

# **Influence of Intellectual Capital and Corporate Governance on Company Financial Performance: Study on Mining Sector Companies Listed on The Indonesia Stock Exchange for 2016-2020 Period**

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## **Abstract**

This study aims to determine the effect of intellectual capital and corporate governance on the company's financial performance. Intellectual capital measurement uses three independent variables, namely Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Value Added Structural Capital (STVA), while corporate governance is proxied by institutional ownership, foreign ownership, and the proportion of independent commissioners, to the company's financial performance is proxied by the Return of Assets (ROA). The study was conducted on mining sector companies listed on the Indonesia Stock Exchange for the 2016-2020 period. By using purposive sampling method, obtained a sample of 10 companies. The results showed that Value Added Capital Employed (VACA), Structural Capital Value Added (STVA), and institutional ownership had an effect on the company's financial performance, while Value Added Human Capital (VAHU), and the proportion of independent commissioners had no significant effect on financial performance.

## **Keywords:**

intellectual capital; corporate governance; financial performance

## **Introduction**

Along with technological advances and changing times, economic growth is something that is highly demanded in every country. Economic growth can be interpreted as an increase in economic conditions in a certain period of time to the next period. The economy is certainly closely related to the world of business and business, so today, every business and business person is expected to be able to measure the company's performance from time to time in order to have a complete picture of the company's value.

The company's financial performance describes the financial condition of a company in a certain period which is analyzed with financial analysis tools. This aspect becomes very

crucial for an investor when or not to invest in a company. The higher the value of a company, the more attractive it is for investors to invest there. On the other hand, poor company performance which results in a decrease in company value will have an impact on decreasing investor interest which in the end will have a bad impact on a company.

Regarding the poor performance of financial companies, Erick Tohir (2020) in [tirto.id](https://tirto.id) news dated February 20, 2020, stated that he would liquidate companies with poor financial performance. According to him, companies whose business, economic value and public services continue to decline and lose money, such as PT Industri Sandang Nusantara (Persero) and PT Kertas Kraft Aceh are no longer able to compete and therefore need to be liquidated in an effort to save the state budget **efficiency**.

On the other hand, President Director of PT Bakrie & Brothers Tbk (BNBR) Bobby Gafur Umar (2018) in [finance.detik.com](https://finance.detik.com), July 26 2018, when responding that the share price of PT BNBR fell very deeply from Rp 500 to Rp 70 and almost returned to the level of Rp 50, admits that the company's financial performance is very poor. In line with that, in the latest news, Deputy Minister of SOEs, Kartika Wirjoatmojo (2021) reported from [finance.detik.com](https://finance.detik.com) on November 9, 2021, in an article entitled "Garuda Minus Severe Capital, beat Sriwijaya" said that PT Garuda experienced negative equity, which technically it's already bankrupt.

In the current condition of the Indonesian economy, one sector that has attracted considerable attention is the mining sector. In the 2020 State Revenue and Expenditure Budget (APBN), mining sector revenues are included in Non-Tax State Revenue (PNBP) from Non-oil and Gas Natural Resources (SDA). In the January 2021 edition of the Electronic Magazine of APBN Kita, PNBP realization reached Rp.

The huge potential of the mining sector, also seeing the various phenomena that occur, the company is expected to be able to improve financial performance or company value, in line with the company's long-term goal of maximizing the welfare of its shareholders through increasing share prices and earning profits.

In this knowledge-based era, one of the strategies for companies to survive is to change the characteristics of the company from a workforce-based business to a knowledge-based business. Companies with knowledge-based businesses place their focus on human resources and knowledge, also emphasize the importance of intangible assets as an aspect that can increase the value of the company.

The importance of intelligence power, smart workers, and corporate information is increasing so that the term Intellectual Capital is becoming increasingly important. Pablos (2003) in Ulum (2016:78) explains that broadly Intellectual Capital can be defined as the difference between the company's market value and value of the book, then Stewart (1998) in Ulum defines it as intellectual material (knowledge, information, intellectual property, experience) that can be used to create wealth. Sullivan (2000) states that Intellectual Capital is knowledge that can be converted into profit, while Heisig, et al (2001) explains that Intellectual Capital can be measured but not visible. Based on the above definition, it can be concluded that Intellectual Capital is an intangible asset owned by the company. This is in line with PSAK 19 concerning Intangible Assets which explains that intangible assets are non-monetary assets that are identified without physical form, which can generate future economic benefits.

The development of the company and its considerable attention to Intellectual Capital, accountants are required to be able to identify, measure, and disclose in financial statements. One method that can be used to measure Intellectual Capital is the method developed by Pulic (1998), called the Value Added Capital Coefficient (VAIC). The method shows how much the company's added value is by measuring the efficiency of Intellectual Capital to the company's total added value. In Ulum (2016: 86-90), it is explained that the main components of VAIC consist of three parts, namely Value Added Capital Employed (VACA), Value Added Human Capital (VAHU) and Structural Capital Value Added (STVA).

The topic of intellectual capital has been discussed by several previous studies and yielded various conclusions. Research conducted by Haryani Chandra and Hamfri Djajadikerta (2017) states that intellectual capital partially has a significant positive effect on firm value in the property, real estate, and building construction sectors. Research conducted by Lutfia Dwi Jayanti and Sugiharti Binastuti (2017) on banking companies listed on the Indonesia Stock Exchange, outlines the conclusions for each component of VAIC, where Value Added Capital Employed (VACA) and Value Added Human Capital (VAHU) has a positive effect on firm value as measured using the Tobin's Q ratio, while Structural Capital Value Added (STVA) has no effect on firm value. In contrast to the two studies above, the research of Nanik Lestari and Rosi Candra Sapitri (2016) shows that Intellectual capital has no effect on firm value in the manufacturing sector. Meanwhile, Yudik Wergiyanto and Nining Ika Wahyuni (2016) with their research on companies that are included in the Global Industry

Classification Standard (CIGS), conclude that intellectual capital has a significant negative effect on firm value.

In addition to improving the disclosure of financial statements in the form of disclosure of Intellectual Capital, a company needs to implement and manage good Corporate Governance. Good Corporate Governance or good governance, will be able to make companies have better competitiveness. Purwantini (2008) stated that in the last 10 years, corporate governance has become an important issue among executives, non-government organizations (NGOs), corporate consultants, academics, and regulators (governments) in various parts of the world. In 1999, the Indonesian government established the National Committee on Corporate Governance Policy (KNKCG). Good Corporate Governance was re-reviewed and the regulations for its implementation in Indonesia occurred when the world economic crisis occurred in 1998 and there were cases involving large companies and well-known Public Accounting Firms, namely Enron and Arthur Andersen (Nur'ainy, Nurcahyo, A, & B, 2013 in Ruslim (2018)). The regulation that regulates the implementation of Good Corporate Governance is corrected so that the improvement of Good Corporate Governance practices and regulations is carried out comprehensively (Financial Services Authority, 2014). In 2004, KNKCG was changed to KNKG (National Committee on Governance Policy).

According to Sutedi (2011:2), what is meant by Good Corporate Governance is a system that is able to regulate and control the company to create added value for all stakeholders. This concept is expected to protect shareholders and creditors in order to get their investment back. The main theory that cannot be separated from corporate governance is agency theory. Agency theory assumes that the goals of the principal and the different goals of the agent can lead to a conflict of interest because the company manager (agent) is assumed to tend to fulfill his own personal goals. To overcome this problem, the company is expected to be able to disclose and implement good and correct corporate governance in order to prove the company's commitment to stakeholders. According to Darmawati (2005), both public and non-public companies must view corporate governance not as merely an accessory, but also as an effort to increase the company's performance and value. Thus, the application of the concept of Good Corporate Governance in Indonesia is expected to increase the professionalism and welfare of shareholders without neglecting the interests of stakeholders.

Corporate governance is proxied, among others, by managerial ownership, institutional ownership, and the proportion of independent commissioners. Cornett's research (in Bangun (2008)), uses indicators of the Corporate Governance mechanism as proxied by managerial ownership, institutional ownership, and the proportion of independent commissioners. The selection of these proxies is based on several opinions, including: Roos (1959) in Bangun (2008) states that the greater the managerial ownership in a company, the management will tend to seek to improve the company's performance, Vafeas (2000) in Bangun (2008) states that the board Commissioners are expected to improve earnings quality and increased earnings quality indicates an increase in company performance and Arif (2006) in Bangun (2008) states that companies with large institutional ownership indicate their ability to monitor large management so that it indirectly improves their performance.

Meanwhile, as an indicator of the company's financial performance, the Return On Assets (ROA) proxy is used. ROA is a comparison of the company's return (profit) compared to its assets. Profit is an indicator that can be used to measure and evaluate company performance (Siallagan and Machfoedz, 2006). The greater the profit generated means the company's performance is getting better.

Another study conducted by Suroso et al. (2017) regarding "Intellectual Capital and Corporate Governance in Financial Performance in Indonesia Islamic Banking" found that ROA is influenced by Human Capital, Structural Capital, Capital Employed, Board of Size, Board of Demographics, Board of Education and Board of Evaluation. In addition, Khanna (2016) found that board composition, board ownership or shareholding pattern, disclosures, and other compliances are parameters in Corporate Governance that have a positive and significant influence on the profitability of manufacturing companies.

Based on the previous research described above, Intellectual Capital and Corporate Governance have various influences on firm value. Information on the implementation and disclosure of Intellectual Capital and Corporate Governance is becoming more relevant and can be used for decision making by interested parties. Therefore, the author raised the theme of research related to this topic with the title *The Effect of Intellectual Capital and Corporate Governance on Corporate Financial Performance (Study on Mining Sector Companies listed on the Indonesia Stock Exchange 2016-2020 Period)*.

## **Methods**

### **Research design**

This research was conducted to see the effect of the independent variable on the dependent variable. The independent variables used in this study are (1) VACA, (2) VAHU, (3) STVA, (4) institutional ownership, (5) foreign ownership, and (6) the proportion of independent commissioners, and a combination of all variables that have been assessed. mentioned above, while the dependent variable used in this study is financial performance as proxied by Return on Assets (ROA). The companies that are the subject of this research are mining sector companies listed on the Indonesia Stock Exchange (IDX).

Based on the time span, the research is classified as a longitudinal study, namely a study in which data on related variables are collected at two or more time limits to answer research questions (Sekaran and Bougie, 2017: 123). In this study, the data collected includes data related to the independent variable and the dependent variable in the range of 2016 to 2020. Based on the type of data, this research is a quantitative study, where the data collected is expressed in numerical units (in terms of numbers). US dollars) and processed using statistical analysis to prove the hypothesis that had been prepared previously. The data used in this study is secondary data, namely data that refers to information collected from existing sources (Sekaran and Bougie, 2017: 130). The secondary data in this study is in the form of financial statements for the 2016-2020 period for mining sector companies listed on the IDX. This research strategy is a survey with a minimum level of researcher intervention. The time horizon used in this research is pooled data/data panel.

### **Operational Definition of Variables and Measurement**

This study involves two types of variables, namely the independent variable and the dependent variable. Independent variables or independent variables are variables that affect the dependent variable, either positively or negatively (Sekaran and Bougie, 2017:79). The independent variable in this study is intellectual capital as measured using VAIC, so there are three independent variables, namely Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA), as well as corporate governance proxied into institutional ownership, foreign ownership, and the proportion of independent commissioners.

The dependent variable or the dependent variable is a variable that is the main concern of researchers (Sekaran and Bougie, 2017:77). In this study there is one dependent variable, namely the company's financial performance as measured by using the ratio of Return of Assets (ROA). The following is a description of the operational definitions of all variables and the measurement of these variables.

### **Independent Variable**

#### *Intellectual Capital*

Intellectual capital in the study was measured using the Value Added Intellectual Coefficient (VAIC) method. VAIC consists of 3 components, namely VACA, VAHU, and STVA. The following are the steps and how to calculate the three VAIC components.

#### 1. Step 1: Calculating Value Added (VA)

VA is calculated using the following formula.

$$\mathbf{VA = OUT - IN}$$

*Source: Ulum (2017;121)*

Information:

OUT = Output (total sales + other revenue)

IN = Input (selling expenses + other costs other than employee expenses)

#### 2. Step 2: Calculating Value Added Capital Employed (VACA)

VACA is calculated using the following formula.

$$\mathbf{VACA = VA/CE}$$

*Source: Ulum (2017;121)*

Information:

VA= Value Added

CE = Capital Employed (total equity + net profit)

#### 3. Step 3: Calculating Value Added Human Capital (VAHU)

VAHU is calculated using the following formula.

$$\mathbf{VAHU = VA/HC}$$

*Source: Ulum (2017;121)*

Information:

VA = Value Added

HC = Human Capital (employee expenses)

#### 4. Step 4: Calculating Structural Capital Value Added (STVA)

STVA is calculated using the following formula.

$$\text{STVA} = \text{SC}/\text{VA}$$

Source: Ulum (2017;122)

Information:

VA = Value Added

SC = Structural Capital (VA - HC)

#### 3.2.1.2. Corporate Governance

Corporate Governance in this study is proxied into institutional ownership, foreign ownership, and the proportion of independent commissioners. The following are the stages and how to calculate the three components.

##### 1. Institutional Ownership

Institutional Ownership is formulated as follows:

$$\text{Institutional ownership (INSTOWN)} = \frac{\text{number of shares owned by financial institutions}}{\text{number of shares issued}}$$

Source: Riduwan and Sari (2013)

##### 2. Foreign Ownership

Foreign Ownership is formulated as follows:

$$\text{Foreign ownership (FRGOWN)} = \frac{\text{the number of shares owned by foreigners}}{\text{number of shares issued}}$$



### 3. Proportion of Independent Commissioners

The proportion of Independent Commissioners is formulated as follows:

$$\text{Proportion of Independent Commissioners (BOARDINDP)} = \frac{\text{number of independent commissioners}}{\text{the total number of commissioners}}$$

### Dependent Variable

#### *Company Financial Performance*

The company's financial performance in this study uses a return of assets (ROA) profitability proxy. According to Ulum (2008), Return on Assets (ROA) is preferred over Return on Equity (ROE) because total equity which is the denominator of Return on Equity (ROE) is one component of VACA. If using Return on Equity (ROE), there will be double counting on the same account (ie equity), where VACA (which is constructed from equity and net income) as the independent variable and Return on Equity (ROE) (which is also constructed from equity account and net income) becomes the dependent variable.

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Dewi (2011) research on intellectual capital also uses the Return on Assets (ROA) proxy as one of the dependent variables. Return on Assets (ROA) is formulated as follows:

$$\text{ROA} = \text{Laba Bersih} / \text{Total Aset}$$

### Data Collection Procedure

#### *Data Collection Techniques and Sources*

This study uses quantitative variables, namely variables that can be expressed by numbers (Lind, et al., 2014:10). Quantitative data in this study was obtained by the documentation method, namely by collecting secondary data in the form of financial reports published by

mining sector companies listed on the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) in the period 2016 to 2020.

#### *Population and Data Sample*

The population is the entire individual or object observed or the size obtained from all related individuals or objects (Lind, Marchal, and Wathen, 2013: 7). The population in this study are mining sector companies listed on the Indonesia Stock Exchange in the 2016-2020 period.

The sample is a portion, or part of a similar population (Lind, Marchal, and Wathen, 2013:7). According to Kuncoro (2013: 118), population is a subset of the population unit (Kuncoro, 2013: 118). The method used to select the sample in this study is judgment sampling, which is a type of purposive sampling in which the researcher selects samples based on an assessment of several characteristics of sample members that are adapted to the purpose of the study (Kuncoro, 2013:139). The characteristics or criteria used to determine the sample of this study are as follows.

1. Mining sector companies listed on the Indonesia Stock Exchange for five consecutive years from 2016-2020.
2. The company has submitted consecutive annual financial reports for 2016-2020 and has been audited and included in the independent auditor's report.
3. The company uses US Dollar (USD) in its financial statements.
4. The company must generate net income in the 2016-2020 period. This is necessary for the calculation of the company's value added (VA).
5. Employee expenses can be identified in the financial statements. This is necessary to calculate the Value Added Human Capital (VAHU).
6. The company discloses the implementation of Good Corporate Governance in its annual report for the 2016-2020 period.
7. The company has a minimum number of Independent Commissioners of 30% of all members of the board of commissioners during the 2016-2020 period.

Based on these criteria, 10 mining sector companies are listed on the IDX, with 50 total observations of the company's financial statements. The list of companies that are sampled in this study are as follows.

**Table 1.**  
**List of Companies that became the Research Sample**

| No | Kode | Nama Perusahaan         |
|----|------|-------------------------|
| 1  | ADRO | Adaro Energi            |
| 2  | BSSR | Baramulti Suksessarana  |
| 3  | BYAN | Bayan Resources         |
| 4  | DEWA | Darma Hendra            |
| 5  | GEMS | Golden Energi Investama |
| 6  | HRUM | Harum Energy            |
| 7  | ITMG | Indo Tambangraya Megah  |
| 8  | MBAP | Mitrabara Adiperdana    |
| 9  | MYOH | Samindo Resources       |
| 10 | TOBA | Toba Bara Sejahtera     |

*Source: Processed by the author*

### **Data analysis method**

This research involves more than one independent variable and one dependent variable. Ghozali (2018:8) explains that to test the effect of more than 1 independent variable on one dependent variable, multiple linear regression is used. However, before performing multiple regression analysis, the classical assumption test must first be performed to ensure that the linear regression model used is valid as a forecasting tool or to answer hypotheses in a study. All of the testing and analysis, as well as the presentation of the data in this study, used the Eviews (Econometric Views) version 10 program.

#### *Classic assumption test*

##### **1. Normality test**

The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution (Ghozali, 2018:161). The test method used in the normality test in this study is the Kolmogorov-Smirnov non-parametric statistical test. The Kolmogorov-Smirnov test is carried out by first stating the following hypothesis.

H<sub>0</sub> : data has normal distribution

H<sub>A</sub>: data are not normally distributed.

The answer to the hypothesis is obtained by referring to the condition that if the significance value is greater than 0.05, then H<sub>0</sub> is accepted and the data is normally distributed. On the other hand, if the significance value of smaller than 0.05 then H<sub>0</sub> is rejected and the data is not normally distributed.

## 2. Multicollinearity Test

The multicollinearity test aims to test whether the regression model found a correlation between independent variables (Ghozali, 2018:107). Independent variables that are correlated with each other are called variables that are not orthogonal.

Multicollinearity can be seen by the value of tolerance and VIF (Variance Inflation Factor). Ghozali (2018:108) explains that the cutoff value commonly used to indicate the presence of multicollinearity is the tolerance value 0.10 or the same as VIF 10.

## 3. Autocorrelation Test

The autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in period  $t$  and the confounding error in period  $t-1$  (Ghozali, 2018:111). In the autocorrelation test, the Durbin-Watson test was used. Decision making in the Durbin-Watson test is based on the following table.

**Table 2.**  
**Durbin-watson Test Decision Making**

| Hipotesis Nol                                | Keputusan     | Jika                        |
|--|---------------|-----------------------------|
| Tidak ada autokorelasi positif               | Tolak         | $0 < d < dl$                |
| Tidak ada autokorelasi positif               | No decision   | $dl \leq d \leq du$         |
| Tidak ada autokorelasi negatif               | Tolak         | $4 - dl < d < 4$            |
| Tidak ada autokorelasi negatif               | No decision   | $4 - du \leq d \leq 4 - dl$ |
| Tidak ada autokorelasi, positif atau negatif | Tidak ditolak | $du < d < 4 - du$           |

## 4. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual of one observation to another observation (Ghozali, 2018: 137). A good regression model is a regression model that does not occur heteroscedasticity or also called homoscedasticity, that is, if the variance from the residual of one observation to another observation is fixed (Ghozali, 2018: 137). The method used for heteroscedasticity testing in this study is the Glejser test, which is a test that proposes to regress the absolute value of the residual on the independent variable (Ghozali, 2018:142).

## **Regression Model Selection Test**

### **1. Chow test**

Chow test The Chow test is to determine which test between the two methods, namely the common effect method and the fixed effect method, should be used in panel data modeling.

The hypothesis in this chow test is as follows: (Ghozali, 2018)

H<sub>0</sub> : Common Effect Model

H<sub>a</sub> : Fixed Effect Model.

If the results of this test show the probability F is more than the 0.05 significance level, then the model chosen is the common effect. On the other hand, if the probability of F is less than the significance level of 0.05, the model that should be used is the fixed effect.

### **2. Hausman test**

Hausman test is to determine which test between the two random effects models and fixed effects models should be carried out in panel data modeling. The hypothesis in the Hausman test is as follows:

H<sub>0</sub> : Random Effect Method

H<sub>a</sub> : Fixed Effect Method

If the Chi-Square probability is smaller than the 0.05 significance level, then H<sub>0</sub> is rejected and the correct model is the Fixed Effect model and vice versa.

### **3. Lagrange Multiplier (LM) Test**

Lagrange Multiplier (LM) is a test to find out whether the Random Effect model or the Common Effect (OLS) model is the most appropriate to use. This Random Effect significance test was developed by Breusch Pagan. The Breusch Pagan method for the Random Effect significance test is based on the residual value of the OLS method. The hypotheses used are:

H<sub>0</sub> : Common Effect Model

H<sub>a</sub> : Random Effect Model

If the statistical LM value is greater than the critical value of the chi-squares statistic, then we reject the null hypothesis, which means that the correct estimation for the panel data regression model is the Random Effect method rather than the Common Effect method.

On the other hand, if the statistical LM value is less than the chi-squares statistic as a critical value, then we accept the null hypothesis, which means that the estimation used in panel data regression is the Common Effect method, not the Random Effect method. The LM test is not

used if the Chow test and Hausman test show that the most appropriate model is the Fixed Effect Model. The LM test is used when the Chow test shows that the model used is the Common Effect Model, while the Hausman test shows the most appropriate model is the Random Effect Model. Therefore, the LM test is needed as the final stage to determine the most appropriate Common Effect or Random Effect model.

### **Hypothesis testing**

#### **1. Test Statistics t**

The t-statistical test basically shows how far the influence of 1 explanatory/independent variable individually in explaining the variation of the dependent variable (Ghozali, 2018:98).

The hypothesis in the statistical test is as follows.

$$H_0 : X_1/X_2/X_3 = 0$$

$$H_A: X_1/X_2/X_3 \neq 0$$

The effect of each independent variable is individually determined by the probability of the calculation results. If the probability is smaller than the significant level of 0.05 (sig. < 0.05), then  $H_0$  is rejected and thus it is said that the independent variable individually influences the dependent variable.

#### **F Statistic Test**

The F statistical test tests the joint hypothesis that all independent variables together are equal to 0 (Ghozali, 2018:98). In other words, the F statistical test tests whether all independent variables have a joint effect on the dependent variable. The hypothesis in the F statistical test is as follows.

$$H_0 : X_1 = X_2 = X_3 = \dots\dots\dots X_n = 0$$

$$H_A: X_1 \neq X_2 \neq X_3 \dots\dots\dots X_n \neq 0$$

The effect of the independent variables together on the dependent variable is determined by the probability of the calculation results. If the probability is smaller than the significant level, namely 0.05 (sig. <0.05), then  $H_0$  is rejected and thus it can be said that the independent variables jointly affect the dependent variable.

### **Coefficient of Determination ( $R^2$ )**

The coefficient of determination ( $R^2$ ) measures how far the model's ability to explain the dependent variation (Ghozali, 2018:97). The value of the coefficient of determination is between 0 and 1. The value of the coefficient of determination which is getting closer to number 1 indicates that the ability of the independent variables to explain the dependent variable in the study is getting higher.

In regression analysis, in addition to measuring the strength of the relationship between two or more variables, it also shows the direction of the relationship between the dependent variable and the independent variable (Ghozali, 2018: 96). The equation of the multiple linear regression model in this study is as follows.

## **Results and Discussion**

### **Data analysis**

#### **Classic assumption test**

Classical assumption test is carried out in order to ensure that the linear regression model used is valid as a forecasting tool or to answer hypotheses. The following is a description of the results of the classical assumption test in this study. The data meet the classical assumption test.

#### *Model Selection Test*

Selection of the best model between the common effect model (CEM), fixed effect model (FEM), and random effect model (REM). To select the best model, several tests were carried out, as follows:

1. The Chow test is used to choose between the common effect model and the fixed effect model. The  $H_0$  of this test is that CEM is a better panel data model, while the alternative hypothesis is that FEM is a better model. The level of significance used in this test is 0.05. Based on the results of processing with 10 views obtained a p-value of 0.0000. The p-value is smaller than the five percent significance level, so the null hypothesis is rejected, which means that the best model is fixed effect.
2. Hausman test to choose between fixed effect model and random effect model. The  $H_0$  of this test is that FEM is a better panel data model, while the alternative hypothesis is that REM is a better model. The level of significance used in this test is 0.05. Based on

the results of processing with 10 views obtained p-value of 0.0002. The p-value is smaller than the five percent significance level, so the null hypothesis is rejected, which means that the fixed effect model is better than the random effect model. So from the results of the tests carried out, it can be concluded that the best model for the company's financial performance with intellectual capital and good corporate governance variables is the fixed effect model.

### Hypothesis test

Based on the results of the Eviews (Econometric Views) version 10 test, the following results were obtained which summarized the Coefficient of Determination (R2) test, F statistic test, and t statistic test.

**Table 4.**  
**EViews Test Results**

| Dependent Variable: ROA                           |             |                    |             |        |
|---|-------------|--------------------|-------------|--------|
| Method: Panel EGLS (Cross-section weights)        |             |                    |             |        |
| Date: 01/31/22 Time: 23:03                        |             |                    |             |        |
| Sample: 2016 2020                                 |             |                    |             |        |
| Periods included: 5                               |             |                    |             |        |
| Cross-sections included: 10                       |             |                    |             |        |
| Total panel (balanced) observations: 50           |             |                    |             |        |
| Linear estimation after one-step weighting matrix |             |                    |             |        |
| Variable  | Coefficient | Std. Error         | t-Statistic | Prob.  |
| C   | 0.733362    | 0.033589           | 21.83309    | 0.0000 |
| LOG(VACA)   | 0.087153    | 0.017097           | 5.097524    | 0.0000 |
| LOG(VAHU)   | -0.055332   | 0.035451           | -1.580823   | 0.1278 |
| LOG(STVA)   | -0.058198   | 0.012941           | -4.497060   | 0.0001 |
| INSTOWN   | 0.019851    | 0.003552           | 5.588876    | 0.0000 |
| FGROWN  | -0.049625   | 0.035374           | -1.402870   | 0.1697 |
| BOARDINDP   | -0.195374   | 0.107021           | -1.825562   | 0.0767 |
| Effects Specification                             |             |                    |             |        |
| Cross-section fixed (dummy variables)             |             |                    |             |        |
| Weighted Statistics                               |             |                    |             |        |
| R-squared   | 0.949522    | Mean dependent var | 1.398832    |        |
| Adjusted R-squared                                | 0.927252    | S.D. dependent var | 0.873990    |        |
| S.E. of regression                                | 0.055487    | Sum squared resid  | 0.104679    |        |
| F-statistic                                       | 42.63712    | Durbin-Watson stat | 2.525389    |        |
| Prob(F-statistic)                                 | 0.000000    |                    |             |        |
| Unweighted Statistics                             |             |                    |             |        |
| R-squared   | 0.951427    | Mean dependent var | 0.730810    |        |
| Sum squared resid                                 | 0.129276    | Durbin-Watson stat | 2.427883    |        |

Source: Eviews 10 output

### Test Statistics t

Based on the t test then:

1. Value Added Capital Employed (VACA) has an influence on the company's financial performance.
2. Value Added Human Capital (VAHU) has no effect on the company's financial performance.
3. Structural Capital Value Added (STVA) has an influence on the company's financial performance.
4. Institutional ownership has an influence on the company's financial performance.
5. Foreign ownership has no influence on the company's financial performance.



6. The proportion of independent commissioners has no influence on the company's financial performance.

### **F Statistic Test**

Based on the results of the F statistical test shown in table 4.7., the calculated F value is 44,521 and a significant value of 0.000 ( $0.000 < 0.05$ ) which means that the decisions taken from the F statistical test are  $H_0$  rejected and  $H_A$  accepted. This states that VACA, VAHU, STVA, institutional ownership, foreign ownership, and the proportion of independent commissioners simultaneously have a significant effect on the company's financial performance.

The coefficient of determination ( $R^2$ ) measures how far the model is able to explain the variation of the dependent variable. When the value of the coefficient of determination is getting closer to 1, this indicates the ability of the independent variables to explain the dependent variable in the study is getting higher.

### **Coefficient of Determination ( $R^2$ )**

It is known that the coefficient of determination seen from the value of Adjusted R Square ( $R^2$ ) is 0.9272 meaning independent variables such as Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), Structural Capital Value Added (STVA), institutional ownership, foreign ownership , and the proportion of independent commissioners studied has a contribution effect of 92.72% on the dependent variable, namely the company's financial performance, while the other 7.28% ( $100\% - 92.72\%$ ) is influenced by other factors outside the variables studied.

### **Conclusion**

This study aims to determine the effect of intellectual capital and corporate governance on the company's financial performance. The study was conducted on 10 mining sector companies listed on the Indonesia Stock Exchange for the 2016-2020 period. Based on the results of data analysis and discussion that has been carried out, as well as referring to the formulation of the problem and hypotheses that have been prepared, the following conclusions can be drawn.

1. Value Added Capital Employed (VACA) has an influence on the company's financial performance.
2. Value Added Human Capital (VAHU) has no effect on the company's financial performance.
3. Structural Capital Value Added (STVA) has an influence on the company's financial performance.
4. Institutional ownership has an influence on the company's financial performance.
5. Foreign ownership has no influence on the company's financial performance.
6. The proportion of independent commissioners has no influence on the company's financial performance.
7. Simultaneously, VACA, VAHU, STVA, institutional ownership, foreign ownership, and the proportion of independent commissioners affect the company's financial performance.

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