

THE IMPACT OF RISK MANAGEMENT, OPERATIONAL PRODUCTIVITY, AND CASH FLOW VOLATILITY ON COMPANY VALUE

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Abstract

The relationship between corporate risk management (ERM) and corporate value is one of the priority topics of corporate governance and has received attention in academia, where results are still mixed and inconsistent. The role of the ERM not only focuses on minimizing risks to the company but also on determining the company's management strategy. The purpose of this study is to test and analyze the effect of risk management disclosure, business risk, operational productivity, and cash flow volatility on company value in the manufacturing industry in public companies listed on the Indonesia Stock Exchange during 2017–2021. This is quantitative research. Population is a manufacturing industry listed on the Indonesia Stock Exchange. The sampling technique uses a purposive sampling method. The sampling technique uses a purposive sampling method. The finding of this study found that it is simultaneously proven that disclosure of risk management, business risk, operational productivity, and cash flow volatility have a significant effect on company value. Partially, the disclosure of risk management has a significant positive effect, while business risk has a negative effect, operational productivity has a significant positive effect, and cash flow volatility has a positive effect on the value of the company. The results of the study are useful to enrich previous findings and provide information for stakeholders.

Subjects: Financial Management, Management Accounting, and Risk Management

Keywords: company value, ERM, risk, operational productivity, cash flow volatility.

1. INTRODUCTION

Widiawati dan Halmawati (2018) stated that the rapid development of the economy made Enterprise Risk Management (ERM) an important part of the company in maintaining the company's performance and profitability. In fact, according to Marhaeni, et al (2015), Enterprise Risk Management allows management to operate more effectively in risky processes. Hoyt and Liebenberg. (2011) argue that Enterprise Risk Management is part of a comprehensive business strategy that aims to protect and enhance shareholder value. Increasing shareholder value also has a positive impact on company value. Good company value can encourage investors to invest in the company. Several previous studies discussing the effect of Enterprise Risk Management on firm value have shown inconsistent results. Devi, et al (2017) found that ERM disclosure positively and significantly affects firm value. The existence of ERM disclosure helps stakeholders in assessing the company's prospects. The respective results indicate that there is no consistency between the theory and the existing findings. So, there is still a gap between the variables above.

Ping and Muthuveloo (2015) describe risk as the potential outcome of a move that does not meet expectations. Reality shows clear evidence that companies that fail to control business risks and corporate governance are increasing, one of which was Enron in 2001. Enron was found to have committed fraud against shareholders over their financial condition (Wijananti, 2015). Some of the company's debt balances are known to be hidden using *off-balance-sheet accounting*. As a result, in 2002, Enron was required to declare bankruptcy, with debts reaching USD 31.2 billion. In addition to Enron, in Indonesia itself, there have also been cases of manipulation of financial statements, precisely carried out by PT United Capital Indonesia Tbk and Bank Lippo Tbk. Then there will be the Jiwasraya Company in Indonesia in 2020. A problem that occurs is the implementation of good corporate governance practices, especially poor risk management. How the development of risk management implementation in the manufacturing industry in developing countries such as Indonesia and its effect on company value require scientific research to enrich the findings of previous research, which will be discussed in the next section,

According to the Indonesian Ministry of Industry (kemenperin.go.id, 2021), the revitalization of manufacturing industry development contributes to the gross domestic product value of 17.34%. Then, the amount of investment value in the manufacturing sector doubled, or by 38%, in 2021, namely from Rp. 167.1 trillion to Rp. 230.8 trillion in 2022. This increase in investment value has a broad effect, especially on the scope of the national economy, where the main impact is to strengthen the structure of the domestic manufacturing industry, which will create a high-quality and competitive country economy on a global scale. Looking at the significant contribution of the manufacturing industry and paying attention to many cases that arise due to weaknesses in managing risk, the author is interested in further examining risk management problems and other factors that affect company value. The results of previous studies, such as Suriyadi and Setyorini's (2020), found that risk management disclosure has a positive effect on company value. The same thing was also found by Devi et al. (2017). This means that if the risk disclosure is higher (a lot), it will drive up the value of the company. Conversely, according to research (Rahmi & Wijaya, 2022), the level of risk management disclosure has no effect on company value. This shows inconsistencies and has the opportunity to be investigated further.

In addition to risk management disclosure, another variable that affects the value of a company is business risk. Research (Alamsyah & Malanua, 2020) found that business risk has a positive effect on company value. However, Ardiansyah et al. (2022) found that business risk negatively affects the value of the company. In addition to disclosure of risk management and business risk, operating productivity is also considered to have a positive effect on company value. The results of previous studies still need to be tested again because they are still inconsistent. For example, research (Hutapea et al., 2017) found that the level of operational productivity has a positive effect on company value. Conversely, he is not aligned with research (Yulianti & Wildan, 2021) finding that the level of operational productivity of the company has a negative influence on the value of the company. These findings need to be reviewed with the hope that the results will better support the rules of science and stakeholder decision-making.

Based on the background described above, this research was conducted for four reasons, namely: 1) The originality of this research is that to the best of our knowledge and investigation, there has been no other research that has combined the variables of ERM, business risk, and operational productivity and cash flow volatility on firm value.; 2) research on the effect of risk management disclosure and other factors on company value is still relatively new (emerging) and the results are inconsistent, especially in developing countries (emerging countries) such as Indonesia; 3) Risk management research is considered important because the contribution of the manufacturing industry to gross domestic product is quite significant, and 4) in addition to examining risk management disclosure variables, this research expands the study by examining business risk, operating productivity, and cash flow volatility that affect company value in the manufacturing industry to find out how they impact the prediction of company value. With these four reasons, it is considered quite strong behind the importance and relevance of this research conducted, with the hope that it can enrich the results of academic studies and have implications for practice in current and future business developments. The research question is: do enterprise risk management disclosure, business risk, operational productivity, and cash flow volatility influence the value of the firm?

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1.1. Agency Theory

Agency theory is a form of two-party contract between agents (managers) and principals (investors) where the agent functions to implement and make every strategic decision for the benefit of the principal or investor as a party who has included his investment in the company (Jensen & Meckling, 1976). Agency theory can be used to solve two main problems found in the relationship between the principal and the agent: suppressing conflicts of personal interest and differences of interest between the agent and the principal, and problems related to the sharing of risk levels between the two. (Eisenhardt, 1989) said the relationship between the principal and the agent (Robinson & Pearce, 2018) will always run well and effectively when the agent or manager makes every decision consistent with the interests of shareholders or agents to avoid the preference of the agent over the principal. By implementing ERM, the risk of relations between agents and investors will be reduced due to better corporate governance, information quality, reporting systems, and corporate culture.

2.1.2. Signaling Theory

Signal theory plays a role in the relationship between ERM and corporate value. Signal theory shows the importance of information released by firms on the investment decisions of parties outside the firm (Spencer, 1973). Company information is very important for investors and business people because it provides information, records, or descriptions of past, present, and future conditions for its survival. A more comprehensive disclosure includes information that the company is better than other companies because it has applied the principle of transparency (Pitrakkos & Maroun, 2020). In addition, investors can distinguish between one company and another. According to Devi *et al.* (2017), the management always tries to disclose every private piece of information that provides special consideration and is of interest to investors,

especially if the information is in accordance with their expectations or in the form of *good news*, and vice versa. If it is not in accordance with expectations, investors will respond to related information as *bad news*.

2.1.3. Company Value

Company value is the potential for the growth of a company, which is related to the development of stock prices, so that it can use investor perception (Sanjaya & Linawati, 2015). Increasing the value of the company will have an impact on the prosperity of the owner or shareholder (Wahidahwati, 2002). The prosperity of the company will increase when its value can be maximized with the right decisions. In this study, company value is defined as market value, as expressed by Rosiana, Juliarsa, and Sari (2013), who argue that if the company's share price increases, it can provide welfare to stakeholders. According to Dinayu *et al.* (2020), the value of a company can be represented by the company's share price, which is a means of valuation by investors, and when the company's stock price increases, it is closely related to the value of the company.

2.1.4. Risk Management Disclosure

Enterprise risk management (ERM) is a process that is influenced by the entity's board of directors, management, and other personnel. It is applied to the creation of a strategy and to all parts of the company. Its goal is to find possible events that could affect the entity and manage risks that are in line with the entity's risk appetite. This gives the entity enough confidence that its goals will be met. The business processes carried out by each company have a narrow or broad scope and are variegated. These processes and activities do not always run as effectively and efficiently as expected due to the risks that arise. Management is directly responsible for every daily operation to reduce and manage any risks that arise.

The implementation of effective and efficient risk management in a company provides various benefits. Good risk management implementation will provide benefits, among others, including an increase in the company's operating performance through a decrease in the value of capital issued, increased investor confidence, and a raise in the company's rating related to debt repayment capabilities.

According to Savitri *et al.* (2020), the application of risk management in each unit of the company's business unit can provide an increase in the quality and quantity of the company's return on capital. This means that the existence of an element of risk management in the entire company can provide a competitive advantage to the company itself because it adjusts to the responsibility of risk acceptance at a lower level. Therefore, the implementation of effective and efficient risk management can provide a benefit and direction for companies towards the concept of sustainability in the future. Therefore, research on this matter needs to continue to be carried out to find out how its implementation in the real world in Indonesia develops. (Setyorini & Supriyadi, 2020)

For this reason, the implementation of risk management disclosure is the basis for providing information on each type of risk faced by a business entity as a whole. This research will

examine the effect of risk management disclosure on manufacturing companies in Indonesia and how it affects the value of these companies. (Setyorini & Supriyadi, 2020)

2.1.5. Business Risk

Business risk is the condition of a company's inability to cover operating costs due to the use of operating leverage (Gitman, 2015) and large fixed operating costs. Risiko business, according to Ginting *et al.* (2020), is the uncertainty that arises in the conditions that will occur from every business activity determined now. From this understanding, at least three core business risks can be drawn, namely the company's incompetence, high fixed operating expenses, and the possibility of occurring in the future (Suhari & Hendra, 2022).

The concept of business risk states that the company's business risk is related to fluctuations in profit generation that have an impact on the uncertainty of the company's ability to pay off each of its debts. Furthermore, business risk is inherent in every financial policy carried out by the manager related to funding and investment, which always incurs fixed costs in the form of (Jill & Houmes, 2022) (Alza & Main, 2018) *leverage* for the company with the aim of increasing profits. Company management should carefully and proactively manage business risks that may arise, and when a company is considered to have a high and large level of business risk, it becomes one of the warnings for investors to avoid because of the high risk of bankruptcy of the company (Brigham & Houston, 2011).

2.1.6. Operational Productivity

Operational productivity is something that is considered for company management, especially in companies in the manufacturing sector that produce products or goods with the aim of generating maximum profits. The concept of the level of operational productivity of the company is attached to the level of use of assets owned to generate adequate value or profit for the company (Yulianti & Wildan, 2021; Harahap, 2017; Cashmere, 2018). Research results (Utami & Welas, 2019) by measuring the turnover rate of all company assets, we will be able to find out whether the company has high or low operational productivity. High inventory turnover indicates that the company's management has sufficient ability and effectiveness in using their assets to generate profits; this triggers opportunities and attractiveness for investors and shareholders to invest and encourages an increase in the value of shares owned by the company (Misran, 2017).

2.1.7 Cash Flow Volatility

According to Kieso *et al.* (2018), cash flow provides information on the flow of cash receipts and cash expenditures obtained by a company in one period. Each incoming and outgoing cash component consists of three types of activities: operating, investing, and funding. Investors and shareholders have special concerns regarding cash flow because it can reflect the amount of cash owned and issued by the company, which describes how much return will be given to investors (Utamingtyas *et al.*, 2021).

Furthermore, cash flow provides complete and relevant information for investors because it is difficult to manipulate by internal parties. This statement is in line with the statement that "the

ability of cash flow can be a comparison to the company's operational performance because the value contained in the cash flow statement unit provides a profit value on a cash basis, which causes data on cash flows to be a more relevant measuring tool when compared to accounting data that is easy to manipulate". Related to the concept of cash flow volatility is the distribution spread of the company's cash flow, where when the level of fluctuation in the company's cash flow is valued very high and moves sharply, it will be difficult to use it as a benchmark of company value so that the value of high operating cash flow volatility has an identical relationship to low investment value. (Arifin & Pratiwi, 2020) (Anggaraini, 2021) (Dechow & Dichev, 2017) (Saptiani & Fakhroni, 2020)

2.2. Hypothesis Development

2.2.1. Disclosure of risk management and company value

Companies will use their best resources in the form of implementing ERM to achieve the best business processes and create corporate value (Andersen, 2008; Bailey, 2019). Efforts to maximize company value are completed in various ways, including managing possible risks. This is so because company-specific factors like environmental uncertainty, inter- and intra-industry competition, company scale, and the presence of the Board of Directors affect the company's performance (Florio & Leoni, 2017; Gordon et al., 2009). Previous research has shown that ERM is positively related to market value (Bohnert et al., 2018; Chen et al., 2020; Farrell & Gallagher, 2015; Lechner & Gatzert, 2017; Malik et al., 2020; McShane et al., 2011; Silva et al., 2018). Danisman and Demirel (2018) revealed that ERM is a management process that allows companies to manage various risks top-down. Chen et al. (2020) found that companies that implement ERM are able to obtain additional benefits of 5.73% in the form of increased revenue compared to non-users. Additional benefits were obtained because the company was able to streamline operating costs by 16.34%. In addition, ERM is a type of non-financial information required by outsiders in conducting assessments (Connelly et al., 2011). This is because company risk information can help investors make investment portfolio decisions (Abdullah et al., 2015). Therefore, the better the company implements ERM, the less influence the various risks that will be faced by the company will have, so as to be able to achieve the company's business goals that increase company value.

Research results by Devi et al., 2017; Iswajuni et al., 2018; Setyorini & Supriyadi, 2020; Ravindi & Ardianto, 2018; Phan et al., 2020; and Trisnawati et al., 2020, state that risk management disclosure (ERM) has a significant positive effect on company value, but the results of research obtained by Rahmi & Wijaya, 2022, found that management's disclosure risk has no effect on company value. Based on the theoretical review and the results of previous research, the research hypothesis is formulated as follows:

H1: Risk management disclosure has a positive impact on company value.

2.2.2. Risiko business and company value

Business risk arises from a company's uncertainty about making profits in the future (Hopkin, 2018). While a number of previous studies have found the influence of these two variables, the

results tend to vary. Based on research on risk to company value, it can be seen that business risk negatively affects company value (Chen et al., 2020; Zungu et al., 2018; Barton & MacArthur, 2015; Grace et al., 2015; Hoyt & Liebenberg, 2015; Hoyt, 2011; Lam, 2014). While research by Maingot et al. (2012) states that there is no significant influence between business risk and company value, this is because the research data used in the study by Maingot et al. (2012) is limited to companies in Canada listed on the S&P Index in 2007 and 2008, and the research data only refers to the financial crisis years of 2007 and 2008, so the results of the study cannot be the basis for other periods. Meanwhile, research by Razali et al. (2011) on 528 public companies listed in Malaysia in 2017 shows that business risk has no effect on the value of a company. This is not in line with other studies, namely Ardiansyah et al. (2022), which found that business risk negatively affects company value so that the level of business risk results in high uncertainty about future projections and company sustainability; the higher the level of risk a company has, the less the value of the company itself, and vice versa. Also, according to Anggraeni et al. (2018), it was found that company risk negatively affects the value of certain companies and will affect company performance, which decreases investor confidence. The existence of controversy over these results motivated researchers to formulate hypotheses as follows:

H2: Business value negatively affects the value of the company.

2.2.3. Operational productivity and corporate value

Related to the variable level of company operational productivity and company value, it is known (Hutapea et al., 2017) that the level of company operational productivity has a positive effect on stock prices that reflect company value. The results of the above research are not in line with the next research, namely Yulianti & Wildan's (2021) finding that the company's operational productivity level negatively affects the company's value. This is because, on the other hand, when the value of the TATO ratio increases, the loading value obtained is also high, so when the inventory turnover value increases, the company cannot manage a good sales loading rate, which of course will reduce the company's profit value, which can affect the assessment of business prospects by investors and shareholders who are related to the company. So based on the results of such inconsistent research, the third hypothesis is formulated as follows:

H3: Operational productivity has a positive effect on company value.

2.2.4. Volatility of cash flow and value of the company

Cash flow volatility provides information about the operational performance of a company in the use and receipt of cash accounts over a certain period. Connected with the signaling theory by Spence (1973) that every investor needs a "signal" from the company that is used for behavioral adjustments related to the information provided. Based on previous research (Pasoloran et al., 2020), cash flow volatility is related to the level of profit fluctuations, so cash flow movements that are too volatile reflect signals to investors that the company is not in a good and stable condition. According to research (Anggaraini, 2021), it was found that cash flow volatility has a positive effect on company value, so the level of cash flow movement

representing the company's operational activities is one of the determining factors for investors in investing in a company. Conversely, Arifin & Pratiwi (2020) found that the level of cash flow volatility has no effect on company value. Based on these inconsistent findings, the fourth hypothesis is formulated as follows:

H4: Cash flow volatility negatively affects the value of the company.

2.3. Research framework

Based on the systematic formulation of hypotheses against the research variables described above, the research framework is described as follows:

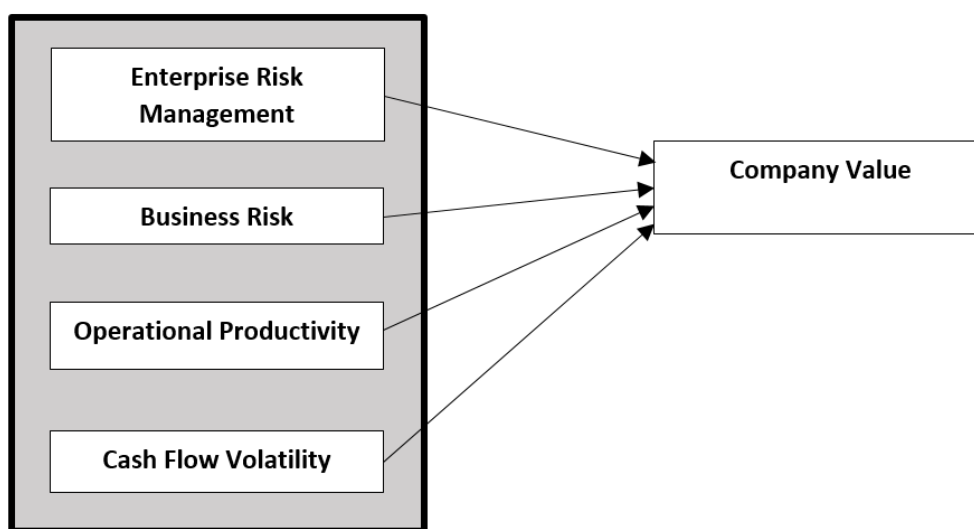


Figure 1: Research framework

3. RESEARCH METHODS

3.1. Data collection and period

This is quantitative research. Population is a manufacturing industry listed on the Indonesia Stock Exchange. The sampling technique uses a purposive sampling method.. The sample characteristics are determined as follows: 1) Manufacturing sector business entities with various types of industries that have been listed on the IDX during the period 2017–2021 2) Manufacturing sector business entities with various types of industries that have presented complete financial and annual reports 3) Business entities that present annual and financial reports in Rupiah Secondary data sources, namely annual and financial reports of each manufacturing entity with various consumer goods and basic industries, have been registered on the IDX for the period 2017 to 2021 through the official IDX website, namely www.idx.co.id.

3.2. Research and Measurement Variables.

Below is a table explaining the operational definitions of variables and their measurements.

Table 1: Research and Measurement Variables

Variable	Measurement	Related Research
Dependent Variable		
Firm Value (FRVL)	Tobin's Q is determined by the proportion of market capitalization plus overall debt divided by aggregate assets of the business entity	(Syamsudin et al., 2020; Anggraeni et al.,2021;Dzahabiyya et al.,2020)
Independent Variable		
Enterprise Risk Management Disclosure (ERMD)	ERMD = Number of items was disclosed/ number of all items 20 items of risk management disclosure indicators COSO principles with an integrated approach to strategy and performance in 2017	(Siregar, 2019; Setyorini &Supryadi, 2020)
Business Risk(BRSK)	BRSK = Changes of Total EBIT (EBIT _{t1} -EBIT _{t0})/EBIT _{t0}	(Yulianti & Ajim, 2018; Alamsyah & Malanua, 2020)
Operational Productivity (PROD)	PROD = Total Sales/Total Assets	Utami & Welas, 2019; Yulianti & Wildan, 2021; Barlian, 2017; Hutepea et al.,2017)
Volatility of Operating Cash Flow (VCFO)	VCFO = CFO _{it} /TA _{it}	Saptiani & Fakhroni, 2020; Anggraini, 2021).
Control Variable		
Leverage (LRVG)	LVRG = Total Debt/Equity	(Jihadi, et al., 2020; Hill, 2021; Abdallah & Ismail, 2017)
SIZE	SIZE = Ln Total Asset	(Arora, A., & Sharma, C., 2016).
LIQT	Current Ratio= Current Asset/Current Liability	Jihadi, et al.,2021
COVID-19	Dummy : a score of 0 is given before 2020, and a score of 1 is given for the covid-19 period from 2020 onwards	Covid-19

Source: Processed by the author, 2023

3.3. Model specification

Relating to the conceptual framework and the formulation of hypotheses that have been formed, the research carried out applies a multiple linear regression model, namely:

$$FRV_{i,t} = a_{i,t} + 1 ERMD_{i,t} + 2 BRSK_{i,t} + 3 PROP_{i,t} + 4 VCFO_{i,t} + 5LVRG_{i,t} + 6 SIZE_{i,t} + 7 LIQ_{i,t} + 8 CVID_{i,t} + e_{i,t}$$

Where:

Dependent Variables:

Firm Value = firm value using Tobin's Q formula

Independent Variables:

ERMD = risk management disclosure level

BRSK = business risk

PROP = operational productivity

VCFO = operating cash flow volatility

Control Variables:

LVRG = leverage

SIZE = company size

LIQT = liquidity

CVID = COVID-19 pandemic

e = error rate

i,t = determining indicator, i for the company and t for the year

3.4 Description of the Research Object

The object of observation is manufacturing companies listed on the IDX during the period 2017–2021. The research population consists of manufacturing companies, which consist of three types of industrial sectors: the basic and chemical industrial sectors, the consumer goods industrial sector, and the miscellaneous industrial sector. The sampling technique used purposive sampling with data collected through the S&P Capital IQ program and the IDX's official website, namely idx.co.id. The following is a summary of the research sampling process. Below is a research sample.

Table 1: Research Sample Selection Results

No.	Description	Number of companies
1	Company Total	70
2	Manufacturing sector companies that are not listed on the IDX from 2017 to 2021.	(4)
3	Manufacturing sector companies that do not present financial reports and annual reports and have all the data needed for the research variables in full from 2017 to 2021.	(4)
4	Manufacturing sector companies that do not present financial reports using the rupiah or IDR currency during 2017 to 2021.	(7)
5	The number of companies used as research samples.	55
6	Period of observation	5 years
7	Number of research sample (55x5)	275

Source: Author collected from IDX

3.5 Descriptive statistics

Table 2 presents descriptive data from the tools observed in the study described below.

Table 2: Descriptive statistics

Variable	Observation	Mean	Standard deviation	Minimum	Maximum
FRVL	275	2.06	2.96	0.12	22.89
ERMD	275	0.79	0.12	0.45	1
BRSK	275	-0.61	8.66	-103.55	19.14
PROP	275	0.91	0.48	0.06	3.16
VCFO	275	0.07	0.1	-0.26	0.43
LVRG	275	0.45	0.25	0.08	1.97
SIZE	275	15.22	1.7	11.91	19.72
LIQT	275	2.26	1.68	0.03	9.62
CVID	275	0.4	0.49	0	1

Source: Secondary data was processed using STATA 16

Table 2 above is the result of descriptive statistical tests applied to each research variable used, where the measurement uses the mean value, minimum value, maximum value, and *standard deviation* of each of these variables. As follows:

- 1) The average company value (FRVL) of 2,065 indicates that the average value of the manufacturing sector in Indonesia is quite developed and good because it has a value above 1, so that most large investors and shareholders assess the market price of stocks and assets that represent the value of companies in the manufacturing sector at an *overvalued* level.

- 2) The risk management disclosure (ERMD) ponder mean value of 0.795, or 79%, illustrates that manufacturing sector companies that implement compliance with ERM disclosure in annual reports during 2017 to 2021 are good and classified as high, where this occurs due to various kinds of regulations that have been set by the government and high efforts and awareness from the company's management to the importance of implementing the principles of risk management in their respective companies.
- 3) Business Risk discovers that the mean value it possesses is -0.613, or -61.3%, which has a reasonably good ability to finance their operational activities.
- 4) Operational productivity (PROP) describes the level of efficiency and effectiveness of management in using each asset owned, obtaining an average value of 0.9104, which means 91.04% of sales value for the use of total company assets. Most of the 275 samples of manufacturing companies have a fairly high asset turnover rate.
- 5) Cash flow volatility describes the fluctuation and distribution of a company's cash flow within a company (Pasoloran *et al.*, 2020), where it can be measured using a ratio scale of comparison between the total value of operating cash flows and the total assets owned by the company in a certain period. It is known that the mean value for the variable cash flow volatility has a value of 0.077, indicating that the level of movement or fluctuation of operating cash flows to the value of assets used in the sample of 275 manufacturing companies averages 7.7%, where the level of fluctuation in cash flows is considered moderate and quite stable because it does not exceed 10.00%. Based on the cash flow volatility's standard deviation value of 0.102, which is higher than the average value, it is possible to say that the value of cash flow volatility has a high and significant level of fluctuation.
- 6) Based on the application of proxies carried out, *leverage* has an average value of 0.457, or 1 rupiah, of the value of assets owned, financed by 0.45 rupiah of debt value owned.
- 7) Company size (SIZE) is a type of measurement that can be used to assess the size of a particular company using natural logarithmic scale measurements of total assets owned. The average value for the variable size of the company through natural logarithmic measurement of total assets in hundreds of millions is 15,224, with a minimum value of 11,914.
- 8) Liquidity (LIQT). The measurement used for liquidity control variables is the current ratio, which is calculated by comparing the total value of current assets to the value of current liabilities owned by a company. Based on the average value in the related table of 2,264, which can be interpreted as representing as many as 275 samples of companies from various manufacturing sectors, they have a high and good level of liquidity because they are greater than 1.00 and can make payments and repay current obligations of 226.39%.
- 9) COVID-19 pandemic (CVID). The COVID-19 pandemic is one of the control variables applied in the study. In measuring the control variables of the COVID-19 pandemic using a *variable dummy* scale, the value 1 is given during the annual and financial reporting

periods in 2020 and after, and the value 0 will be given during the annual reporting period and finance in 2019 and earlier. obtained an average score of 0.4. Related to the minimum value owned being 0 and the maximum value being 1, this is because the measurement scale used is a *variable dummy with a standard deviation* value of 0.491. Means it is in the middle of financial reporting before and after COVID-19.

Is a research model feasible as a model, as seen from the F test? The results of this study show the results of the model feasibility test shown in Table 3 below.

Table 3: Results of hypothesis testing

Regression test results with standard error regression	
Number of observation	275
F(8,266)	8.72
Prob > F	0
R-Squared	0.207
Root MSE	0.818

Source: Secondary data was processed using STATA 16

3.6 F Test

Through the feasibility test table above, it is known that the regression model applied has a probability value, or Prob > F, of 0.0000, which can be interpreted as significant at the applied significance limit of 0.05. So in general, the model used has a very high level of compatibility with the data used. Furthermore, it can be indicated that disclosure of risk management (ERMD), business risk (BRSK), operational productivity (PROP), and cash flow volatility (VCFO) as independent variables used has a simultaneous effect on the value of the company.

3.7 Coefficient of Determination Test

The coefficient of determination test is applied to assess the level of explanatory ability of each independent variable used with the specified dependent variable, which can be seen through the results on adjusted R2. We can see from the results of the coefficient of determination test in table 3 that adjusted R2 is 0.1832 or 18.32%, meaning that the dependent variable, namely firm value, can be explained by independent variables, namely ERM disclosure (ERMD), business risk (BRSK), operational productivity (PROP), and cash flow volatility (VCFO) of 18.32%, while the remaining 81.68% is explained by other variables that are not included in this research model. With a coefficient of determination of 18.32%, it can be interpreted that the explanatory ability of the model used is medium.

3.8 Uji Hypothesis and Discussion

Table 4: Hypothesis Test Results and t-test

Dependent variable = Company value				
Variable	Coeff.	Robust Std Error	t	P > t
ERMD	1.967	0.473	4.15	0
BRSK	-0.007	0.004	-1.68	0.093
PROP	0.2	0.119	1.68	0.095
VCFO	2.122	0.601	3.53	0
LVRG	0.123	0.312	0.4	0.693
SIZE	-0.033	0.03	-1.09	0.278
LIQT	0.122	0.043	2.83	0.005
CVID	-0.191	0.107	-1.79	0.075
_Cons	-1.627	0.531	-3.06	0.002

Sumber: Processed through STATA 16 output

Based on the results of the t test, which are shown in Table 4, related hypotheses were found by looking at the negative or positive influence of each variable's level of coefficient and the level of significance or not adjusting for the level of significance limitation. Which has been determined at both 1%, 5%, and 10%. To test the level of significance of each variable, the probability value listed in the column P >|t| can be known through the significance limitations that have been used.

3.8.1 Disclosure of Risk Management and the Company's Value

Through table 4, it is known that risk management disclosure has a coefficient value of 1.967, a probability value of P >|t| 0.000, and a t value of 4.15. Based on the results, a coefficient value of 2.168 indicates that risk management disclosure (ERM) has a positive and statistically significant effect at the level of 0.000 or less than 1%, so that risk management disclosure can predict the value of the company. So that the results of research in the one-tailed test can prove that H1, which states risk management disclosure has a significant positive effect on company value, is acceptable. So that the greater and greater levels of risk management disclosure carried out by the company will increase its value, In connection with the signaling theory, every risk management disclosure in the form of guidelines, implementation results, details of management strategies, evaluations related to the course of risk management activities, etc., will be a form of positive signals or good news given to management and to investors and shareholders, especially the implications for the future prospects and survival of the company itself. This research is in line with the results of research conducted by Devi et al. (2017), Iswajuni et al. (2018), Setyorini & Supriyadi (2020), Ravindi & Ardianto (2018), Phan et al. (2020), and Trisnawati et al. (2020), which states that risk management disclosure (ERM) has a significant positive effect on company value, but the research results obtained are not in line with research conducted by Rahmi & Wijaya (2022), which found that management disclosure risk has no effect on company value. The risk management process should be built on a solid foundation of risk philosophy, integrity and ethical values, corporate governance, competence, and responsibility, as well as a goal-setting process that takes into account dimension risks,

dynamic information and communication flows, and continuous monitoring of all parts of the framework. Organizations must implement an effective ERM, as it allows them to optimize risk management by providing systematic and holistic risk evaluation and control.

The company will use its best resources in the form of implementing ERM to achieve the best business processes and create corporate value. Efforts to maximize company value are completed in various ways, including managing possible risks. This is because the company's performance is influenced by company-specific factors such as environmental uncertainty, inter- and intra-industry competition, company scale, and the existence of the Board of Directors (Florio & Leoni, 2017; Gordon et al., 2009). Chen et al. (2020) found that companies that implement ERM are able to obtain additional benefits of 5.73% in the form of increased revenue compared to non-users. Additional benefits were obtained because the company was able to streamline operating costs by 16.34%. In addition, ERM is a type of non-financial information required by outsiders in conducting assessments (Connelly et al., 2011). This is because company risk information can help investors make investment portfolio decisions. Therefore, the better the company implements ERM, the less influence the various risks that will be faced by the company will have on achieving the company's business goals that increase company value. Findings (Setyorini & Supriyadi, 2020) show that risk management disclosure has a significant positive impact on company value, where any information about risk management that is effectively and relevantly disclosed becomes a factor in the form of positive signals to investors regarding company valuation because it shows that these companies can make good and high-quality efforts to manage each risk so that the value of the company will increase. Furthermore, Devi et al. (2017) found that the disclosure of any risk management information has a significant and positive impact on the value of the company due to its own confidence in the market in evaluating the project and the sustainability of the company in the future.

The results of the research obtained found that risk management disclosure has a significantly positive effect on company value, so the greater the principal risk management carried out by the company, the greater the increase in the company's own value. The results of the research are in line with POJK Regulation Number 44 of 2020 about the obligation to implement the principle of risk management for non-banking financial service institutions, or LJKNB. This regulation says that the company's internal parties must implement every point of understanding, measuring, managing, evaluating, and using risk management information systems. According to *signaling* theory, every disclosure of risk management in the form of guidelines, implementation results, details of management strategies, evaluations related to the course of risk management activities, and others will be a form of positive signals or *good news* given to management by investors and shareholders regarding the assessment of their investment portfolio of a company, especially the implications of future prospects and the survival of the company itself. So the research results obtained are in line with the research conducted by Devi *et al.* (2017), Iswajuni *et al.* (2018), Setyorini & Supriyadi (2020), Ravandi & Ardianto (2018), Phan *et al.* (2020), and Trisnawati *et al.* (2020), which states that risk management disclosure (ERM) has a significant positive influence on company value, but the results of the research obtained are not in line with the research conducted by those who found

that risk management disclosure does not have an influence on company value. (Rahmi & Wijaya, 2022)

In relation to stakeholder theory and signaling, where stakeholder theory says that the company's management has the only responsibility to stakeholders for creating added value and minimizing the level of losses it will get, being connected with risk management disclosure can be a form of responsibility and effort from management in carrying out operational activities with their full openness through maximum and effective management of various company risks. Furthermore, through various risk management information, the company is revealed to have a form of commitment from the company's management in managing each company's risk, so that the greater or greater the level of disclosure of the principal risk management applied by the company, it shows an illustration that the company has a higher commitment related to risk management so that the fulfillment of every goal owned by the company can be fulfilled properly and comprehensively. In line with agency theory, management can apply risk management disclosure in financial statements as an effort to overcome information asymmetry problems that arise with investors. Therefore, the disclosure of every piece of risk management information carried out can indicate that the company's management has sought an open function with investors and their shareholders so as to reduce the problem of information inequality with the principal.

3.8.2 The Effect of Business Risk on Company Value

According to the H2 hypothesis, there is evidence that the level of the operating leverage ratio, which serves as a proxy for business risk, has a significant and detrimental impact on the company's value. Table 4 shows that business risk has a coefficient value of -0.00686, a probability value of $P > |t|$ 0.093, and a t value of -1.69. In accordance with the results of the t test, it was found that the value of the coefficient was -0.0074591, which showed that the level of business risk had a negative and statistically significant effect of 0.093, smaller than the 10% significance limit, so that it is known that business risk can predict the value of the company. Since the hypothesis is one-way, the one-way test is the value of $P > |t|$ halved, where the value of $P > |t|$ in the one-way test becomes 0.046, so that the probability value remains significant at the 5% significance limit. So that through the results of the one-tailed test, the H2 hypothesis, which states that business risk has a negative and significant effect on company value, can be proven and accepted.

3.8.3 The Effect of Operational Productivity on Company Value

The H3 hypothesis states that operational productivity, proxied using the TATO ratio or total asset turnover, has a positive effect on the value of the company. Table 4 shows that operational productivity has a coefficient of 0.200, a probability value of $P > |t|$ 0.095, and a t value of 1.68. The results that have been obtained identify that operational productivity has a positive effect, namely a coefficient of 0.0095 with a significant level of 0.095 or declared significant at the limit of significance of 10%, so that operational productivity is known to be able to predict the value of the company. When the turnover value of assets owned by the company increases, it signals good news for investors. These results support previous studies, namely (Hutapea et al.,

2017); (Khairunnisa et al., 2019); (Aprilia et al., 2018); and (Salaanti & Sugiyono, 2020), in which operational productivity results proved to have a positive effect on company value. On the other hand, it does not support the research conducted by Yulianti and Wildan (2021). This research provides a good reference for investors and management to give more serious attention to increasing operational productivity as an important factor in increasing company value. This is a signal and good news for improving the quality of business processes along the value chain. As a result, asset turnover will increase and become a driver of increased financial performance (including net income and earnings per share) and further increase the demand or attraction of investors to buy shares of the company, which will consequently trigger an increase in stock market prices and in turn increase the value of the company.

3.8.4 The Effect of Cash Flow Volatility on Company Value

The fourth hypothesis (H4) states that cash flow volatility is proxied through operating cash flows compared to a company's total assets and has a negative effect on the company's value. Judging from the t-test results in Table 4, it can be seen that cash flow volatility has a coefficient of 2.122 and a probability value of $P > |t| 0.000$ with a t value of 3.53. Through these results, it can be stated that cash flow volatility has a $P > |t|$ level. A significant 0.00 or 0% is less than the 1% significance limit and has a positive effect coefficient of 2.122. Then the H4 hypothesis, which states that cash flow volatility negatively affects the value of the company, is rejected. The results of this study support the research conducted according to Pasoloran et al. (2020); (2021); and Fajri & Juanda (2021).

On the other hand, the research results obtained do not support research conducted by Zaimah and Hermanto (2020), which found that cash flow volatility has a significant negative effect on company value, and research by Arifin and Pratiwi (2020) found that cash flow volatility was not proven to have an influence on company value. The practical implication for management and investors is that it can indicate that there is a strong relationship between the level of volatility in the value of cash flows and operational performance, so that the assessment is in the form of information that the company has good performance. Because they successfully manage their assets to generate positive profits and cash flows. This is an attraction for investors and/or shareholders to include their investment in companies that expect an increase in company value in the future.

4. CONCLUSION

The research process led to the following conclusions:

1. Hypotheses one to three are accepted, namely that disclosure of risk management, business risk, and operational productivity has a significant and positive effect on the value of the company. This means that all three variables are able to predict the value of the company.
2. Partial disclosure of risk management has a significant positive effect on the value of the company. Before business risk has a negative effect, operational productivity has a significant positive effect, and cash flow volatility also has a positive effect on the value of the company. The results of this study will be useful to enrich previous findings and

provide information for stakeholders, especially management and investors, on how to increase company value in the future, especially given the increasing importance of ERM in increasing company value in the manufacturing industry.

4.1 Research limitation

This research is limited to the sample scope of manufacturing industries listed on the Indonesia Stock Exchange so that the conclusions are only for that industry, and may not be used for other industries.

4.2 Practical implications

Based on the results of the study, the following practical implications are presented:

- 1) Disclosure of the application of risk management has proven to be significantly positive for the value of the company, so company management has considered activating risk management disclosure because it is proven to be able to increase company value. The more enterprise risk management items disclosed by a company, the higher the quality of the company's ability to provide transparency and completeness of information related to risk profiles to external parties, which also aims to attract stakeholders. Higher profitability gives the company a higher valuation in the market. In this case, the company's capacity to manage its business risks should support profitability. If the company is able to implement enterprise risk management properly, supported by good profitability, it will be able to increase its value.
- 2) Business risk is proven to have a significant negative effect on the value of the company, so it becomes one of the considerations for internal parties in maintaining and managing the level of business risk at a reasonable and small limit because it has been proven to reduce the value of the company.
- 3) Because operational productivity has a significant positive influence on company value, this is good news for management to improve the company's asset control system because it is proven that asset turnover can increase the value of the company.

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