance is able to mediate the relationship between human capital and company value and there is a significant influence.

The Relationship between Structural Capital and Company Value through Financial Performance

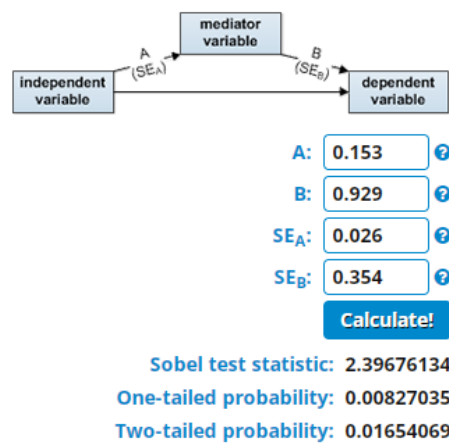


Figure 2 Sobel calculator test results

The results of the Sobel calculation show a calculated statistical value of 2,396 and a significance value of 0.016 (sig. 0.016 < 0.05) which means that there is a significant influence. This shows that financial performance mediates the relationship between structural capital and company value and there is a significant influence.

The Relationship between Relational Capital and Company Value through Financial Performance

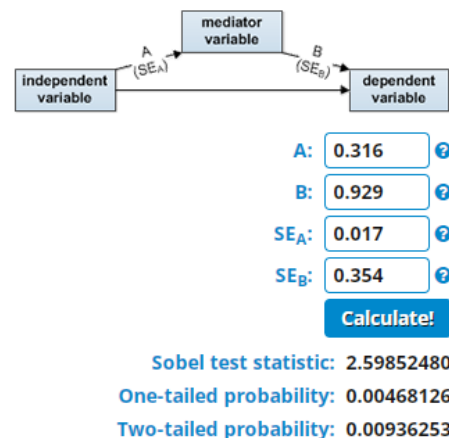


Figure 3 Sobel calculator test results

The results of the Sobel calculation show a calculated statistical value of 2,598 with a significance value of 0.009 (sig. 0.009 < 0.05) which means that there is a significant influence. This shows that financial performance mediates the relationship between relational capital and firm value and there is a significant influence.

Based on the results of the Sobel calculation, human capital, structural capital and relational capital have a Sobel value test statistic and significance respectively 2.351 (sig = 0.019), 2.397 (sig = 0.017), and 2.599 (sig = 0.009). This indicates that financial performance can mediate human capital, structural capital and relational capital on company value. Intellectual capital increasing company value through financial performance.

Discussion

Human capital has a positive and significant impact on financial performance, supporting the first hypothesis. This finding aligns with studies by Putri & Nurfauziah (2019), Zunariski et al. (2023), and Sika & Astini (2022), which highlight the strategic role of human resource management in enhancing financial outcomes, as measured by ROA. According to

Resource-Based Theory, human capital is a valuable, rare, and hard-to-imitate asset, while stakeholder theory emphasizes that HR management should also address the needs of various stakeholders. Incorporating human capital into corporate strategy not only boosts financial performance but also strengthens stakeholder relationships. Similarly, structural capital positively and significantly influences financial performance, supporting the second hypothesis. Effective management of structural capital enhances productivity and cost control, as confirmed by prior research from Putri & Nurfauziah (2019), Zunariski et al. (2023), and Herlina et al. (2022).

Relational capital has a positive and significant effect on financial performance and the third hypothesis is accepted. The company's ability to collaborate with customers stakeholder proven to create trust in the company. All interested parties will not hesitate to help the company in carrying out its operations. These results are in line with research conducted by Hodijah et al. (2023), Putri & Nurfauziah, 2019), Zunariski et al. (2023), Ratnadi et al. (2021), Herlina et al. (2022), and Ika & Astini (2022) which show that relational capital relationships can have a positive impact on financial performance. Human capital has a positive and insignificant effect on firm value and the fourth hypothesis is rejected. The effectiveness of human resource (HR) management in an organization is demonstrated by knowledge of how to optimize employee performance to produce added value for the company. The right HR management strategy can increase productivity, operational efficiency and sustainable innovation, although individual or team contributions may not always have a direct impact on company value. Companies can create a work environment that supports employee growth by providing relevant training programs, a clear performance management system, and a positive work culture, work-life balance, and appropriate incentives. Therefore, effective management will increase the competitiveness and sustainability of the company in the long term, although the impact of HR on company value may not be visible in the short term. Research conducted by Padila & Muslimin (2024), Mardiana et al. (2023), as well as Nasution & Ovami, (2021) which prove that intellectual capital can positively influence company value are rejected.

Structural capital has a positive but insignificant effect on firm value, supporting the fifth hypothesis. According to Resource-Based Theory, intellectual capital, including structural capital, is a strategic resource that can enhance competitive advantage when effectively managed. This finding aligns with previous research by Achriaty & Putri (2023) and Nasution & Ovami (2021), which found a positive influence of structural capital on firm value. Conversely, relational capital also shows a positive but statistically insignificant effect on firm value, leading to the rejection of the sixth hypothesis. Although relational capital has the potential to enhance firm value, its impact remains weak without consistent management. Based on Resource-Based Theory and stakeholder theory, relational capital can add value when companies address the expectations of stakeholders such as employees, customers, and investors. Therefore, this study emphasizes the need to strengthen relational capital management strategies to significantly improve firm value and stakeholder satisfaction.

Financial performance can mediate human capital, structural capital and relational capital on company value. Intellectual capital increases company value through financial performance, which shows how well strategic resources are managed. Previous studies, such as Prakasa (2022), Wibowo et al. (2022), Mudjijah et al. (2019), and Krisnando (2019), found that company value is strongly influenced by financial performance. If managed optimally, human capital, structural capital and relational capital are strategic assets in context Resource-Based Theory (RBT), can increase the company's competitiveness. However, the new strong financial performance means that the value of this intellectual capital is fully met, demonstrating the company's ability to convert intellectual assets into financial profits. In addition to generating profits for shareholders, effective management of intellectual capital helps employees, customers, business partners, communities and the environment. Therefore, managing human capital, structural capital, and relationships that consider the interests of various parties

increases the company's competitiveness and ensures sustainable mutually beneficial relationships with stakeholders.

CONCLUSION

This study examines the relationship between intellectual capital and firm value with financial performance as a mediating variable. The results show that human capital, structural capital, and relational capital have a positive and significant effect on financial performance, which ultimately has an impact on increasing firm value. Capital structure also has a significant effect on firm value, while human capital and relational capital have a smaller direct impact. To increase firm value, management needs to manage structural capital effectively and continue to develop human capital and relational capital through employee training, strengthening organizational infrastructure, and improving relationships with external stakeholders. The limitations of this study lie in the scope that is limited to certain aspects of intellectual capital, without considering external factors and variations in industrial sectors, so further research is recommended to cover broader sectors and additional factors such as company ownership structure and corporate social responsibility.

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