

## The Effect of Enterprise Risk Management (ERM) Disclosure on Firm Value Mediated by Profitability: Empirical Study on Banks Listed on the IDX 2018-2020

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**Abstract.** One important aspect of company value is ERM (Enterprise Risk Management). ERM can manage risks well so that company goals can be achieved. This study aims to see the effect of ERM disclosure on profitability, and the value of a company, as well as profitability on firm value. This study uses quantitative data with the panel data regression analysis method. Secondary data in the study comes from *audited annual financial reports* of financial companies in the form of banks, which have been *listed* on the IDX from 2018 to 2020, and can be downloaded from the bank's website. The data used is in 2018-2020 in annual form. The analysis technique in testing and proving the hypothesis used in the study is panel data regression analysis. The data is processed using the Eviews 12 application. The results showed that the variation in the following year's Company Value ( $Q\ Ratio_{t+1}$ ) can be explained by variations in the independent variables in the model, namely ERM Disclosure, ROA, Company Size, LDR, and Dividends the following year and the independent variables ERM Disclosure, ROA, Company Size, LDR, and Dividends the following year, together (simultaneously) affect the dependent variable Company Value the following year ( $Q\ Ratio_{t+1}$ ).

**Keywords:** Enterprise Risk Management (ERM); Firm value; Profitability.

**Abstrak.** Salah satu aspek penting terkait nilai perusahaan adalah ERM (Enterprise Risk Management). ERM dapat mengelola risiko dengan baik, sehingga tujuan perusahaan dapat tercapai. Penelitian ini bertujuan untuk menganalisis pengaruh pengungkapan ERM terhadap profitabilitas dan nilai perusahaan, sebagaimana profitabilitas yang menentukan nilai perusahaan. Penelitian ini menggunakan data kuantitatif dengan metode analisis regresi data panel. Data sekunder dalam penelitian ini berasal dari laporan keuangan tahunan yang telah diaudit atau audited annual report perusahaan perbankan yang telah terdaftar di Bursa Efek Indonesia (BEI) pada rentang waktu antara tahun 2018 sampai dengan tahun 2021. Data tersebut dapat diunduh dari situs web bank yang bersangkutan. Data yang digunakan adalah data pada rentang tahun 2018-2021 dalam bentuk laporan tahunan. Teknik analisis dalam pengujian dan pembuktian hipotesis yang digunakan dalam penelitian ini adalah analisis regresi data panel. Data diolah menggunakan aplikasi Eviews 12. Hasil penelitian menunjukkan

*bahwa variasi variabel independen dalam model penelitian ini, yaitu Pengungkapan ERM, ROA, Ukuran Perusahaan, LDR, dan Dividen tahun berikutnya, berpengaruh secara simultan terhadap variabel dependen Nilai Perusahaan.*

**Kata kunci:** *Enterprise Risk Management (ERM); Nilai perusahaan; Profitabilitas.*

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**Article Info:**

Received: May 22, 2023

Accepted: September 28, 2023

Available online: December 6, 2023

DOI: <http://dx.doi.org/10.30588/jmp.v13i1.1521>

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## BACKGROUND

An entity will encounter uncertain conditions in achieving its objectives. These uncertain conditions will cause risk. Risk is an inevitable event and is inherent in the company's activities. Companies that are able to identify their risks will try to control them as much as possible systematically and effectively. Several types of risks are typical in the banking business such as credit, liquidity, market, operational, strategic, compliance, legal, and reputation risks. In order to control these risks, a company needs a tool to reduce or handle what is called risk management (Cristofel & Kurniawati, 2021; Wilbanks et al., 2017).

In the beginning, the perspective of risk management was still segmental, known as *Traditional Risk Management* (TRM), where risk handling was carried out in each business unit separately (Hu et al., 2014; Lin et al., 2012). However, in recent years there has been a change in the perspective of risk management with a comprehensive approach. To comprehensively handle risks by identifying and measuring various risk factors and coordinating risk management activities across operating units, companies implement *Enterprise Risk Management* (ERM).

An example of a case that shows the need for risk management is Enron, which went bankrupt in 2001 due to an accounting scandal (Pamungkas, 2019). Another example of business risk cases in banking institutions is *fraud* committed by Citibank internal employees due to weak ERM (Devi et al., 2017). The case of PT Sunprima Nusantara Pembiayaan (SNP Finance), which also brought 14 creditor banks with a credit value of IDR 6 trillion, is also an example of the absence of a comprehensive entity risk management system or *enterprise* management. The results of the 2019 National Risk Management Survey show that ERM has been applied by the majority of entities in Indonesia, private and government, as many as 76.12% of respondents stated that the institutions where they work have implemented ERM (Munawwaroh et al., 2021; Siregar & Safitri, 2019). ERM implementation from year to year shows maturity, reflected in the increasing number of institutions that implement. The implementation of risk management in Indonesia refers to several standards, namely ISO 31000, COSO ERM, and others (Table 1). Based on the survey, the most widely applied framework is ISO 31000, but based on the industry perspective, entities engaged in the financial sector apply COSO the most, namely 20%.

**Table 1. Risk Management Adoption in Indonesia**

| <b>Standar</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> |
|----------------|-------------|-------------|-------------|
| ISO 31000      | 61.50%      | 62.0%       | 67.5%       |
| COSO ERM       | 17.84%      | 19.0%       | 15.0%       |
| Others         | 20.66%      | 19.0%       | 17.5%       |

Source: CRMS Indonesia (2018).

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its publication in 2004 entitled Enterprise Risk Management-Integrated Framework, states that ERM is a series of processes that are influenced by the Board of Directors and management, applied to set strategies, and are intended to identify an event that has the potential to affect the company, and to manage risk so that it is within its risk appetite, so as to provide assurance for the achievement of company goals. Shad, Lai, Fatt, Klemes, & Bokhari, stated that the emergence of ERM is a response to the provisions that require companies to manage risk comprehensively and globalization (Shad et al., 2019). To answer the growth of ERM as a system and the rapid development of business risks and continue to face uncertainty in the future, in 2017 COSO updated ERM with a publication entitled Enterprise Risk Management- Integrating with Strategy and Performance

The implementation of ERM will help the management of a company to identify possibilities that can affect the company, manage risks and risk trends that may arise so that the achievement of company goals can be guaranteed. To achieve company goals by managing risk, one important aspect is risk disclosure and how to manage it. Investors in making investment decisions, one of which is considered is information related to ERM which is usually presented in the company's financial statements, so that information transparency is important in a company's annual report (Siregar & Safitri, 2019). Signaling theory describes the implementation and disclosure of ERM which is one of the signals from the entity to investors and shareholders in the context of implementing *good corporate governance*. Through ERM disclosure, the company informs outsiders of the risk management it has carried out, both financial and non-financial related information and discloses its impact on the future of an entity (Devi et al., 2017). ERM disclosure informs the company's risk profile to external parties, as well as a sign that the company is committed to implementing risk management (Hoyt & Liebenberg, 2011). ERM disclosure informs the company's risk profile to external parties, as well as a sign that the company is committed to implementing risk management.

According to Hoyt and Liebenberg, ERM aims to create mechanisms within a company so that risks can be anticipated and managed for the purpose of increasing the value of an entity (Hoyt & Liebenberg, 2011). The value is seen from the stock price, which is a reference for investors in investing. For this reason, in this study Tobin's Q is used, which is a measure of prospective market- based value that reflects investor expectations, or means the market value of assets compared to the cost of replacing assets. However, because the cost of replacing assets is generally not available, a standard proxy Q approach is adopted, namely the ratio between the market value of equity added to the book value of its liabilities, then divided by the book value of assets (Clune et al., 2019; Cummins et al., 2006).

Hoyt and Liebenberg (2011) consider that company size affects its operational activities so that it can reflect its value. Companies with a large scale are likely to adopt a comprehensive ERM program, because they are more complex, face a wider range of risks, and have institutions that support ERM programs. Thus it is important to control for firm size on Tobin's Q by using the log book value of assets (Hoyt & Liebenberg, 2011). Furthermore, to control the relationship between liquidity and firm value, the *Loan to Deposit Ratio* (LDR) is used, which is a ratio to measure the total loans given compared to the amount of third party funds. Halimah and Komariah in their research found that LDR has a significant effect on firm value. Mismanagement of credit causes the bank's income to decrease so that it has an impact on the company's value (Halimah & Komariah, 2017). Hoyt and Liebenberg (2011) suggest a positive relationship between dividends and firm value, which is consistent with the idea that dividend payments are a valuable method of reducing agency costs. In measuring dividends, *dummy* variables are used.

The value of a company is also influenced by profitability factors, the greater the ability to generate profits, the greater the profit investors expect. In line with signal theory, profitability is a good signal for investors. A company that experiences profits will tend to trade at a premium price. According to agency theory, profitability has the ability to mediate the influence between ERM and firm value. This is because profitability is closely related to efforts to minimize risk in a company's operational activities carried out by management. For this reason, profitability will be used as a mediating variable in this study. Dianawati and Fuadati (2016) in their research using profitability as a mediating variable stated that GCG and CSR can increase firm value when profitability is high. Other similar studies using profitability as a mediating variable in the relationship between risk management and firm value were also conducted, among others by Agustina and Baroroh (2016); Munawwaroh et al. (2021); and Supriyadi and Setyorini (2020).

Research related to the effect of risk management on firm value, among others, was conducted (Chen et al., 2020), who examined the adoption of ERM on the value of financial companies in Taiwan. The independent variable is the value of a company calculated using a method called Tobin's Q, and the independent variables include ERM, company size, profitability as measured by ROA, dividends, percentage of insider share ownership, and sales growth. The results show that the adoption of an ERM program is positively related to firm value, and also significantly helps firms increase revenue and cost efficiency by 9.22% and 16.34%, respectively. The positive effect of ERM on firm value is weaker than the results of Hoyt and Liebenberg (2011), who found about 20% of the value added from implementing ERM in insurance companies in the United States.

Bertinetti et al. (2013) also conducted research on ERM adoption by both financial and non-financial companies in Europe, found a significant positive relationship between ERM adoption and the value of a company, where *size*, beta (stock sensitivity to market movements), and ROA as statistically determining variables. The inconsistent conclusions between one study and another are the basis for re-conducting research on the effect of ERM disclosure on the value of a company with profitability as a mediating variable. The company to be studied is a financial service institution in the form of a bank that has been *listed* on the IDX in 2018-2021. Financial companies in the form of banks are used as research objects because this industry has very large managed

funds, in the position of December 2021 third party funds reached IDR 7,479 trillion, while loans disbursed reached IDR 5,769 trillion (Otoritas Jasa Keuangan, 2022). The amount of public funds managed by banks to carry out their intermediary function and the increasingly diverse banking risks in their business activities require *good governance*. Furthermore, to overcome the risks in their operational activities, banks need risk management as a tool in identifying, measuring, monitoring, and controlling the risks of their activities, so that losses do not occur that exceed the capacity of a company's ability (Otoritas Jasa Keuangan, 2016)

**Table 2. Condition of Commercial Banks**

| Indikator                        | Nominal   |            |            |            | qtq     |         | yoy     |         |
|----------------------------------|-----------|------------|------------|------------|---------|---------|---------|---------|
|                                  | Jun'21    | Dec'21     | Mar'22     | Jun'22     | Mar'22  | Jun,22  | Jun'21  | Jun'22  |
| <b>Total Asset (IDR billion)</b> | 9,411,164 | 10,112,304 | 10,131,460 | 10,038,568 | ↑0.19%  | ↑1.75%  | ↑8.54%  | ↑9.54%  |
| <b>Credit (IDR billion)</b>      | 5,581,789 | 5,768,585  | 5,863,269  | 6,176,861  | ↑1.64%  | ↑5.35%  | ↑0.59%  | ↑10.66% |
| <b>DPK (IDR billion)</b>         | 6,966,349 | 7,479,463  | 7,481,675  | 7,602,297  | ↑0.03%  | ↑1.61%  | ↑11.28% | ↑9.13%  |
| - Giro (Rp miliar)               | 1,865,012 | 2,143,505  | 2,188,067  | 2,230,034  | ↑2.08%  | ↑1.92%  | ↑17.43% | ↑19.57% |
| - Savings (IDR billion)          | 2,242,114 | 2,432,260  | 2,434,465  | 2,518,071  | ↑0.09%  | ↑3.43%  | ↑13.07% | ↑12.31% |
| - Deposits (IDR billion)         | 2,859,223 | 2,903,698  | 2,859,143  | 2,854,191  | ↓-1.53% | ↓-0.17% | ↑6.32%  | ↓-0.18% |
| <b>CAR (%)</b>                   | 24.30     | 25.67      | 24.79      | 24.69      | (88)    | (10)    | 180     | 39      |
| <b>ROA (%)</b>                   | 1.88      | 1.84       | 2.19       | 2.37       | 35      | 18      | (4)     | 49      |
| <b>NIM/NOM (%)</b>               | 4.56      | 4.51       | 4.53       | 4.69       | 2       | 16      | 23      | 13      |
| <b>BOPO (%)</b>                  | 84.53     | 83.68      | 80.55      | 78.46      | (333)   | (189)   | (45)    | (607)   |
| <b>NPL/NPF Gross (%)</b>         | 3.24      | 3.00       | 2.99       | 2.86       | (1)     | (13)    | 13      | (38)    |
| <b>NPL/NPF Net (%)</b>           | 1.06      | 0.88       | 0.84       | 0.80       | (4)     | (4)     | (10)    | (26)    |
| <b>LDR/FDR (%)</b>               | 80.13     | 77.13      | 78.37      | 81.25      | 124     | 288     | (851)   | 112     |

Source: Financial Service Authority (2022).

Risk management practices in banking in Indonesia began to receive attention since the issuance of Bank Indonesia Regulation (PBI) in 2003 which regulates risk management in Commercial Banks. In this provision, banks are required to start implementing risk management by taking into account the objectives and policies, capabilities and size, and complexity of their respective businesses, at least 4 (four) of the 8 (eight) existing risks. However, along with the development of products and activities, as well as the need for transparency in risk control, in 2009 the provisions related to risk management were revised to be mandatory for all risks for conventional commercial banks, both individually and consolidated with subsidiaries. The provisions were updated again with the issuance of POJK in 2016. With these provisions, risk management has been implemented by all conventional Commercial Banks in Indonesia, and must be disclosed in the Bank's report, as stipulated in the POJK transparency and publication of bank reports.

This research focuses on how ERM can influence company value. This study has differences with the previous one because there are variable updates and differences in the period studied, namely the banks *listed* on the IDX from 2018 to 2020. The research focuses on aspects of risk management disclosure using the 2017 COSO framework, consisting of 5 components detailed into 20 principles. The 2018-2020 period was chosen to see the effect of disclosure of ERM implementation before and in the year of the Covid-19 pandemic, on firm value. This study aims to see the effect of ERM disclosure on profitability, and the value of a company, as well as profitability on company value.

## **THEORETICAL REVIEW**

### **Signalling Theory**

Signal theory is utilized by stakeholders to provide both positive and negative signals so as to reduce information asymmetry, the emphasis is more on the importance of disclosed information on investment decisions. For example, the financial performance described in the financial statements can provide a sign for investors or potential investors in making investment decisions. The development of good financial performance from time to time can be positive information for potential investors. In addition to financial performance, ERM is also an important sign needed by investors to find out how risk management is implemented in a corporate entity. ERM-related information in the company's annual report can provide a signal to investors on making investment decisions and reduce asymmetric information between them Burhanuddin (2020) stated that ERM disclosure in the financial statements would improve the quality of information presentation because it was more transparent (Burhanuddin, 2020). Financial performance and ERM that provide a positive signal can further increase the value of the company (Agustina & Baroroh, 2016).

### **Stakeholders Theory**

Stakeholder theory explains that a corporate entity does not only operate for its own sake but must be able to benefit both internal and external stakeholders such as shareholders, creditors, customers, government, the wider community, and other related parties. The existence of stakeholders will be a review for company management in disclosing the information they have in a company report. Stakeholders are able to control the resources owned by the company so that it influences the achievement of a company, for that the company needs to maintain relationships with stakeholders. Managers must be able to develop relationships and keep stakeholders motivated and build a group whose members give each other the best so as to produce value for a company (Freeman, 2004).

### **Agency Theory**

The originators of the first agency theory, namely Jensen and Meckling (1976) argue that agency relations occur when one or more than one person (principal) employs the services of another party (agent) and then gives the authority to make decisions to the agent. With this delegation of authority, the principal gives trust to the manager to handle the company, so that it becomes an obligation for the manager to present information through financial reports. This is because managers know more about the company's internal conditions and what the prospects are going forward, compared to shareholders. Signals related to the condition of companies managed by managers must be conveyed to shareholders, to show responsibility for the companies they manage.

The responsibility of managers related to good corporate governance is reporting and disclosure regarding ERM. ERM disclosure is an important element in building a governance structure and is mandatory for companies. ERM provides assurance on risk management carried out by management, so that there is certainty about the company's operations in the future, and agents are entitled to rewards for their performance in providing this certainty. A company's financial statements can be of higher quality with ERM-related disclosures, because it shows transparency (Burhanuddin, 2020).

## RESEARCH METHODS

This study uses quantitative data with the panel data regression analysis method. Secondary data in the study comes from *audited annual financial reports of* financial companies in the form of banks, which have been *listed* on the IDX in the time span of 2018 to 2020, which can be downloaded from the bank's website. The data used is in 2018-2020 in annual form. The population of this study is banking issuers listed on the IDX in the 2018-2020 period, the sample of this study uses audited financial reports from banking sector issuers in the time span between 2018 and 2020. The data collection technique uses the annual report documentation method which is widely published through the bank's website. The analysis technique in testing and proving the hypothesis used in the study is panel data regression analysis. The data is processed using the *Eviews 12* application, the first thing to do is to determine the appropriate panel data regression estimation model in the study, namely between *Common Effect*, *Fixed Effect*, or *Random Effect*. The model used to solve this problem is by looking for a regression from the independent influence to the dependent variable so that the coefficient of determination and correlation from the independent variable to the dependent variable can be seen.

## RESULTS AND DISCUSSIONS

The results of descriptive statistics for the 35 banks sampled in the research are as follows.

### Descriptive Data Analysis

Table 3 showed a descriptive analysis for each variable in this research. The results of the descriptive analysis show that the dependent variable (Y), namely firm value (Q ratio) in this study, has an average value of 1.070334 with a maximum value of 3.295289, namely PT Bank Raya Indonesia, Tbk. in 2020 and a minimum value of 0.713652, namely PT Bank Artha Graha Internasional, Tbk. in 2018, with a standard deviation value of 0.306347. The standard deviation of the firm value variable which is smaller than the average indicates a small data variation in this variable.

**Table 3. Descriptive Statistics Results**

|              | Q        | Pengungkapan ERM | Size     | LDR      | Dividen  | ROA       |
|--------------|----------|------------------|----------|----------|----------|-----------|
| Mean         | 1.070334 | 0.929524         | 17.83394 | 87.49848 | 0.400000 | 1.060762  |
| Maximum      | 3.295289 | 1.000000         | 21.19954 | 163.0000 | 1.000000 | 4.000000  |
| Minimum      | 0.713652 | 0.700000         | 14.54142 | 39.33000 | 0.000000 | -4.610000 |
| Std. Dev.    | 0.306347 | 0.081658         | 1.662158 | 22.17733 | 0.492248 | 1.530301  |
| Observations | 105      | 105              | 105      | 105      | 105      | 105       |

Source: Secondary data with Eviews 12 processing (2023).

The independent variable (X1), namely *Enterprise Risk Management (ERM) Disclosure*, shows an average value of 0.929524 with a maximum value of 1 and a minimum of 0.7. There are 12 banks with the maximum ERM Disclosure value for 3 consecutive periods (2018-2020), while banks with the minimum ERM Disclosure value are PT Bank Pembangunan Daerah Banten Tbk and PT Bank Pembangunan

Daerah Jawa Barat Tbk, in 2018 and 2019. The standard deviation value of the ERM Disclosure variable is 0.081658 which is smaller than the average, meaning that ERM Disclosure at Conventional Commercial Banks listed on the IDX has small fluctuations in value.

The control variables used in this study are *Company size/Size*, LDR, and Dividends. The *Company Size/Size* variable (X2) calculated using the LnAssets formula has an average value of 17.83394, a maximum value of 21.19954, namely PT Bank Rakyat Indonesia (Persero), Tbk. in 2020 and a minimum value of 14.54142, namely PT Bank Oke Indonesia, Tbk. in 2018, and a standard deviation of 1.662158. The LDR variable (X3 ) has an average value of 87.49848, a maximum value of 163, namely PT Bank BTPN, Tbk. in 2019, a minimum value of 39.33, namely PT Bank Capital Indonesia, Tbk. in 2020, and a standard deviation of 22.17733. Meanwhile, the Dividend variable (X4) has an average value of 0.400000, a maximum value of 1 and a minimum of 0, and a standard deviation of 0.492248. The standard deviation of the Dividend variable which is greater than the average indicates a large variation in data.

Profitability proxied by ROA as an intervening variable (Z) has an average value of 1.060762, a maximum value of 4, namely PT Bank Central Asia, Tbk. in 2018 and 2019, and a minimum value of -4.610000, namely PT Bank KB Bukopin, Tbk. in 2020. The standard deviation of the ROA variable of 1.530301 is greater than the average, indicating a relatively large variation in data at Conventional Commercial Banks listed on the IDX.

### Significance Test

The partial hypothesis significance test is carried out to see the significance of the influence between the independent variable on the dependent through the t-test:

$H_0: \beta_j = 0$  (the *j*th variable has no effect on the dependent variable).

$H_1: \beta_j \neq 0$  (variable *j* affects the dependent variable).

Based on the hypothesis above,  $H_0$  is rejected, if  $t\text{-stat} > t\text{-table}$  or if  $P\text{-value}/2 \leq \alpha$ .

**Table 4. t-test results**

|         | Variables                       | Coefficient           | t-Statistic            | Prob.            | Conclusion                                     |
|---------|---------------------------------|-----------------------|------------------------|------------------|--|
| Model 1 | Dependent: ROA                  | 9.033677              |                        |                  |  |
|         | Independent:<br>ERM Disclosure  | -8.577419             | -2.032285              | 0.0460           | Negatively significant                         |
| Model 2 | Dependent: Q Ratio              | -3.822323             |                        |                  |  |
|         | Independent:<br>ERM Disclosure  | 3.935494              | 642648.1               | 0.0000           | Significant positive                           |
|         | ROA                             | 0.031712              | 580040.2               | 0.0000           | Significant positive                           |
|         | Company Size                    | -0.040310             | -25895.37              | 0.0000           | Negatively significant                         |
|         | LDR                             | 0.003628              | 170409.1               | 0.0000           | Significant positive                           |
|         | Dividends<br>Company Value (-1) | -0.045831<br>1.534753 | -402962.8<br>3529960.0 | 0.0000<br>0.0000 | Negatively significant<br>Significant positive |

Source: Secondary data with Eviews 12 processing (2023).

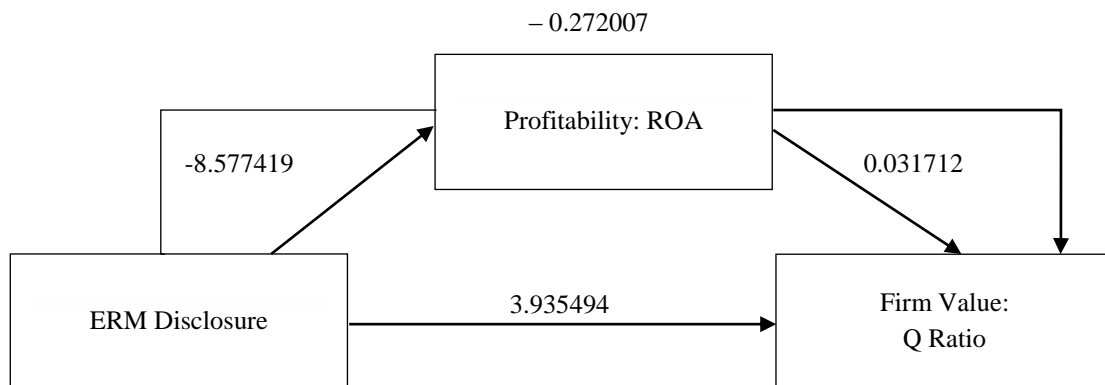


Path analysis is used to test the effect of intervening variables (mediation). Based on data processing on Eviews 12, the following regression equation results are obtained (Table 4):

Model 1:  $ROA = 9.033677 - 8.577419 \text{ ERM Disclosure}$

Model 2:  $Q_{t+1} = -3.822323 + 3.935494 \text{ ERM Disclosure} + 0.031712 \text{ ROA} - 0.040310 \text{ Company Size} + 0.003628 \text{ LDR} - 0.045831 \text{ Dividend}$

From the values generated in the two regression models carried out, the following path diagram is obtained a diagram shown in Figure 1.



Source: Secondary data with Eviews 12 processing (2023).

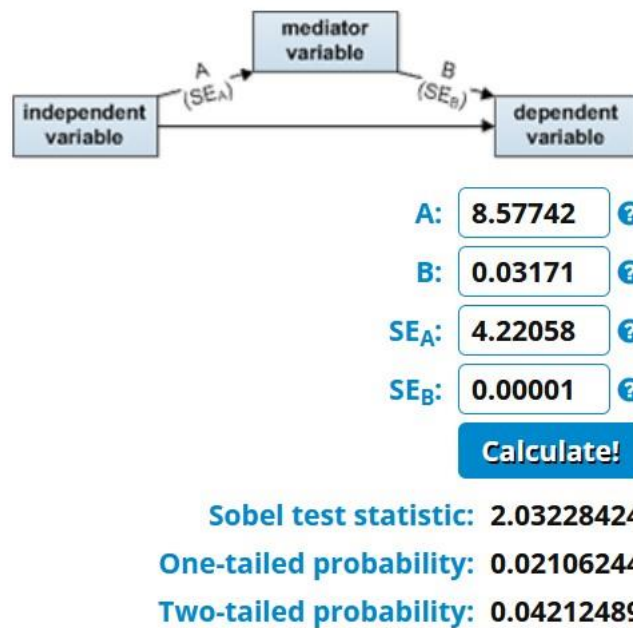
**Figure 1. Path Diagram**

Based on testing Model 1 and Model 2 as summarized in the Figure 1, the amount of direct and indirect effects can be obtained as follows:

- Effect of ERM Disclosure on Firm Value = 3.935494
- The Effect of ERM Disclosure on Firm Value through ROA

The indirect effect =  $-8.577419 \times 0.031712 = -0.272007$

Based on the direct and indirect forms of calculating the effect of ERM Disclosure on Firm Value, it is known that ERM Disclosure has a smaller indirect effect on firm value through profitability than its direct effect. According to Baron and Kenny (1986), when there are direct and indirect effects, it is called *partial mediation*. As according to Zhao et al. (2010), the mediation typology above where the mediated effect ( $a \times b$ ) and the direct effect ( $c$ ) both exist and lead in the opposite direction, it is called *competitive mediation*. The Sobel-test was conducted to test the mediation hypothesis, namely testing the strength of the indirect effect of ERM Disclosure on Firm Value through ROA, with the following results are shown in Figure 2. In Figure 2, it is known that the resulting significance value is  $0.04212489 < 0.05$ , so it can be concluded that ROA mediates the relationship between ERM Disclosure and Firm Value (Q Ratio).



Source: Eviews processing results calculated with *Sobel-test Calculator* (2023).

**Figure 2. Sobel-test Result**

## Discussion

### 1. Effect of ERM Disclosure on Profitability

The regression analysis results show that ERM disclosure has a probability value of  $0.0460 < 0.05$  with the coefficient value of ERM disclosure is negative,  $-2.032285$ , that means ERM disclosure has no impact on profitability. Thus the first hypothesis in this study is rejected. ERM disclosures that have no effect on profitability are in line with research (Aryanti et al., 2021). Based on empirical evidence, this study concludes that the application of ERM has no impact on company performance as indicated by its profitability. This is because ERM disclosure in the annual reports of banks *listed* on the IDX is considered an investment in a bank's long-term business continuity efforts, while profitability proxied in ROA is a temporary proxy for financial performance (Agustina & Baroroh, 2016). Furthermore, the disclosure of ERM in detail and accurately according to the main principles in COSO ERM - *Integrating with Strategy and Performance* carried out by Indonesian banks listed on the IDX, is still relatively new, so it requires adjustment because ERM is a continuous strategic process (Aditya & Naomi, 2017).

The findings in this study contradict the results of research conducted by (Faiq & Septiani, 2020), as well as (Supriyadi & Setyorini, 2020), where risk management disclosure has a positive effect on profitability. The results of this study indicate that *signaling theory* cannot be proven correct. The financial performance described in the annual report is not used by investors or potential investors in making investment decisions, as well as ERM, which is an important sign that investors need to know how risk management is implemented in a corporate entity, is not used.

## 2. The Effect of ERM Disclosure on Firm Value Next Year

The results of the regression analysis show that ERM disclosure has a probability value of 0.0000 smaller than 0.05 with a  $t\text{-count} > t\text{-tabel}$  value of  $642648.1 > 1.983972$ , it means that ERM disclosure has a positive and significant effect on firm value (Q ratio). The second hypothesis of this study is accepted, namely the disclosure of ERM has an effect on firm value calculated by Tobin's Q. These results are in line with research conducted by Sajida and Purwanto (2021); Bertinetti et al. (2013); and Hoyt and Liebenberg (2011), where ERM disclosure has a positive effect on firm value. Through ERM disclosure, the company informs outsiders about the risk management it has carried out. In accordance with signal theory, disclosure of good ERM implementation is a positive signal to investors, so that it is then responded back positively by investors and generates added value for the company.

In line with agency theory which states that the principal/shareholder hands over the management of the company to the agent/manager, so that the manager is obliged to provide financial reports that signal the state of a company to its shareholders. Good risk management is one sign that the company's performance can run optimally. This positive response and image can increase company value.

Company management discloses its information including related to the implementation of ERM in a company report to *stakeholders*, in order to maintain relationships with *stakeholders*. A good relationship with *stakeholders* will create the power to generate value for a company. The results of research related to ERM disclosure affecting Firm Value are in line with *stakeholder* theory

## 3. The Effect of Profitability on Company Value Next Year

The regression analysis results show that profitability has a probability value of 0.0004 smaller than 0.05 with a  $t\text{-count} > t\text{-tabel}$  value of  $580040.2 > 1.983972$ , it means that profitability as measured by ROA has a significant and positive effect on firm value (Q Ratio). Thus the third hypothesis in this study is accepted.

Profitability is a signal for investors, the signal is then responded to by the rise and fall of stock prices. Research results by Agustina and Baroroh (2016) and Hermuningsih (2016) found that profitability has a positive impact on firm value. High profitability shows the ability of management to carry out operational activities, minimize company expenses, and maximize company profits, thereby increasing company value because it is increasingly attractive to investors.

Profitability is a reflection of a company's operational activities. The ability to generate profits based on assets owned is an important part of assessing the performance of a company in a certain period (Agustina & Baroroh, 2016). These results support research conducted by Mariani and Suryani (2018) which shows that a company with high and increasing profitability is a signal that the company has good prospects in the future, so that the company value will also increase.

## 4. The Effect of ERM Disclosure on Next Year's Firm Value through Profitability

The results of the Sobel-test show that the resulting mediation effect is significant, which is 0.04212489 smaller than 0.05, it means that there is a mediating effect, so that the fourth hypothesis of this study, namely profitability mediates the relationship between ERM disclosure and firm value, is accepted. This research is in line with

Fajriah and Ghozali (2022) which states that there is a significant indirect effect of ERM on firm value through ROA. Also, it means that profitability is able to support ERM activities to increase firm value. The company's ability to manage risk and carry out ERM activities properly is a determinant of the company in achieving profitability. The companies that manage risk well will increase ROA.

## CONCLUSIONS AND RECOMMENDATIONS

The results showed that the Coefficient of Determination test ( $R^2$ ) obtained the *adjusted R<sup>2</sup>* model 2 value of 0.591129 or 59.11%. It means that 59.11% of the variation in the following year's company value can be explained by variations in the independent variables in the model, namely ERM Disclosure, ROA, Company Size, LDR, and Dividends the following year, as well as the independent variables ERM Disclosure, ROA, Company Size, LDR, and Dividends the following year, together (simultaneously) affect the dependent variable Company Value the following year. The implication of this research is that ERM is one of the factors in supporting a company's achievements, so it needs a concern for every company in running its business. The limitation of this research is that the mediating variable is profitability, so other variables are needed in further research and can expand research on ERM.

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