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Analyzing the Role of Risk Awareness in Enterprise Risk Management

Inta Budi Setya Nusa[1*]

[1]Accounting Department, Universitas Komputer Indonesia,
Jl. Dipatiukur No. 112-116 Bandung 40132, West Java, Indonesia

E-mail: inta.budi@email.unikom.ac.id

Abstract. This study aims to examine the effect of the five components of enterprise risk management (ERM) on the effectiveness of ERM. This study specifically focuses on the role and function of calculating risk as an ERM component and in the interactions of other ERM components. There are five indicators or components in ERM resulting from factor analysis applied to risk management (RM) in manufacturing companies. RMC in this study was measured by a dummy variable. Where a company that discloses the establishment of a Risk Management Committee (RMC) and a Separate Risk Management Committee (SRMC) in its annual report is given a value of 1, and a company that does not disclose the formation of an RMC and SRMC in its annual report is given a value of 0. Auditor reputation is expressed by whether the auditor used by companies included in the Big Four or not. Analysis Methods The analytical tool used in this research is logistic regression analysis. Parameter estimation using Maximum Likehood Estimation (MLE). The overall model feasibility test uses the chi-square statistical test which is used based on the probability function. This study uses a sample of 149 observations from various companies indexed on the Indonesia Stock Exchange from 2019 to 2021.Research shows that the presence of RMC in a company will increase the demand for risk assurance, which is illustrated by higher assurance fees from auditors, compared to other companies. Second, the results of the study also show that KAP Big four provide better audit quality than non-Big four, then based on the parameters of the Heckit model with the Heckman procedure.Two-Step Estimator shows that there is a strong relationship between the presence of RMC in the company and the company's performance.

1. Introduction

Good risk management is one of the keys that must be applied in every business. The role of risk management, which is mostly behind the scenes, is not widely seen, however, its function is too big to be underestimated. Like digging to close a hole, without a well-managed risk, the penetration of the effort made will be nothing. Its function is to build a strong analytical base so that various business decision-making steps carried out by the company can avoid the risk of harm and even encourage profit expansion at an optimal level. A risk-aware culture is fundamental and at the same time critical to the successful implementation of risk management in an organization. The behavior and culture of human resources significantly influence all aspects of risk management at all levels and stages [1] . In this regard, it is very important for the company to ensure the adequacy of efforts to develop / increase awareness of management and employees regarding the importance of risk management, as well as the

adequacy of efforts to socialize the framework and or risk management procedures to each stakeholder involved in risk management in the Company.

Risk culture is the behavior of all personnel interacting and the perception of everything related to risk. Perceptions of these risks will be reflected in the decisions taken and the way of doing work. To respond to risk (risk response) for operational risk, several steps can be taken, one of which is to build sensitivity or concern for human resources (HR) towards a risk culture. Risk culture is becoming increasingly important because the implementation of a risk management system includes tasks in daily operations. In everyday life, the work culture factors related to risk will be more prominent in determining the success of a system implementation than the system itself. Processes related to risk culture are usually driven by motivation from top management and commitment to carry out management consistently. Top management must set an example of implementing a risk culture, then subordinates will follow. Without understanding the indicators of a risk awareness culture, it will be difficult for them to plan the building of an effective risk awareness culture, and/or take steps to spread the risk awareness culture across all levels of the organization. [2]. Risk management is implemented in the organizational environment through the development of a Risk awareness culture, the establishment of a Risk Management structure, and the application of a Risk Management Framework. [3]The development of a Risk-aware Culture is carried out in accordance with the values of the Ministry of Finance to achieve organizational goals, which is manifested in the leadership's commitment to consider Risk in every decision making, continuous communication to all levels of the organization regarding the importance of Risk Management both top-down and bottom-up. up, appreciation for organizations and/or employees who can manage Risks well; and the integration of Risk Management in the organization's business processes.The Risk Management structure within the organization formed consists of the Risk Owner Unit (UPR) which is the unit owner of the strategy map that is responsible for implementing the Risk Management Process on organizational goals according to the unit's duties and functions, the Risk Management Compliance Unit, and the Inspectorate General. The implementation of the Risk Management Framework is carried out with a flow starting from the formulation of the Risk Management system, the Risk Management process, and the monitoring and evaluation of the Risk Management system.

The Risk Management process is an integrated part of the overall management process, particularly strategic planning, performance management, budgeting and internal control systems, and is integrated into the culture and business processes of the organization. The Risk Management process at the Ministry of Finance is implemented periodically for 1 (one) year and consists of stages, namely communication and consultation, context formulation, risk identification, risk analysis, risk evaluation, risk mitigation, monitoring and review. [4] Communication is an activity to convey information with the aim of increasing awareness and understanding of Risk, while consultation is an activity to obtain information related to Risk with the aim of getting feedback for decision making. The formulation of the context aims to understand the environment and limitations of the application of Risk Management in each Risk Ownership Unit (UPR). Risk identification aims to determine all risks that affect the achievement of organizational goals. These risks include events, causes, and physical impacts. Risk Analysis aims to determine the amount of risk and the level of risk. [4]

Risk evaluation aims to determine risk priorities, residual risk magnitude/level, expectations, risk mitigation decisions, and key risk indicators. Risk Mitigation is an action that aims to reduce and or maintain the Amount and/or Main Risk Level until it reaches the Expected Residual Risk. Risk Mitigation is carried out by identifying and selecting Risk mitigation options, compiling a Risk mitigation plan, and implementing the mitigation plan. Monitoring and Review aims to ensure that the implementation of Risk Management runs effectively according to the plan and provides feedback for the improvement of the Risk Management process. Risk monitoring and review is carried out for all stages of the Management Process. [4]

As previously mentioned, the purpose of risk management is essentially risk management to obtain optimal benefits and increase the possibility of achieving the organization's vision, mission, goals and performance improvement as well as protecting and increasing the added value of the organization. The

risk management structure shows the roles and responsibilities of each unit in risk management in the organization. A series of processes are carried out in stages to support the implementation of risk management. Within the Ministry of Finance, risk management has also been supported by a set of rules that are in accordance with risk management standards. The risk management process can be further improved in the future by always paying attention to the current situation and uncertainty in the future, as well as from the existing organizational goals, so that risk identification within the organization can be more diverse and have more risk categories. This study examines the relationship between enterprise risk management (ERM) components and their effect on the effectiveness of the Risk Management Committee (RMC. This study specifically focuses on the role of risk awareness as an ERM component in the interactions of other formal ERM components.

2. Literature Review

2.1. The Concept of Risk Awareness in Enterprise Risk Management

2.1.1. Risk Appetite Framework

There is a comprehensive framework that is understood by all directors and commissioners, committees and risk management units as well as internal audit. There is a clear and unambiguous 'Risk Appetite Statement'; The existence of clear risk limits for each risk category, and risk aggregation either per category, per department, per region (which is relevant to the division of territory / authority in the organization), as well as at the overall level of the organization; Defining the roles and responsibilities of the board of directors and the board of commissioners in determining and approving the organization's risk appetite statement, and the process of adjusting it if the organizational context requires it. Risk appetite is embedded in the organization's business strategy and planning, as well as expressed in the budget with a measurable model. This will allow risk aggregation to be monitored and managed in such a way that the strategy can be executed within the agreed risk appetite corridor.

The Spread Of A Risk Aware Culture After the development of a risk culture, organizations need to pay attention to the extent to which the development of a risk awareness culture is spread and embedded throughout the organization. This is necessary so that the organization will be able to carry out the strategy that has been determined and stay within the corridor of risk appetite that has been defined previously. In spreading a risk-aware culture, there are at least four things that need to be observed and ensured that this is realized, namely: 1). Tone from the top: Commitment, ownership, active involvement, and consistent behavior of the board of directors and board of commissioners in managing organizational risk, especially related strategic and operational risks. 2). Accountability: Each employee understands the organization's core values, is capable of performing the roles expected of them, and is aware that they are accountable for their actions. 3). Pro-active communication: An environment that encourages open communication and employee involvement so as to stimulate a critical and positive attitude from their involvement in facing the challenges faced by the organization. 3). Incentives: Performance management and employee development are accompanied by an incentive system that encourages and strengthens the maintenance of risk management behaviors desired by the organization. In this case, incentives are designed to support the internalization of core and noble values and a risk-aware culture at every level of the organization. [5].

Risk management awareness; 1). Cultivate Risk Awareness (Risk Culture) in business to avoid the opportunity for incidents of Financial and Non Financial Losses. 2). Employees' awareness of every risk that exists at work can open an "Opportunity/Opportunity" for the occurrence of Fraud, either Internal or External. 3). By developing risk-aware behavior, the Company's personnel will carry out activities according to procedures / provisions within the Company and will continue to increase knowledge of the latest provisions / procedures / guidelines / SOPs, and be aware of changes in the surrounding environment (External & Internal). [2]

According to [2] Chairman of the Steering Committee of the Indonesia Risk Management Professionals Association (IRMAPA) from many references and empirical experiences, below are some indicators of a healthy and conducive risk-aware culture; 1). There is a strong risk management or governance framework so that all organizational decisions are made based on the risk considerations in

that framework. 2). There is a risk appetite statement that is understood by all people in the organization and is consistently used as a barometer in decision making. The organization is aware when a new risk arises that exceeds the risk appetite, and/or identifies activity above the established risk appetite so that the risk can be escalated as soon as possible. 3). There is a balance of 'Risk-Rewards' that is consistent with the organization's risk appetite, particularly in terms of organizational outcomes which are inherently linked to strategic risk; 4). The existence of a control system commensurate with the scale and complexity of the organization; 5). There is an increase in the quality of risk modeling, data accuracy, human resource capabilities and necessary equipment so that organizations are able to measure risk more accurately and justify the decision-making process to be more accountable. There is appropriate disciplinary action for limit violations or deviations from risk policies, and operational incidents.

Risk Management is an approach taken to risk by understanding, identifying and evaluating the risks of a project. Risk management is a process that identifies, measures, develops, selects and manages options to deal with these risks [6]. Appropriate risk management is risk management that applies future possibilities and is proactive from existing reactive. Thus, risk management does not only reduce the tendency of the occurrence of risk but also the impact that arises. ISO 31000 is an international standard issued by the International Organization for Standardization (ISO) to manage risk. This international standard can be used for various activities of individuals, groups and organizations. The use of this standard is general, that is, it can be used for various industrial sectors ([7]). ISO 31000 is divided into three parts, namely risk management principles, risk management framework and risk management process.

The success of implementing a risk culture of course also has an impact on maintaining the sustainability of the company (sustainability business) in the future. Increased awareness of risk management due to several corporate scandals and various surprising business failures and risk management is one of the biggest determinants of loan portfolio performance [7]. For some sectors, the formation of the RMC is still voluntary. However, awareness of corporate risk has emerged, which has resulted in the need for a special risk-focused board committee, namely the RMC. RMC establishes board-level support for risk appetite and strategy, develops “ownership” of risk management oversight by the board, and reviews corporate risk reports. The RMC is described as a sub-committee of the board of administrators providing education on enterprise risk management at the board level (KPMG 2001). Previous research has also shown that in controlling, detecting, and preventing risk, especially in terms of economic risk, RMC plays an important role [8]. Interestingly, there is positive evidence regarding the relationship between RMC and audit fees [9]; [10].

Clients demand high-quality audits when they want to demonstrate the credibility of financial statements ([11]; [12]. The Big 4 effect or the concept that Big 4 audit firms deliver better than non-Big 4 firms has been determined in several studies of public companies [13]. Big4 auditors are also more threat averse than smaller audit firms and can better deal with client pressure due to the fact that they have greater bargaining power. Furthermore, Big4 audit firms are more intensely involved in the threat of litigation and are more likely to be conservative, reporting roughly to protect their reputation [14]. As higher quality is likely to be rewarded, we also expect to observe an increase in audit fees.

There are several definitions of organizational/company risk management in general, including: Risk management is a comprehensive set of policies, procedures, owned by an organization, to manage, monitor and control an organization's exposure to risk [15]. Enterprise Risk Management is a comprehensive, integrated framework, to manage credit risk, market risk, economic capital, risk transfer, to maximize firm value [16]. Enterprise Risk Management (ERM) is a process, which is influenced by management, board of directors, and other personnel of an organization, is applied in strategic setting, and covers the organization as a whole, designed to identify potential events that affect an organization, manage risks in tolerance of an organization, to provide reasonable assurance regarding the achievement of organizational goals. [17]. Meanwhile, according to [18], risk management is a systematic and structured process supported by a Risk conscious culture to manage organizational Risk at an acceptable level in order to provide adequate confidence in achieving organizational goals.

RMC in this study was measured by a dummy variable. Where companies that disclose the establishment of a Risk Management Committee (RMC) and Separated Risk Management Committee (SRMC) in their annual reports are given a value of 1, and companies that do not disclose the formation of RMC and SRMC in their annual reports are given a value of 0. Independent commissioners in this study are measured by: the percentage of the number of independent commissioners compared to the total number of commissioners ([19]). The size of the board of commissioners in this study was measured by adding up all members who are members of the board of commissioners. A large board size can influence the formation of new committees ([20]; [21]. Auditor reputation is expressed by whether the auditor used by the company is included in the Big Four or not. Companies that use KAP Big Four as their external auditors are given a score of one (1) and otherwise are given a score of zero (0) [19]). Financial reporting risk in this study is measured by dividing the total receivables and inventories by the assets owned by the company [19]. Leverage is measured by dividing total debt by total assets [19]. Analysis Method The analytical tool used in this research is logistic regression analysis (logistic regression). Parameter estimation using Maximum Likehood Estimation (MLE). The overall feasibility test of the model using the chi-square statistical test is used based on the likelihood function. Likelihood L of the model is the probability that the hypothesized model describes the input data. Cox and Snell's R square is a measure that tries to imitate the size of R2 in multiple regression which is based on the likelihood estimation technique with a maximum value of less than 1 (one) so it is difficult to interpret. Cox and Snell's R square is a modification of the Cox and Snell coefficients to ensure that the value varies from 0 (zero) to 1 (one).

2.1.2. Method

The analytical method used in this study is logistic regression analysis (logistic regression). Parameter estimation using Maximum Likehood Estimation (MLE). Testing the total model using the chi-square statistical test which is used based on the probability function. Likelihood L of the model is the probability that the hypothesized model describes the input data. Cox and Snell's R Square is a measure that tries to imitate the size of R2 in multiple regression which is based on a probability estimation technique with a maximum value of less than 1 (one) so it is difficult to interpret. Cox and Snell,s R Square is a modification of the Cox and Snell coefficients to ensure that their values vary from 0 (zero) to 1 (one). The explained matrix shows the predictive power of the regression model to predict the truth of the existence of RMC and SRMC in a company. While the Multicollinearity test aims to test whether in the regression model there is a correlation between the independent variables (independent). The analysis used in this study is logistic regression analysis. While the Multicollinearity test aims to test whether in the regression model there is a correlation between the independent variables (independent). The analysis used in this research is logistic regression analysis. This study uses a sample of 149 observations from various companies indexed on the Indonesia Stock Exchange from 2019 to 2021 and uses ordinary least squares to prove our hypothesis.

3. Results and Discussion

This study documents several important results. First, in line with our hypothesis, the presence of RMC in a firm will increase the demand for risk assurance, which is illustrated by higher assurance costs from auditors, compared to other firms. Second, we also document that because Big 4 KAPs provide better audit quality, compared to non-Big 4, it is reasonable for them to charge higher fees. Third, we also document that higher audit fees for firms that have RMC will be lowered if they are audited by Big 4. This result is due to the favorable relationship between RMC and Big 4, in which each satisfies the needs of the other. Our Heckman two-stage regression test also shows robust results.

These results can provide several contributions, both from a theoretical and practical perspective. First, studies focusing on RMC are still limited compared to other governance mechanisms, particularly in Indonesia. Second, we extend the previous literature documenting the relationship between RMC and audit fees to be dominated by the characteristics of corporate governance mechanisms. Third, our results are also expected to contribute to practitioners by informing them that although owning an RMC may

lead to higher audit fees, if they are paired with a qualified auditor (Big 4), it will create a profitable collaboration. When the demand for a high level of assurance from the existence of RMC is provided with a sufficient level of assurance of supply by Big 4 auditors, audit fees can be minimized. Lastly, we also recommend regulators to mandate listed companies to have a special risk management committee as it provides demands for a better level of assurance, which ultimately enhances good corporate governance practices in Indonesia.

4. Conclusion

The results of this analysis show that when the demand for a high level of assurance from the existence of RMC is provided with a sufficient level of assurance of availability by the Big 4 auditors, then the audit fee can be minimized. The results of this study also recommend the regulator to mandate companies listed on the stock exchange to have a special risk management committee because it can provide responses to guarantee better risk management and ultimately improve the practice of good corporate governance in Indonesia.

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