

# The Effect of *Intellectual Capital* and *Debt to Equity Ratio* on Company Value with Company Size as a Moderation Variable in Technology Companies Listed on the Indonesia Stock Exchange for the 2020-2023 Period

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**Abstract.** This study aims to analyze the influence of Intellectual Capital and Debt to Equity Ratio (DER) on company value, as well as the role of company size as a moderation variable in technology companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2023 period. The research method used is quantitative associative with secondary data obtained from the company's annual report. The sample consisted of 15 technology companies selected through the purposive sampling method, resulting in a total of 60 observational data. The analysis technique used was panel data regression with the Moderated Regression Analysis (MRA) approach using the EVIEWS 12 statistical test tool. The results of the study show that Intellectual Capital has a significant positive effect on the value of the company. The Debt to Equity Ratio also has a significant positive influence on the value of the company. However, the size of the company is not able to moderate the relationship between Intellectual Capital and the value of the company. On the other hand, the size of the company has been proven to moderate the influence of the Debt to Equity Ratio on the value of the company. The value of the determination coefficient (R<sup>2</sup>) of 0.998320 indicates that the variation in the company's value can be explained by 99.83% by independent variables in the model. These findings show that the management of intangible assets such as Intellectual Capital as well as capital structures through DER have an important role in increasing the value of companies. However, the scale of the company does not always reinforce that influence consistently.

**Keywords:** Intellectual Capital; Debt to Equity Ratio; Company Value; Company Size

## 1 INTRODUCTION

Industrial development in the field of technology in Indonesia is experiencing rapid growth (Rahmawati et al., 2022). This is evidenced by the frequent use of technology that can help with daily life such as the use of smartphone to make it easier to communicate, Internet of Things (IoT) for data exchange, and digital payment systems that enable cashless transactions. The emergence of these technological innovations helps humans to solve work or problems easily.

(Saleh, 2021) revealed that this year, the performance of the index containing technology stocks or IDXTECHNO recorded the highest gain of 108.75% in terms of year to date (ytd) when the JCI only increased by 2.8% and LQ-45, which contains the 45 most liquid stocks, only increased by 2%. Natalia (2023) also revealed that the technology index or IDXTECHNO increased by 2.85%. The increase in technology stock prices was supported by improving macro conditions. One of them is from inflation in the United States. The stock market price indicates the financial performance of a company which is very important to determine the value of the company. Therefore, the higher the stock price, the higher the value of the company (Laughter) et al., 2023).

The value of companies in the technology sector listed on the Indonesia Stock Exchange (IDX), is an important measure for investors that is used to assess the company's profit potential and future prospects. Signalling Theory is one of the relevant theories to explain this. This signal includes information about the management actions that have been taken to realize the owner's wishes (Anggita & Andayani, 2022). This will affect the investment decisions of external parties of the company, the information that the company issues is very important. Because it contains records, facts, or descriptions of past, present, and future situations related to the company's existence and the influence it has caused, this investment is important for investors (Fauziah & Sudiyatno, 2020).

Maximizing the value of the company is very important for a company, because doing so also means maximizing the prosperity of shareholders which is the main goal of the company (Yuliana, 2020). Company value is a crucial metric to assess a company's success because it can encourage investors to invest. Potential investors' opinions of a company's performance, which often correlates with its share price, can also be influenced by this value (Tandanu & Suryadi, 2020). The market's perception of the company's performance and the potential profits to be obtained in the future is indicated by the company's value. When the value of a company increases, the benefits are not only felt by shareholders or investors through an increase in the stock price, but also have a positive effect on various other aspects such as having the ability to compete with other companies for the survival of a company.

A company in order to be able to compete and maintain its survival is by maximizing the use of the company's resources, both tangible assets and intangible assets. However, often companies focus on managing only

one of their assets, namely tangible assets such as machinery, equipment, and buildings. In fact, to achieve maximum results, companies must be able to use, utilize, and manage their intangible assets. Intellectual capital is a type of intangible asset. Intangible assets that can be leveraged to generate wealth and gain a competitive advantage are intellectual capital, which deals with knowledge, information, intellectual property, and expertise. In technology companies, management Intellectual Capital It is becoming increasingly crucial, considering that the industry relies heavily on innovation and creativity. Technology companies that are able to optimize Intellectual Capital His research, such as through research and development, as well as the team's ability to create new solutions, will have a significant advantage in the market. This shows that the company's value is higher compared to other companies (Yulinda et al., 2020). Value Intellectual Capital which is high, shows that the company has a high quality of human resources as well. Investors in the capital market will give more value to excellence Intellectual Capital a company by making investments that in turn will contribute to increasing the value of the company (Novyarni et al., 2024). In line with the importance of intangible asset management, other aspects that also affect the value of the company are Debt to Equity Ratio.

Debt to Equity Ratio (DER) is an important component in determining the value of the company. The value of the DER indicates how much debt there is in a company's capital. A high DER value indicates that creditors' funds, not the company's internal funds, control most of the company's capital (Rahmadi & Mutasowifin, 2021). This can increase financial risk due to the obligation to pay debts. This higher risk can make investors distrust the company and will reduce the value of the company. However, debt also has the potential to be used as a strategic tool in funding profitable investments or expansions. If DER is managed wisely, debt can be a valuable resource to increase a company's profitability. By leveraging debt for projects that have a higher rate of return than the cost of the debt itself, the company can increase its market value and competitiveness. Therefore, effective DER management becomes very important in this context.

In this study, the size of the company or commonly referred to as Firm Size In this study, it was used as a moderation variable. The purpose of moderation variables is to strengthen or weaken the correlation between independent and dependent variables. According to Saraswati & Nurhayati (2022), the size of the company is reflected in total assets, total sales, average sales rate, and average total assets. The size of a tech business often indicates its resources and innovation capabilities. Larger IT companies typically have easier access to funding, advanced equipment, and skilled personnel, all of which help them grow and compete in the market. This is in line with the findings Pradanimas & Sucipto (2022) This suggests that larger companies have better access to internal and external data and are more stable. As a result, larger businesses have higher value. As a moderation variable, firm measures are used to assess how those variables affect the relationship between independent and dependent variables.

According to Ermanda & Puspa (2022) and Wulandari & Purbawati (2021) in his research revealed that Intellectual Capital has a significant effect on the company's value. Meanwhile, in the research conducted Hallauw & Widyawati (2021) and Herdani & Kurniawati (2022) reveals that Intellectual Capital It has no influence on the company's value. This shows that in reality, there are still many companies that have not disclosed and made optimal use of the value of Intellectual Capital that he has. As a result, the market will tend to give a high valuation to a company based on the level of profit generated and the fundamental factors achieved without looking at the value Intellectual Capital.

Research Nopianti & Suparno (2021) and Son et al., (2021) states that the debt-to-equity ratio significantly increases the value of the company. Instead, research Wijaya & Fitriati (2022) and Ristiani & Sudarsi (2022) did not find a relationship between the value of the company and the debt-to-equity ratio. This shows that changes in the company's capital structure have no effect on the company's value. Information on how management spends finances effectively and efficiently to build company value is essential for investors.

Noviandari et al., (2023) found that the impact of intellectual capital on the value of the company was not moderated by the size of the company. These results are consistent with studies Suropto & Islami (2024) who found that the relationship between intellectual capital and company value was not moderated by the size of the company. This is because investors and analysts tend to consider factors such as growth potential, profitability levels, market risk, and risk management rather than focusing solely on the size of the company itself.

Other research by Syahputri et al., (2024) and Setyarini et al., (2023) show that the relationship between the company's values and Debt to Equity Ratio (DER) can be moderated by the size of the company. The funding sources chosen by each company will have an impact on its financial structure. Due to the significant debt burden that a company bears, the more debt the company has, the lower its value in terms of operating costs. As a result, large companies with many stakeholders will have an easier time winning creditors. However, this contradicts the findings of research by Fitria & Irkhami (2021) and Dayanty & Setyowati (2020), which shows that the impact Debt to Equity Ratio (DER) to the value of the company cannot be mitigated by the size of the company. This shows that larger company sizes do not necessarily improve the capital structure as a source of funding. Thus, the size of a company cannot significantly strengthen or weaken the relationship of capital structure to the value of the company.

The difference in results from previous research and the lack of research that combines Intellectual Capital

and Debt to Equity Ratio as independent variables and company value as dependent variables and adding company size as a moderator cause researchers to be interested in conducting this study. The population taken by the researcher is a technology sector company listed on the Indonesia Stock Exchange. The reason the researcher took the population of companies in the technology sector is because of the rapid growth of the technology sector as evidenced by the increase in stock prices. Technology companies are very important to the government because they have a huge impact on the economy and society. So, technology companies are very suitable to be used as research objects. The research period used in this study starts from 2020-2023. Thus, the researcher took the title of the research "**The Influence of Intellectual Capital and Debt to Equity Ratio on Company Value with Company Size as a Moderation Variable in Technology Companies Listed on the Indonesia Stock Exchange for the 2020-2023 Period**".

## 2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Signalling Theory

Kennedy & Anastalia (2024) stating that a signal or signal serves to convey a message, in which the sender (owner of the information) seeks to provide relevant information to the recipient, who can then take advantage of it. The receiving party will adjust its behavior based on their understanding of the received signal.

Signal theory explains how a company conveys information to various interested parties, especially investors. Investors do not always have access to the same information as company management, they often face difficulties in making investment decisions. As a result, there is an information imbalance, where management has more extensive knowledge of the company's performance and prospects than investors (Carolin & Susilawati, 2024).

The information imbalance that occurs can be reduced by publishing the company's annual report as a signal containing reliable financial information. Signalling Theory is closely related to company value, where by providing transparent and accurate information, companies can reduce uncertainty regarding their future prospects which in turn can increase the company's value.

### Resource Based View

Ulum (2017, p. 23) explain Resource Based View (RBV) or resource theory explains that good resources in the company will have an impact on the company's long-term performance and will make the company superior in competing with its competitors. Resource (resource) that are valuable and scarce can be directed to create a competitive advantage, so that resource that they have are not easy to replace, imitate, and will last for a long time.

This theory is closely related to Intellectual Capital. View Resource Based View A company can achieve an advantage in business competition and have good financial performance by owning, controlling, and utilizing important strategic assets, both tangible and intangible (Rahmadi & Mutasowifin, 2021).

### Solvency Ratio

One of the financial ratios used in this study is the solvency ratio. The solvency ratio is one of the indicators used by companies to determine their ability to meet long-term commitments. A company is considered insolvent if its total debt exceeds its total assets. Debt to Equity Ratio is a solvency ratio that can give a clear picture of a company's capital structure and show the debt-to-equity ratio (Hanafi & Halim, 2018, pp. 75-85). DER is relevant because tech companies often require large investments. This can reflect the company's financial risk and reliance on debt.

### Company Size

Company size or Firm Size is the size of a company which is assessed from total assets, total sales and the number of workers. The greater the value, the larger the size of a company (Effendi & Ulhaq, 2021). In this study, asset analysis is important because the assets owned by technology companies are not only tangible assets but also intangible assets such as intellectual capital. Measurement firm size according to Erlinda (2022) It can be calculated with the following formula:

$$\text{Firm Size} = \ln (\text{Total Asset})$$

### Intellectual Capital

Tom Stewart of 1997 defines *Intellectual Capital* as knowledge, information, intellectual property, and

experience that each employee in the company has and that will give them a competitive advantage in the market can be used to build the company's wealth (Ulum, 2017). Companies based Intellectual Capital has the potential to achieve effective and efficient company performance. The higher the value Intellectual Capital a company, the more effectively the company's resources are used. (Annisa, 2023).

Ulum (2017, pp. 120-121) states that there are several components in the *Value Added Intellectual Coefficient* (VAICTM) and to find the value can use the following formula:

- a. *Value Added* (VA)

$$VA = OUT - IN$$

Information:

OUT : Total sales and other revenue

IN : Sales expenses and other expenses (other than employee expenses)

- b. *Value Added Capital Employed* (VACA)

$$COW = VA/CE$$

Information:

VA : *Value Added*

THAT : *Capital Employed*: available funds (equity, net income)

- c. *Value Added Human Capital* (VAHU)

$$VAHU = VA/HC$$

Information:

VA : *Value Added*

HC : *Human Capital* (employee burden)

- d. *Structural Capital Value Added* (STVA)

$$STVA = SC/VA$$

Information:

SC : *Structural Capital* (VA – HC)

VA : *Value Added*

- e. *Value Added Intellectual Coefficient* (VAICTM)

$$VAICTM = VACA + FOAM + STVA$$

Information:

COW : *Value Added Capital Employed*

VAHU : *Value Added Human Capital*

THE : *Structural Capital Value Added*

### Debt to Equity Ratio

The ratio used to calculate the percentage of debt to equity of a company is called Debt to Equity Ratio (DER). The calculation of this ratio involves a comparison of all available equity with total debt, which includes short-term and long-term debt (Kasmir, 2019, pp. 159-160).

The lower this ratio, the smaller the debt-to-capital portion owned, which in turn will create a higher level of financial security (Mahayati et al., 2021). Account Debt to Equity Ratio according to Kasmir (2019, p. 160) can use the following formula:

$$\text{Debt to Equity Ratio} = \frac{\text{Total Utang}}{\text{Ekuitas}}$$

### Company Values

A company's value reflects the circumstances in which a company has reached a certain level that can describe the level of public trust in it. Company value is important because an increase in the value of the company will drive an increase in the stock price, which in turn indicates an increase in wealth for shareholders. A significant increase in the value of a company can be considered a success because it encourages more investors to invest (Hidayat et al., 2021).

Tobin's Q is used in this study as a company value measurement technique. Fauziah (2017) stating that Tobin's Q value is obtained by summing up the market value of the stock and the market value of the debt and then comparing it to the value of all the capital placed in the activation of production. Rhinophy et al., (2023) states that in calculating Tobin's Q can be done using the following formula:

$$Q = \frac{MVE + D}{TA}$$

Information:

MVE: *Market Value of Equity* (Share Price x Number of Shares Outstanding)

D : *Debt* or total debt

TA : Total Assets

### HIPOTESIS

This research can formulate several hypotheses as follows:

H1: It is suspected that Intellectual Capital affects the Company's value in technology companies listed on the Indonesia Stock Exchange for the 2020-2023 period.

H2: It is suspected that the Debt to Equity Ratio affects the Company's value in technology companies listed on the Indonesia Stock Exchange for the 2020-2023 period.

H3: It is suspected that the size of the company can moderate the influence of Intellectual Capital on the value of the company in technology companies listed on the Indonesia Stock Exchange for the 2020-2023 period.

H4: It is suspected that the size of the company can moderate the influence of the Debt to Equity Ratio on the value of the company in technology companies listed on the Indonesia Stock Exchange for the 2020-2023 period.

## 3 RESEARCH METHODS

This study uses an associative quantitative approach, while the data used are secondary data. Quantitative research is research that uses an objective approach, includes the collection and analysis of quantitative data and uses statistical testing methods (Fatihudin, 2020). This study analyzes the emphasis on numbers, so that it can be found out whether there is an influence between variables by comparing existing theories using data analysis techniques that are in accordance with the variables in the study.

The population in this study uses all technology companies listed on the Indonesia Stock Exchange (IDX) with a range of 2020-2023 with a total population of 47 companies. The large number of populations can be sampled using the purposive sampling method, which is a sample taken based on certain considerations. The sample in this study is 15 companies from 47 populations. Meanwhile, the observation data in this study is 60 data.

The collected data was obtained using the documentary method, which is a method of collecting data obtained through records and documents (Fatihudin, 2020). The documents used in this study are in the form of annual reports (annual report) each company obtained through the official website of the IDX as well as the official website of each related company. The annual report is presented in the form of nominal rupiah which is then tabulated using Microsoft Excel. After that, a technical stage of data analysis was carried out using statistical test tools Econometric Views (Eviews) version 12.

## 4 RESULTS AND DISCUSSION

## Result

### Multiple Linear Regression Test

The relationship between two or more independent variables and one dependent variable is known as multiple linear regression analysis. The results of the multiple linear regression test are as follows:

Table 1 Multiple Linear Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.938397	0.045820	20.48006	0.0000
IC	0.308195	0.008179	37.67971	0.0000
DER	0.200710	0.001109	181.0130	0.0000

Source: Output Eviews 12 (data processed, 2025)

Based on table 1 above, the regression equation can be described as follows:

$$NP = 0.938397 + 0.308195IC + 0.200710DER + e$$

a. Konstanta  $\alpha$

The constant value in this study is 0.938397 which shows that if all independent variables, namely *Intellectual Capital* and *Debt to Equity Ratio* are zero, then the value of the dependent variable or company value is 0.938397.

b. Koefisien *Intellectual Capital* (IC)

The value of the *Intellectual Capital variable coefficient* is 0.308195 which indicates that every 1 unit increase in the IC will increase the value of the dependent variable, namely the company value of 0.308195 units, assuming that other variables are fixed.

c. Koefisien *Debt to Equity Ratio* (DER)

The value of the *Debt to Equity Ratio variable coefficient* is 0.200710 which indicates that every 1 unit increase in the DER will increase the value of the dependent variable, namely the company value of 0.200710 units, assuming other variables are fixed.

## Uji Hypothesis

The purpose of hypothesis testing is to determine whether a research hypothesis is acceptable or rejected.

### Partial Test (t-test)

The t-test is used to determine the extent to which independent variables, namely *Intellectual Capital* (IC) and *Debt to Equity Ratio* (DER), affect the dependent variable, namely the company's value. Based on Table 1 above, the results of the t-test can be known as follows:

a. The Influence of *Intellectual Capital* on Company Value

It is known that t-calculation is 37.67971 with a significance level  $\alpha = 0.05$  using the formula of degrees of freedom  $df = n - k - 1$  ( $df = 60 - 3 - 1 = 56$ ), resulting in a t-table of 1.67252. The t-calculated value is  $37.67971 > t\text{-table } 1.67252$  and the significance value is  $0.0000 < 0.05$ , then it can be concluded that *Intellectual Capital* has an effect on the value of the company.

b. The Effect of *Debt to Equity Ratio* on Company Value

It is known that t-calculation is 181.0130 with a significance level  $\alpha = 0.05$  using the formula of degrees of freedom  $df = n - k - 1$  ( $df = 60 - 3 - 1 = 56$ ), resulting in a t-table of 1.67252. The t-value is  $181.0130 > t\text{-table } 1.67252$  and the significance value is  $0.0000 < 0.05$ , so it can be concluded that *the Debt to Equity Ratio* has an effect on the value of the company.

### Coefficient Determination Test

The degree to which dependent variation can be explained by the independent variable as a whole is determined by the determination coefficient test ( $R^2$ ). The greater the  $R^2$  value, the better, because this shows that the regression model is able to explain the dependent variables more strongly.

Table 2 Determination Coefficient Test Results

Root MSE	0.088710	R-squared	0.998320
Mean dependent var	3.101500	Adjusted R-squared	0.998261
S.D. dependent var	2.182243	S.E. of regression	0.091014
Akaike info criterion	-1.906896	Sum squared resid	0.472164
Schwarz criterion	-1.802179	Log likelihood	60.20687
Hannan-Quinn criter.	-1.865935	F-statistic	16930.87
Durbin-Watson stat	1.857658	Prob(F-statistic)	0.000000

Source: Output Eviews 12 (data processed, 2025)

Based on table 2 above, the results of the determination coefficient test show that the R-Squared value is 0.998320, which means that 99.83% of the variation in the company's value can be explained by independent variables, namely *Intellectual Capital* and *Debt to Equity Ratio* together. Meanwhile, the remaining 0.0017 (0.17%) was explained by other factors outside the regression model.

### Moderated Regression Analysis (MRA)

The moderation variables in this study were Company Size (Z) with *Intellectual Capital* (X1) and *Debt to Equity Ratio* (X2) as independent variables, and company value (Y) as dependent variables. Using the MRA approach, this study aims to see the extent to which company size affects the relationship between IC and DER to company value.

Table 3 MRA Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.502197	0.004486	111.9428	0.0000
IC	0.300149	0.000244	1228.241	0.0000
THE	0.199941	3.30E-05	6055.607	0.0000
UP	-9.70E-07	1.62E-06	-0.597322	0.5530
IC*UP	2.82E-07	2.80E-07	1.009615	0.3176
UP	0.019929	7.88E-05	252.9516	0.0000
Root MSE	0.002456	R-squared	0.999999	
Mean dependent var	3.117636	Adjusted R-squared	0.999999	
S.D. dependent var	2.277664	S.E. of regression	0.002602	
Akaike info criterion	-8.962234	Sum squared resid	0.000332	
Schwarz criterion	-8.743253	Log likelihood	252.4614	
Hannan-Quinn criter.	-8.877552	F-statistic	8273982.	
Durbin-Watson stat	1.654241	Prob(F-statistic)	0.000000	

Source: Output Eviews 12 (data processed, 2025)

Based on table 3 above, a formula can be made from the *Moderated Regression Analysis* (MRA) equation, which is as follows:

$$NP = 0,502197 + 0,300149IC + 0,199941DER - 0,000000970UP + 0,000000282IC*UP + 0,019929DER*UP + e$$

a. Konstanta  $\alpha$

The constant of 0.502197 indicates that if all the variables are independent and their interactions are zero, then the value of the company is estimated to be 0.502197.

b. Koefisien *Intellectual Capital* (IC)

The IC coefficient of 0.300149 indicates that every increase of 1 IC unit increases the company's value by 0.300149, so that IC has a positive effect on the company's value.

c. Koefisien *Debt to Equity Ratio* (DER)

The DER coefficient of 0.199941 means that every 1 unit increase in the company's value by 0.199941, so that DER also has a positive effect.

d. Company Size Coefficient (UP)

The UP coefficient of -0.000000970 indicates that every increase of 1 unit of UP decreases the company's value by 0.000000970.

e. Interaction Coefficient of *Intellectual Capital Variables* and Company Size

Interaction *Intellectual Capital* and Company Size (IC\*UP) produces a coefficient of 0.000000282 with a profitability of  $0.3176 > 0.05$ , so that the company size does not moderate the influence of IC on the company's value. Thus, the H3 hypothesis is rejected.

f. Variable Interaction Coefficients of *Debt to Equity Ratio* and Company Size

Interaction *Debt to Equity Ratio* and Company Size (DER\*UP) produces a coefficient of 0.019929 with a profitability of  $0.0000 < 0.05$ . This shows that the size of the company moderates while also reinforcing the positive influence of the DER on the company's value. Thus, the H4 hypothesis is accepted.

g. Koefisien Determinasi *Moderated Regression Analysis* (MRA)

The R2 value on multiple regression of 0.998320 increased to 0.999999 after including the moderation variable. This proves that the model with moderation is able to explain 99.99% of the variation in the company's value and is overall significant based on *F-statistic* 0,000000.

## Discussion

### The Influence of *Intellectual Capital* on Company Value

Based on the results of the tests that have been carried out, it shows that *Intellectual Capital* has a significant effect on the company's value so that the first hypothesis (H1) is accepted. Intellectual Capital, which includes intangible assets such as knowledge, creativity, and employee abilities, has been proven to have an impact on a company's performance and value. According to Mauliddah *et al.*, (2024) *Intellectual Capital* has a significant effect on the company's value. This is consistent with *Resource Based View* (RBV) which states that resource management can increase competitiveness.

In the technology sector, companies that manage intellectual assets well get a higher market valuation. PT M Cash Integrasi Tbk (MCAS) is an example with an average IC of 2.97 and a company value of 3.15 during 2020-2023 (*Annual Report* MCAS, 2023). Intellectual assets such as digital distribution networks, cloud-based platforms, and strategic relationships are proven to increase market perception. These findings support research Ermanda & Puspa (2022) and Wulandari & Purbawati (2021), but in contrast to Hallauw & Widyawati (2021) and Herdani & Kurniawati (2022) which states that *Intellectual Capital* has no effect on the company's value.

### The Effect of *Debt to Equity Ratio* on Company Value

Based on the results of the partial test, it shows that *the Debt to Equity Ratio* has a significant effect on the company's value, so the second hypothesis (H2) is accepted. The positive coefficient shows that the higher the debt-to-equity ratio, the higher the company's value. This is in line with signal theory, where the use of debt is seen as management's belief in long-term profit prospects.

One of the technology companies that shows a positive relationship between DER and company value is PT. M Cash Integrasi Tbk (MCAS) has a company value of 3.15 with an average DER of 0.49 during 2020-2023, it can be seen that a healthy debt structure can increase the company's value. These results support the research Nopianti & Suparno (2021) and Son *et al.*, (2021) which states that DER has a significant positive effect on the company's value. However, the results of this study are not in line with the Ristiani & Sudarsi (2022) and Wijaya & Fitriati (2022) which states that DER has no influence on the value of the company.

### The Influence of *Intellectual Capital* on Company Value with Company Size as a Moderation Variable

The results of the moderation test showed that the size of the company was not able to moderate the influence of IC on the value of the company, so the third hypothesis (H3) was rejected. However, IC still has a positive effect before moderation. The role of company size in this relationship belongs to the *moderator predictor type*. This means that the quality of IC determines the increase in the value of the company more than the size of the asset.

Data support these findings, where the average IC fell from 0.39 in 2022 to -0.70 in 2023, followed by a decrease in the company's value from 1.89 to 1.76, while the company's size was relatively stable. This confirms that fluctuations in a company's value are more influenced by IC than company size. These results are in line with research conducted by Noviardani *et al.*, (2023) and Suripto & Islami (2024) which states that the company size variable cannot moderate the relationship *Intellectual Capital* with company values.

### The Effect of *Debt to Equity Ratio* on Company Value with Company Size as a Moderation Variable



The results of the moderation test showed that the size of the company was able to moderate the influence of DER on the company's value so that the fourth hypothesis (H4) was accepted. Thus, the role of company size belongs to the *quasi-moderator type*.

The increase in DER from 1.07 in 2020 to 5.82 in 2021 was followed by an increase in the company's value from 1.80 to 3.20. The increase in DER is not perceived as a negative, but rather as a positive signal, especially when the size of the company also increases from 27.76 to 27.88. This is in accordance with *Signalling Theory* which emphasizes that large companies are more trusted by the market in managing debt (Syahputri *et al.*, 2024).

These findings are in line with Syahputri *et al.*, (2024) and Setyarini *et al.*, (2023) which states that the size of a company can moderate the relationship between DER to company value. However, in contrast to Fitria & Irkhami (2021) and Dayanty & Setyowati (2020) which in his research states that the size of a company cannot moderate the influence of DER on the value of the company.

## CONCLUSIONS AND SUGGESTIONS

### Conclusion

This study aims to examine the influence of independent variables (*Intellectual Capital* and *Debt to Equity Ratio*) on dependent variables, namely company values with company size as a moderation variable. Based on the results of the research, the following conclusions can be drawn:

1. The results of the partial test showed that the *Intellectual Capital variable* had an effect on the value of the company, so the first hypothesis (H1) was accepted.
2. The results of the partial test show that the *Debt to Equity Ratio variable* has an effect on the company's value, so the second hypothesis (H2) is accepted.
3. The results of the *Moderated Regression Analysis* (MRA) test showed that the company size variable did not moderate the influence between the *Intellectual Capital variables* on the company's value, so the third hypothesis (H3) was rejected.
4. The results of the *Moderated Regression Analysis* (MRA) test showed that the company size variable could moderate the influence between the *Debt to Equity Ratio variable* on the company's value, so that the fourth hypothesis (H4) was accepted.

### Suggestion

Based on the conclusions that have been obtained, the researcher provides the following suggestions:

1. For technology companies, it is necessary to improve the management of *Intellectual Capital*. Especially on human resources, organizational structures, and external relations to encourage innovation, efficiency, and competence. In addition, the capital structure must be managed efficiently as DER has been shown to affect the value of the Company. As long as the risk is under control, debt can be a strategy to increase the value of a company. Although the size of the company does not moderate the influence of ICs, the effectiveness of IC management remains a major factor in increasing the value of the company.
2. For investors, consider the capital structure and size of the company before investing, as both affect the stability and value prospects of the company.
3. For future researchers, it is recommended to research other sectors of *property and real estate*, the consumer goods industry, or finance. In addition, it can extend the research period, as well as add other variables besides IC, DER, and company size because there are likely other factors that also affect the company's value.

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## ATTACHMENT

### Appendix 1 Calculation of *Intellectual Capital* of Technology Companies for the 2020-2023 Period

<i>Intellectual Capital</i>					
KODE	Tahun				Rata-Rata Perusahaan
	2020	2021	2022	2023	
ATIC	-3,41	-1,85	4,91	4,09	0,94
CASH	0,38	0,45	0,01	-15,05	-3,55
DIVA	2,00	2,15	1,42	1,13	1,68
DMMX	3,91	3,75	2,20	2,53	3,10
EMTK	2,76	2,38	1,52	1,00	1,92
ENVY	0,14	-16,93	-23,54	-4,98	-11,33
GLVA	2,85	2,56	2,99	2,91	2,83
HDIT	0,25	0,55	-5,20	-26,09	-7,62
KREN	1,50	-10,43	3,03	3,10	-0,70
LUCK	-0,47	1,02	1,55	1,02	0,78
MCAS	4,28	3,51	2,37	1,72	2,97
MTDL	1,62	4,03	4,16	3,90	3,43
NFCX	5,39	4,35	2,22	1,81	3,44
PTSN	1,81	1,83	2,13	2,20	1,99
WIFI	4,50	3,20	6,12	10,14	5,99
Rata-Rata Tahun	1,83	0,04	0,39	-0,70	

### Appendix 2 Calculation of *Debt to Equity Ratio* of Technology Companies for the 2020-2023 Period

Debt to Equity Ratio					
KODE	Tahun				Rata-Rata Perusahaan
	2020	2021	2022	2023	
ATIC	9,86	78,61	25,07	12,82	31,59
CASH	0,77	0,47	0,22	0,48	0,49
DIVA	0,31	0,10	0,09	0,16	0,17
DMMX	0,17	0,14	0,20	0,29	0,20
EMTK	0,44	0,13	0,11	0,12	0,20
ENVY	0,18	1,95	-4,09	-1,37	-0,83
GLVA	1,37	1,70	1,72	1,37	1,54
HDIT	0,15	0,31	0,07	0,21	0,19
KREN	0,21	0,26	0,28	0,40	0,29
LUCK	0,22	0,22	0,28	0,28	0,25
MCAS	0,38	0,41	0,48	0,70	0,49
MTDL	0,72	0,93	0,94	1,01	0,90
NFCX	0,41	0,39	0,35	0,77	0,48
PTSN	0,57	0,93	0,48	0,40	0,60
WIFI	0,24	0,74	1,30	1,11	0,85
Rata-Rata Tahun	1,07	5,82	1,83	1,25	

### Appendix 3 Calculation of Company Size in Technology Companies for the 2020-2023 Period

Ukuran Perusahaan					
KODE	Tahun				Rata-Rata Perusahaan
	2020	2021	2022	2023	
ATIC	29,09	29,05	29,07	29,32	29,13
CASH	26,02	25,77	26,14	26,16	26,02
DIVA	27,78	28,49	28,48	27,64	28,10
DMMX	27,41	27,71	27,76	27,49	27,59
EMTK	30,51	31,27	31,43	31,39	31,13
ENVY	26,50	24,93	24,29	23,46	24,80
GLVA	26,88	27,15	27,55	27,56	27,29
HDIT	26,75	26,86	26,59	26,58	26,70
KREN	28,83	28,77	28,69	28,70	28,75
LUCK	25,77	25,83	25,89	25,89	25,85
MCAS	28,24	28,39	28,28	28,32	28,31
MTDL	29,40	29,66	29,78	29,95	29,70
NFCX	27,97	28,29	28,25	28,09	28,15
PTSN	28,23	28,54	28,47	28,48	28,43
WIFI	26,96	27,52	27,97	28,08	27,63
Rata-Rata Tahun	27,26	27,88	27,91	27,81	

Nilai Perusahaan					
KODE	Tahun				Rata-Rata Perusahaan
	2020	2021	2022	2023	
ATIC	1,22	1,44	1,18	1,14	1,25
CASH	3,83	2,81	1,04	1,01	2,17
DIVA	1,73	1,39	0,66	0,47	1,06
DMMX	2,41	19,39	6,88	3,01	7,92
EMTK	4,41	3,78	1,52	0,95	2,67
ENVY	0,43	2,00	3,87	9,55	3,96
GLVA	1,76	1,33	1,68	1,63	1,60
HDIT	1,23	1,35	0,30	0,39	0,82
KREN	0,63	0,76	0,54	0,60	0,63
LUCK	0,97	1,78	0,74	0,51	1,00
MCAS	2,16	4,16	3,97	2,31	3,15
MTDL	1,08	1,72	1,32	1,15	1,32
NFCX	1,39	3,38	3,11	2,13	2,50
PTSN	1,04	0,96	0,76	0,84	0,90
WIFI	2,71	1,67	0,77	0,76	1,48
Rata-Rata Tahun	1,80	5,20	1,89	1,76	

### Appendix 4 Calculation of Company Value in Technology Companies for the 2020-2023 Period