Enterprise Risk Management

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ENTERPRISE RISK MANAGEMENT ON FIRM VALUE : EMPIRICAL STUDY ON MANUFACTURING SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstract: Enterprise risk management (ERM) is being adopted by many firms globally and the value relevance of enterprise risk management is scarce. The purpose of this study was to determine the impact of enterprise risk management on firm value for companies on the Indonesia Stock Exchange. This study is conducted using a sample of manufacturing companies listed on the Indonesia Stock Exchange from 2012 to 2020. The findings indicate a significant correlation between enterprise risk management and firm value, indicating that enterprise risk management significantly contributes to firm value. These findings may be used to develop and shape enterprise risk management policy frameworks for firms and countries. The study provides new insights, from an Indonesian emerging market context on the value effects of enterprise risk management. Nonetheless, this study found that companies with larger and international samples may improve future studies.

Keywords: *Corporate Risk, Enterprise risk management, Firm Value.*

1. Introduction

The development of the business world increases competition among companies. Each company has various competitive advantages, one of which is the use of technology. This has resulted in changes in the flow of business that are felt to be increasingly tight.

The rapid growth of the business world has increased the role of management in running its business. The company's management as a manager will strive to improve its performance so that it can increase the value of the company. Company value is a company benchmark that reflects the prosperity of shareholders. The higher the value of the company, the higher the prosperity of shareholders.

The assessment made by investors of the company can also be through fluctuating share prices. Many investors have difficulty in predicting the value of the company as a reference in making investment decisions. This is because the stock price of a company can increase or decrease at any time. Management will try to find the best way to exercise rational management to maximize shareholder wealth. The following is a business phenomenon that shows the volatility in manufacturing industry companies listed on the Indonesia Stock Exchange.

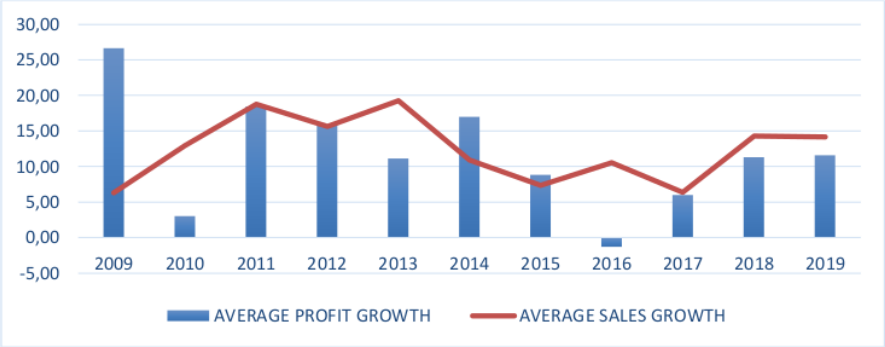

Figure 1. Average Profit and Sales Growth of Manufacturing Companies on the IDX

The above phenomenon shows that in the rapidly changing economic development, companies must manage finances for short-term achievements by thinking about the long term.

A business in a company requires decision-making on the risk because without risk there is no opportunity or reward. However, excessive risk-taking will lead to the destruction of the company as seen from the phenomenon of many companies being forced to close and the increasingly limited role of financial institutions related to the high risk. Risk comes from two activities carried out by the company. First, business activities as a financial strategy are carried out by the company. Four strategic financial decisions must be made by the company, namely: how much basic assets should be, how much financing comes from debt and also capital, how much profit is paid for dividends and retained earnings, and should issue new equity at the end of the year. company (Heinemann, 2009). The second activity is the decision on how much financial risk to take which will depend on the characteristics of the business.

Business risk is an inherent risk related to the nature of a particular business and the competitive strategy undertaken so that business risk relates to everything except the financing structure. Business risk can be evaluated using a model based on the product life cycle produced by the company. Financial risk discusses debt to capital. Debt and equity have different risk profiles for investors and companies so their use must be balanced. Companies that have high business risks should not take high financial risks. Financial risk must be managed together with business risk to produce the most effective risk profile to create value for the company.

Company risk management is one of the basic studies in increasing company value. So companies must anticipate risks in creative ways (Shenkir and Walker, 2007). The following is data on companies that anticipate risk through hedging on the Indonesia Stock Exchange.

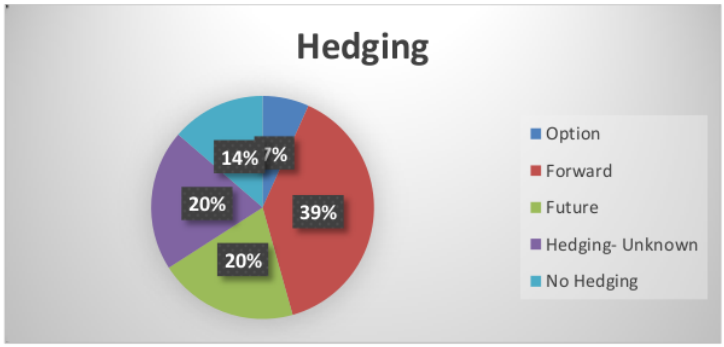

Figure 2. Companies listed on the Indonesia Stock Exchange
Source: Indonesia Stock Exchange, 2020

Based on the figure above, of the 622 companies listed on the Indonesia Stock Exchange in 2019, 537 companies hedged and 85 companies did not hedge. This shows that in fact, many companies focus on risk management. Current risk management requires companies to manage risk as a whole and focus on increasing the value of the company so that companies try to quantify each type of risk. So that the decisions made are related to the impact and control.

Risk management can be carried out through integrated risk management, namely, the implementation of Enterprise Risk Management (ERM) which allows management to effectively deal with uncertainties related to risks and opportunities, as well as increase the capacity to build corporate value (Committee of Sponsoring Organizations of The Treadway). Commission, 2004).

Various studies have been conducted to prove that risk management is one of the factors that determine firm value Stulz (1984); Aaboo (2015). However, other opinions conclude that risk management will increase the company's cost of debt so that it increases the risk to the company (Froot, Scharfstein & Stein (1993)).

Based on the results of several studies that have been carried out, it can be concluded that although the application of risk management is adopted by various industries, the number of bankrupt companies indicates the occurrence of financial difficulties which are a risk and of course already known by the leadership in the company. The lack of understanding of the implementation of risk management is the biggest indication among financial industry professionals, as seen in the many studies and reports issued by professional risk associations. There are several gaps in the implementation of risk management based on research that has been carried out which is the focus of this research, namely: the lack of combined risk management in all business units; lack of transparency; inadequate methods, management, and assessment of data; as well as differences in situational factors that occur such as business cycles and dynamic environments. A very dynamic and competitive environment will make it difficult for companies to map out their design in value creation. The existence of uncertainty, especially in demand, is the biggest source of risk (Leavy, 2015).

The application of risk management is a new supervisory process in the business environment and an immature theoretical field (Beasley, et al.; 2011). However, it has been

carried out for the last fifteen years (Shad, 2019). Academic research on risk management follows the same development cycle as it does practically in that it explores a business environment that is subject to unpredictable events. The growth of research on the implementation of risk management grew rapidly after the mortgage crisis which was generally caused by the failure of corporate governance. Academics make failure in the overall risk control process, reliance on sophisticated models, and belief in sound judgment as a focus in the development of future risk management concepts.

This research is based on differences in the results of research regarding the application of risk management which is an important decision in the company for the long term. This study will explain how the influence of enterprise risk management on firm value in manufacturing companies in Indonesia.

2. Research Method

This study focuses on seeing how the influence of enterprise risk management on firm value in manufacturing companies listed on the Indonesia Stock Exchange. The research population is 156 companies and the research sample is 104 companies. The data used is secondary data originating from the company's financial statements from 2012 to 2019. The measurement of company value is obtained with two approaches, the first with Price to Book Value as a measure of management's success in past operations and prospects in the future. While the second measurement with a profitability approach is Return on Assets. The research dependent variable is Enterprise risk management as a dummy variable which shows a binary decision for 1 if the company has adopted the ERM program and zero otherwise. Then this study also uses control variables as determinants of firm value, including total assets, debt to equity ratio, debt to asset ratio, sales, dividends, and earnings after tax.

This study will use pooled ordinary least square regression. However, because the data used are panel data, this study uses a random effect approach by considering the number of companies that are more than the period of the study. The research equations are:

$$PBV_{it} = \alpha + \beta_1 ERM_{it} + \beta_2 SIZE_{it} + \beta_3 DER_{it} + \beta_4 DAR_{it} + \beta_5 SALES_{it} + \beta_6 DIV_{it} + \beta_7 EAT_{it} + \varepsilon_t \quad (1)$$

$$ROA_{it} = \alpha + \beta_1 ERM_{it} + \beta_2 SIZE_{it} + \beta_3 DER_{it} + \beta_4 DAR_{it} + \beta_5 SALES_{it} + \beta_6 DIV_{it} + \beta_7 EAT_{it} + \varepsilon_t \quad (2)$$

3. Results and Discussion

3.1. Results

The results of the study will explain the description of the research data and the results of the regression estimation of each equation. An explanation of the main variables used in the study can illustrate the representation of the sample used. The following is a statistical table for each research variables used in the basic regression.

Table 1. Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Maximum	Minimum
PBV	832	2.835108	6.758728	82.44	0.01
ROA	832	1069.761	30142.06	869410.8	0.039184

ERM	832	0.77502	0.162866	1.098612	0.693147
SIZE	832	14.34385	1.974221	20.66753	5.075343
DER	832	2.921583	13.74489	227.1617	0.021993
DAR	832	6.763579	177.3402	5115.829	0.021993
SALES	832	14.22616	2.131277	20.54826	5.48076
DIV	832	5.387765	5.245053	16.34343	0.693147
EAT	832	11.23431	2.466297	18.22312	4.235273

Source : Processed Secondary Data, 2021

Before estimating the regression, the step was to test the database so that the equations in the regression did not experience multicollinearity problems. The following is a paired correlation matrix table:

Table 2. Pairwise Correlation Matrix

Variable	ERM	SIZE	DER	DAR	SALES	DIV	EAT
ERM	1.00						
SIZE	0.07	1.00					
DER	0.05	0.04	1.00				
DAR	0.02	0.12	0.01	1.00			
SALES	0.18	0.80	0.05	0.05	1.00		
DIV	0.07	0.28	0.12	0.04	0.36	1.00	
EAT	0.07	0.78	0.03	0.08	0.78	0.45	1.00

Source : Processed Secondary Data, 2021

The results in the paired correlation matrix table showed that the coefficient value between the independent variables was below 0.8. If the coefficient value between independent variables does not exceed 0.8, then there is no multicollinearity problem (Widarjono, 2013).

After multicollinearity test, the next step is to estimate. We estimate using ordinary least square, fixed effect, or random effect. This test shows that the estimation technique is to measure the relationship between enterprise risk management and firm value. Therefore, the technique used is the random effect. The results of the estimation of the two research models of the study using the random effect method as shown in the following table:

Table 3. Regression Analysis

Variable	Dependent Variable: PBV		Dependent Variable: ROA	
	t-Statistic	Prob.	t-Statistic	Prob.
ERM	-2.524592	0.0118	-1.380529	0.1678
SIZE	0.031079	0.9752	-3.141294	0.0017
DER	1.490417	0.1365	-0.233474	0.8155
DAR	-2.890864	0.0039	2709.997	0.0000
SALES	1.141313	0.2541	-1.991596	0.0467

DIV	0.395794	0.6924	1.061214	0.2889
EAT	4.758921	0.0000	4.261408	0.0000
C	0.147539	0.8827	3.036092	0.0025

Total panel (balanced) observations: 832

Source : Processed Secondary Data, 2021

In Table 3, the estimation results of the first equation show that there is a significant influence between enterprise risk management on firm value as measured by price to book value. while the second equation shows that enterprise risk management does not affect return on assets.

3.2.Discussion

There are differences in the estimation results in the first and second equations. The first result shows that enterprise risk management has an effect on price book to book value and the second result shows that enterprise risk management does not affect the return on assets. However, the two equations also conclude that enterprise risk management is in line with firm value. So that the research objective is achieved, namely positive enterprise risk management in line with firm value.

The concept of risk management is a recent and important process in companies (Beasley, 2015) and is an immature field of science. Scientific research on risk management depends on economic developments. Risk management is a systematic recording of all types of risks related to the existence and development of the company; it involves analyzing and prioritizing recognized risks as well as defining and implementing strategic measures to minimize intolerable risks (Anderson, 2016). The evolution of the risk management concept has reflected the goal of reducing costs and mitigating risks. At the same time management does its best to maximize revenue to add real value to the company.

The findings of this study indicate that the ability of effective risk management is related to the availability of resources in a measure of the success of prospects. This is also related to companies that are fast in responding to changes in the competitive environment. In addition, the findings also reveal where there are differences in perspective originating from differences in interests between management and shareholders.

4. Conclusion

Based on the test results indicate that there is an effect of enterprise risk management on firm value as measured by price to book value. Meanwhile, enterprise risk management does not affect the firm value as measured by return on assets. However, the two equations also conclude that the existence of enterprise risk management is in line with firm value.

This research was developed based on the theories and concepts of financial management and strategic management, where the dynamic component that changes very quickly becomes an important factor in planning decisions and making decisions, especially risk management in companies.

This study has several limitations, namely using a sample of one industry with a span of only eight years. Most of the research on the application of risk management is carried out

using samples from only one industry. This is an effort to control the possibility of homogeneity. Therefore, suggestions for further researchers to conduct research using the entire industry listed on the stock exchange.

Reference

Aabo, T., Fraser, J.R.S., & Simkins, B. J. (2010). The Rise and Evolution of the Chief Risk Officer. *Enterprise Risk Management: Today's Leading Research and Best Practices for Tomorrow's Executives*, *9*(3), 531–556.

Andersen, T. J. (2013). Corporate Risk Management and Value Creation. *Montenegrin Journal of Economics*, *Volume 9*(2), 17–27.

Beasley, M. B. (2010). Current State of Enterprise Risk Oversight and Market Perceptions of COSO's ERM Framework, ERM Initiative at North Carolina State University,. In C. R. ERM. Raleigh.

Beasly MS, P. D. (2008). The information conveyed in hiring announcements of senior executives overseeing enterprise-wide risk management processes. *Journal of Accounting, Auditing and Finance 23(3)*, 311-332.

Bender, R., & Ward, K. (2013). *Corporate financial strategy (4th Edition)*.

COSO. (2004). *Enterprise Risk Management – Integrated Framework*. Jersey City.

Froot KA, S. D. (1993). Risk management: coordinating corporate investment and financing policies. . *Journal of Finance 48*, 1629-1658.

Gates, S., Nicolas, J.-L., & Walker, P. L. (2012). Enterprise Risk Management: A Process for Enhanced Management and Improved Performance. *Management Accounting Quarterly*, *13*(3), 28–38. http://ezproxy.library.capella.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=78173163&site=ehost-live&scope=site

Hoyt, R. E. (2011). The Value of Enterprise Risk Management. *Journal of Risk and Insurance, 78(4)*, 795-822.

Leavy, P. (2015). *Method meets art: Arts-based research practice (2nd ed.)*. Guilford Press.

Shad, M. K., Lai, F. W., Fatt, C. L., Klemeš, J. J., & Bokhari, A. (2019). Integrating sustainability reporting into enterprise risk management and its relationship with business performance: A conceptual framework. *Journal of Cleaner Production*, *208*, 415–425. https://doi.org/10.1016/j.jclepro.2018.10.120

Stulz, R. M. (1984). Optimal Hedging Policies. *The Journal of Financial and Quantitative Analysis*, *19*(2), 127. https://doi.org/10.2307/2330894

TJ, A. (2009). Effective risk management: Exploring effects of innovation and capital. *Journal of Strategy and Management 2(4)*, 352-379.

van Daelen, M., & Van der Elst, C. (2013). Risk Management and Corporate Governance. In *Risk Management and Corporate Governance*. https://doi.org/10.4337/9781849807999

Widarjono, A. (2018). *Ekonometrika Pengantar Dan Aplikasinya Disertai Panduan Eviews. Edisi kelima*. Yogyakarta: UPP STIM YKPN Yogyakarta.

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