







“Effect of enterprise risk management and corporate governance mechanisms on firm performance: Evidence from listed companies in Indonesia”

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EFFECT OF ENTERPRISE RISK MANAGEMENT AND CORPORATE GOVERNANCE MECHANISMS ON FIRM PERFORMANCE: EVIDENCE FROM LISTED COMPANIES IN INDONESIA

Abstract

This study aims to assess the influence of enterprise risk management and corporate governance mechanisms on companies' financial and market performance. This study's population is all companies registered on the Indonesia Stock Exchange in 2019. The purposive sampling method was used to select 664 listed companies to obtain a total sample of 242 companies. This study used a quantitative approach and analyzed data using Partial Least Square (PLS). The results showed that enterprise risk management ($p < 0.01$; $\beta = 0.28$) and corporate governance mechanisms ($p = 0.01$; $\beta = 0.14$) affect company financial performance. Enterprise risk management ($p < 0.01$; $\beta = 0.16$) affects company market performance, but corporate governance mechanisms ($p = 0.24$; $\beta = 0.05$) do not affect company market performance. This paper gives stakeholders a better understanding of the relationship between enterprise risk management, corporate governance, financial performance, and corporate market performance; consequently, it can serve as a resource for decision-making. For management, these results can be used as a guideline for taking appropriate steps in managing risk and implementing corporate governance to improve the company's financial and market performance.

Keywords

enterprise risk management, corporate governance mechanisms, financial performance, market performance, public listed companies, partial least square, quantitative study

JEL Classification

L25, G32, G34, L32

INTRODUCTION

Companies registered on the stock exchange have a complex and significant role in driving a country's national economic growth. This role is realized through job creation, innovation, value creation, and increasing capital market liquidity. Knowing how to improve company performance is necessary with the magnitude of the owned role.

Performance is an essential factor that concerns stakeholders, especially shareholders. This is because performance is a benchmark for shareholders to decide on continuing their investment. Therefore, management is responsible for achieving optimal company financial and market performance.

Companies continually encounter diverse risks while striving for optimal performance. This is due to the dynamic and unpredictable nature of the business environment. Consequently, it is essential for companies to effectively handle risks, particularly those inherent to their

industry (Susilo & Kaho, 2018). Companies need a holistic and structured risk management approach, recognized as enterprise risk management (ERM), to handle the risks. ERM is a more comprehensive, integrated, complex, and cross-sector risk management procedure (Dickinson, 2001; Hery, 2015; Kleffner et al., 2003). In Indonesia, registered companies are mandated to disclose the implementation of risk management in their annual report (following instructions of the Capital Market Supervisory Agency-BAPEPAM). Companies must integrate ERM into all their business activities to mitigate risks. The implementation of ERM as a method of risk mitigation has been proven to optimize performance (Florio & Leoni, 2017; Hoyt & Liebenberg, 2011; Yang et al., 2018).

Companies are not only responsible for implementing ERM but also for adhering to corporate governance (CG) for optimal performance. The principal objective of CG is to guarantee that public companies achieve their goals of enhancing shareholder value and safeguarding stakeholder interests (Rezaee, 2009). Companies that respect shareholder rights will be considered committed protectors of investors' interests. As a result, these companies will enjoy greater public trust, leading to a greater belief in the company and its products, which may result in increased sales, profits, and returns. This indicates that optimal performance will be obtained when a company implements corporate governance.

CG represents a structured system designed to manage a company professionally, guided by transparency, accountability, responsibility, independence, and fairness principles (Burak et al., 2017; Olannye & Anuku, 2014). CG is achieved through both internal and external CG mechanisms (Rezaee, 2009). Internal CG mechanism requires the involvement of an independent commissioner and various committees below it, as well as the audit committee, risk monitoring committee, CG committee, and remuneration committee, to ensure the company's stated objectives are achieved. Meanwhile, external corporate governance mechanisms are essential to ensure transparency and accountability in financial information produced by companies, achieved through the engagement of public accountants (Ahmed & Hamdan, 2015; Mahrani & Soewarno, 2018; Sarkar et al., 2012). The optimal implementation of the CG mechanism can improve company performance.

1. LITERATURE REVIEW AND HYPOTHESES

Firm performance refers to the evaluation of the results of a company in achieving the goals and objectives set. Firm performance provides an overview of how effectively the company runs its operations, achieves financial goals, manages risks, and provides value to stakeholders. Firm performance can be viewed from internal and external perspectives (Florio & Leoni, 2017; Gentry & Shen, 2010; Tho et al., 2021).

From an internal perspective, performance can be seen from financial performance. Financial performance pertains to a company's competence to effectively utilize and handle its wealth, as demonstrated by historical data in financial reports (IAI, 2007). Financial performance describes a company's internal financial condition, which can be measured using financial analysis tools such as ROA and ROE (Al-Homaidi et al., 2019; Guluma,

2021; Masood & Ashraf, 2012). These performance measures describe the company's performance in a certain period. Ultimately, the achievement of this performance serves as the foundation for management to enhance performance in the subsequent period and to provide bonuses or penalties. Besides the internal perspective, investors consider external perspectives, namely organizational performance, as seen from stock prices. From an external (market) perspective, the performance of publicly traded companies can be reflected in the market value of their shares (Baxter et al., 2013; Husnan, 2006).

To achieve optimal financial and market performance, companies need to adopt two critical factors: risk management and CG mechanisms. Risk management involves identifying and controlling all the company's risks, while governance mechanisms concentrate on decision-making, monitoring, and compliance within a firm (Akindele, 2012; Elbadry et al., 2015). Implementing these

two factors will lead the company toward its target and long-term objectives.

In carrying out its operational activities, the company cannot avoid the various risks it faces. Risk refers to uncertainty that can cause losses and the possibility of deviation from expectations that can cause losses (Djojosoedarso, 2008; Kasidi, 2010). A business established to generate profits is constantly exposed to various risks, such as investment risks, risks related to reputation, legal risks, operational risks, risks associated with compliance, and other risks. Therefore, the company must manage and control the risks. Meanwhile, enterprise risk management (ERM) is concerned with recognizing risks and formulating strategies to deal with them effectively (Cebenoyan & Strahan, 2004).

ERM is a concept in which companies fully manage risk. This is a new approach to risk management that previously operated in silos (traditional risk management), where different organizational units handled risks separately. ERM is comprehensive, integrated, complex, and cross-sectional. Because it provides an integrated approach to identifying and measuring enterprise risk, it is rapidly gaining traction as a powerful method for facilitating better decision-making. ERM can empower decision-makers to improve overall risk management practices (Beasley et al., 2005; Gordon et al., 2009).

Implementation of ERM by companies is a collaboration involving board members, management, and other staff members in the process that entails developing strategies, integrating them into business operations, identifying activities that may impact the company, managing those risks, maintaining alignment with the company's risk tolerance, and providing sufficient assurance for achieving company objectives (COSO, 2004). ERM implementation can be seen from four factors consisting of: 1) strategy, i.e., a plan of action designed to accomplish goals following the organization's mission; 2) operations, which refers to the successful and effective utilization of sources; 3) reporting or the accuracy of relevant reports; and 4) compliance or the observance of appropriate rules and regulations (COSO, 2004). The company's success in implementing the four ERM factors will impact performance.

Implementing ERM can direct organizations to minimize and control operational expenses (Soin & Collier, 2013). Applying ERM will make it easier for companies to minimize risks, reducing the costs incurred due to these risks. Reduction in company costs related to risk shows that the company has managed its risks. Thus, profits and returns will increase, and, consequently, the company's financial performance will also increase. Previous studies have confirmed this, such as Florio and Leoni (2017) and Yang et al. (2018), who showed that adopting ERM improves financial performance because firms that implement ERM can manage risks and minimize costs incurred.

ERM implementation is essential for management in determining acceptable risk levels (risk appetite). ERM must be implemented to develop a strategy for risk management. By identifying and determining risk appetite, ERM enables companies to report to investors about their risk profile and indicates that companies are committed to the risks they face (Glowka et al., 2021; Iswajuni et al., 2018; Yilmaz & Flouris, 2017). Companies implementing ERM are often considered more attractive to investors because they proactively manage risk and achieve company goals. Investors tend to be more interested in investing in companies with solid risk management because well-managed risks can enhance the accomplishment of the business strategy and the company's long-term growth. With increasing investor interest, the company's stock market performance can increase. ERM can improve an organization's market performance because its existence is intended to create value for investors. This is supported by Florio and Leoni (2017) and Hoyt and Liebenberg (2011).

Moreover, corporate governance (CG) refers to the organization's arrangement and procedures to confirm accountable, transparent, and responsible business conduct (International Finance Corporation, 2018). According to OECD (2015), corporate governance involves interactions and connections among management, investors, the board of directors, and other stakeholders. CG includes a set of mechanisms to ensure that management (referred to as "agents") operates the organization in the best interests of one or more stakeholders (known as "principals"). These stakeholders include investors, lenders, vendors, clients,

staff, and other entities involved in interactions when the company conducts its business activities (Goergen & Renneboog, 2006).

CG consists of two mechanisms: internal and external. The internal CG mechanism aims to direct, manage, and monitor the company's operations to create long-term value for all parties involved. Meanwhile, external CG mechanisms are intended to oversee the company's activities and outcomes, aligning the interests of internal stakeholders such as management, executive board, supervisory board (board of commissioners), and employees, with those of outside parties like shareholders and other stakeholders. Internal CG mechanisms include the board of directors, the board of commissioners and their subordinate committees, internal audit, management, and internal control functions. External CG mechanisms include the capital market, labor market, government regulations, court decisions, and best practice investor activities (Rezaee, 2009).

In the present study, the CG mechanisms are independent commissioners and risk oversight committees (internal CG mechanisms) and independent auditors (external GC mechanisms). The independent commissioners and the risk oversight committee are part of the board of commissioners and their subordinate committees. Meanwhile, an independent auditor is a manifestation of compliance with government regulations that require companies that meet specific criteria to be audited.

The presence of an independent commissioner who is competent and has high integrity will contribute to strategic decision-making and ensure that company management can use resources efficiently. The existence of an effective risk oversight committee will assist companies in reducing costs arising from business risks. Furthermore, independent auditors can detect errors or abuse in preparing financial statements and improve these financial reports to be accountable and reliable. Implementing an effective CG mechanism will benefit the firm's financial performance by enhancing transparency, accountability, and resource utilization. Irma et al. (2015) and Mahrani and Soewarno (2018) demonstrated the effect of CG mechanisms on firm financial performance.

Furthermore, independent commissioners who are competent and have high integrity can minimize bureaucratic problems between management and stakeholders. Independent commissioners oversee the board of directors' performance to confirm that the company fulfills investors' expectations. A convincing risk oversight committee can minimize risk and increase investor interest in the company because it can manage risk well. Moreover, the existence of an independent auditor gives confidence to investors that the company's financial statements are accountable and reliable. Implementing an effective CG mechanism will signal to investors that the company is being managed appropriately, which will affect market performance. Irma et al. (2015) and Mahrani and Soewarno (2018) demonstrated the effects of CG mechanisms on market performance.

This study assumes that if ERM is implemented in a company with an excellent corporate governance environment, its performance will also increase. Numerous studies have investigated an association between ERM and performance (Candy, 2021; Florio & Leoni, 2017; Hoyt & Liebenberg, 2011; Rahman et al., 2022; Yang et al., 2018) as well as that between the CG mechanisms and firm performance (Irma et al., 2015; Mahrani & Soewarno, 2018; Mohd-Sanusi et al., 2017; Sarkar et al., 2012). Nevertheless, only some academic investigations have examined the impact of ERM and CG in the context of financial and market performance. According to preceding research that examines the correlation between ERM implementation, CG, and firm performance, the conclusions are still contradictory (Anatasya & Novita, 2019; Dwiputri, 2019; Mungawanah, 2018; Quon et al., 2012).

Mungawanah (2018) failed to establish research on the consequences of ERM implementation on the performance of service companies registered on the Indonesia Stock Exchange. Quon et al. (2012) examined non-financial registered companies on the Toronto Stock Exchange but could not demonstrate the ERM impact on performance. The findings of previous studies have yielded conflicting results regarding the impact of CG mechanisms on performance. In Indonesia, neither Anatasya and Novita (2019) nor Dwiputri (2019) demonstrated a relationship between CG mechanisms and firm performance.

Anatasya and Novita (2019), Dwiputri (2019), and Mungawanah (2018) have produced contradictory findings. Moreover, research on ERM, governance, and performance in Indonesia focuses mainly on specific industrial sectors (Anatasya & Novita, 2019; Dwiputri, 2019; Irma et al., 2015; Mahrani & Soewarno, 2018; Mungawanah, 2018). Thus far, few studies have focused on ERM, corporate governance, and performance across all industry sectors. However, all companies, regardless of the type of industry, have risks and require good corporate governance (Susilo & Kaho, 2018), raising the importance of reexamining the relationship between the implementation of ERM, CG mechanisms, and organization performance, especially in Indonesia.

From the preceding explanation, ERM can positively influence the company's financial performance and market performance because it can mitigate risks, further reduce costs, and ultimately increase profits and share prices. Implementing the CG mechanism will streamline the monitoring and oversight functions of achieving predetermined performance, both financial and market performance. This study intended to analyze the influence of ERM and CG mechanisms on the financial and market performance of Indonesia Stock Exchange (IDX)-registered companies in 2019. Therefore, this study proposes the following hypotheses:

H1a: Enterprise risk management positively influences financial performance.

H1b: Enterprise risk management positively influences market performance.

H2a: Corporate governance mechanisms positively influence financial performance.

H2b: Corporate governance mechanisms positively influence market performance.

2. METHODOLOGY

This study uses data from the annual report of companies registered on the Indonesia Stock Exchange (IDX) in 2019. The selection of samples was conducted using a purposive sampling method. This method involves choosing research samples based on specific criteria, as Sugiyono (2014) outlined. The following are the criteria for selection: (1) companies listed on IDX in 2019, (2) these listed companies publish their annual reports on IDX, (3) companies published their 2019 annual reports in the rupiah currency, and (4) the company has complete data regarding the variables used in the study and disclosed in the annual report. Finally, 242 companies from a population of 664 companies that have been registered on IDX in 2019 met the criteria of sampling (Table 1).

This study analyzed data using version 6.0 of the Warp-PLS software for structural equation modeling partial least squares (SEM-PLS). When utilizing SEM-PLS, the data type is considered. Hair et al. (2014) suggest that the employment of SEM-PLS is suitable when analyzing finance ratios or other data irregularities of a similar kind.

The research variables are measured using several measures. Performance variables are measured from two perspectives (Florio & Leoni, 2017; Gordon et al., 2009). The internal perspective describes an organization's historical performance (financial performance) assessed by ROA and ROE. In contrast, the external perspective describes the expectations of prospective investors concerning an enterprise's stock value, as assessed by Tobin's Q (market performance) (Florio & Leoni, 2017).

ERM variables are measured using Gordon et al.'s (2009) ERM Index, which was devised following the four main goals for ERM implementation: strategy, operations, reporting, and compliance of COSO (2004). Initially constructed by Gordon

Table 1. Research sample

Criteria of sampling	Total Companies
Companies registered on IDX in 2019	664
Listed companies do not publish annual reports on IDX	(83)
Listed companies published 2019 annual reports using other than rupiah currency	(76)
Companies have incomplete information related to the variables	(263)
Total sample	242

et al. (2009), the ERM measurement is adjusted to accommodate the data availability in the annual reports of registered companies in Indonesia. Gordon et al.'s Index (2009) has been adjusted for the availability of these data (Liem, 2018).

This study employs three indicators to measure CG mechanisms: the existence of a risk oversight committee, an independent commissioner, and the competence level of external auditors. A score of 10 is assigned if the firm has a risk oversight committee for measuring. A firm with no risk oversight committee will be assigned a score of 5 because the commissioner performs risk oversight rather than the committee in several organizations without a risk oversight committee. Independent commissioners refer to the number of independent commissioners in the company (Husaini & Saiful, 2019). The assessment of external auditors' quality is accomplished by assigning a score of 1 to auditors affiliated with the Big Four and a score of 0 to auditors not associated with the Big Four (Golshan & Rasid, 2012; Lechner & Gatzert, 2018).

This study considers four control variables that have been shown to affect performance, including company size, type of industry, complexity of the business, and the Chief Risk Officer (CRO) within a company. According to Masmoudi and Ben Arab (2018), there is a greater tendency for larger companies to recognize ERM compared to smaller companies, attributed to the nature, timing, and scale of potential risks a company encounters that undergo variations as it grows and evolves. Florio and Leoni (2017) and Husaini and Saiful (2019) used firm size as the control variable. The firm size is determined by taking a Ln (natural logarithm) of the total assets. The type of industry is the sec-

ond variable. Each industry has different risks. The inherent risk of specific sectors is greater than that of others. Florio and Leoni (2017) used industry type as a control variable when testing ERM's influence on performance. It was measured based on Lechner and Gatzert's (2018) measurements. The third control variable is business complexity. It is related to the existing business segments in the company. When more business segments are owned, operational activities will increase, making the company more vulnerable to risk (Gordon et al., 2009). A company's complexity assessment is based on Lechner and Gatzert's (2018) measurement. The last control variable is the Chief Risk Officer (CRO). CRO is an individual who is responsible for managing risk. Its existence influences firm performance, as proven by Florio and Leoni (2017).

3. RESULTS

This study implements SEM with Warp PLS 6.0 for the analytical method. In SEM analysis, descriptive statistics, an outer model, an inner model, and a path analysis are included.

Table 2 shows that the mean of ROA and ROE are 0.03 and 0.06, showing that companies in the sample have a low intermediate level of profitability. Tobin's Q average is 1.7. The average ERM implementation of 1.22 indicates a positive number. The average number of risk oversight committees is 6.4 (> 5), meaning that more than fifty percent of the companies sampled for this study already have risk oversight committees, and the average number of independent commissioners is 1.8 (rounded off) n 2, demonstrating that the

Table 2. Descriptive statistics

Variable	Minimum	Maximum	Mean	Standard Deviation
ROA	-0.4014	0.4163	0.0314	0.0854
ROE	-1.0414	1.9391	0.0624	0.2511
Tobin's q	0.0022	16.2633	1.7528	2.1158
ERM	-0.2636	10.6245	1.2241	1.4985
Risk Oversight Committee	5.00	10.00	6.4256	2.00
Independent Commissioner	1.00	6.00	1.8017	0.9237
Independent Auditor	0.00	1.00	0.3347	0.4719
Size	24.451	34.887	29.045	1.9323
Industry Type	0.00	1.00	0.2355	0.4243
Complexity	1.00	7.00	2.2851	1.5176
Chief Risk Officer (CRO)	5.00	10.00	6.7149	2.3735

Table 3. Correlation among latent variables with square roots of AVEs

	ERM	CG Mechanisms	Size	Industry and Complexity	CRO	FP (ROA and ROE)	MP (Tobin's q)
ERM	(1.000)	0.187	0.254	-0.188	0.080	0.249	0.074
CG Mechanisms	0.187	(0.740)	0.711	0.490	0.561	0.163	-0.077
Size	0.254	0.711	(1.000)	0.424	0.484	0.149	-0.198
Industry and Complexity	-0.188	0.490	0.424	(0.804)	0.487	-0.035	-0.143
CRO	0.080	0.561	0.484	0.487	(1.000)	-0.009	-0.197
FP (ROA and ROE)	0.249	0.163	0.149	-0.035	-0.009	(0.898)	0.241
MP (Tobin's q)	0.074	-0.077	-0.189	-0.143	-0.197	0.241	(1.000)

Note: FP = Financial Performance; MP = Market Performance; CRO = Chief Risk Officer.

average amount of independent commissioners in registered companies is two. The quality of the external auditor has an average of $0.33 < 0.5$. Only 33 percent of the companies assessed in the current research have been audited by the Big Four.

Outer model testing assesses the validity and reliability of variables. The validity test encompasses two stages: the convergent validity test and the discriminant validity test, as Ghazali and Latan (2014) outlined. The evaluation of convergent validity can be obtained by analyzing the load factor value. The load factor values in this study ranged from 0.672 to $1.000 > 0.50$. Subsequently, convergent validity was also observed in the average variance extract (AVE) value, ranging from 0.548 to $1.000 > 0.50$, indicating that all constructs in this study are valid (Chin, 1998; Hair et al., 2014). The discriminant validity test was performed by comparing the square root of each construct's AVE value to its correlation or construct with other constructs.

Table 3 shows that the model has acceptable discriminant validity (Ghozali & Latan, 2014) because

each construct's AVE square root value is higher than the correlation value between the construct and the other constructs in the model.

The measurement of reliability considers Cronbach's alpha or the composite reliability value. The composite reliability value of this study is $0.783-1.0 > 0.70$, which is 0.892 (financial performance), 1.0 (market performance), 1.0 (ERM), 0.783 (CG mechanisms), 1.0 (size), 0.786 (industry and complexity), and 1.0 (CRO), indicating that all constructs are reliable (Ghozali & Latan, 2014).

The inner model is assessed by evaluating the R-squared value. Figure 1 reveals that the R-squared variable of financial performance (ROA and ROE) is 0.14, indicating that ERM and CG mechanisms influence 14% of the financial performance variable. In contrast, variables beyond the scope of this study influence the remaining percentage. The R-squared value for the market performance variable in this study (Tobin's q) is 0.11, indicating that ERM and CG mechanisms influence 11% of the market performance variable. Other variables beyond the scope of the survey affect the rest of it.

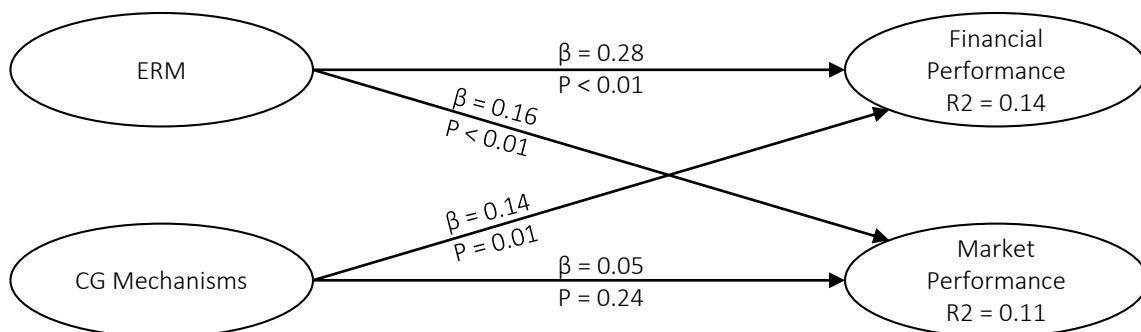
**Figure 1.** Path analysis model

Table 4. PLS path analysis coefficient results

Path	Path Coefficient	P-value	Decision
ERM → Financial performance	0.28	<0.01	Accepted
ERM → Market performance	0.16	<0.01	Accepted
CG mechanisms → Financial performance	0.14	0.01	Accepted
CG mechanisms → Market performance	0.05	0.24	Rejected

Note: P-value < 0.05 (hypothesis is accepted), P-value > 0.05 (hypothesis is rejected).

The results of hypotheses testing are obtained by testing the probability values, namely the p-value and path coefficients with WarpPLS. Statistics are shown in Figure 1 and Table 4.

Table 4 shows the results of hypothesis testing. ERM positively influences financial ($\beta = 0.28$, $p < 0.01$) and market performance ($\beta = 0.16$, $p < 0.01$). In addition, CG mechanisms positively influence financial performance ($\beta = 0.14$, $p = 0.01$), but CG mechanisms do not affect market performance ($\beta = 0.05$, $p = 0.24$). In this study, H1a, H1b, and H2a are accepted, but H2b is rejected.

4. DISCUSSION

These results demonstrate the role of ERM and CG mechanisms in improving firm performance. This study reveals that ERM positively impacts financial performance (H1a). Adopting ERM enables companies to identify potential risks and minimize costs resulting from those risks. When a company can reduce its expenses, it will increase its financial performance by generating enormous profits. These findings follow Florio and Leoni (2017) and Yang et al. (2018).

The finding shows ERM implementation positively and significantly affects market performance (H1b). ERM can signify to investors that the organization is committed and responsible for the organization's

risks so that managed risks will result in maximum profit for the organization and ultimately maximize share prices. This study's findings validate Florio and Leoni (2017) and Hoyt and Liebenberg (2011), who demonstrated a positive correlation between ERM and market performance.

Furthermore, the study's findings indicate that corporate governance mechanisms significantly positively affect financial performance (H2a). The results align with Irma et al. (2015) and Mahrani and Soewarno (2018). The existence of oversight by the risk oversight committee and independent commissioners in the corporate governance mechanism ensures that the risk management process and other business activities run smoothly. In addition, an independent audit of the corporate governance mechanism will ensure the accountability of financial reporting, enhancing the trustworthiness of the reported performance in the financial statements. Therefore, good corporate governance will lead to optimal financial performance.

This study failed to prove that corporate governance mechanisms affect market performance (H2b). This is due to several external factors, such as economic conditions, regulatory changes, and political events, which affect the relationship between the two variables. The findings of Anatasya and Novita (2019) and Dwiputri (2019) in Indonesia also found that corporate governance mechanisms do not affect market performance.

CONCLUSION

This study aims to analyze the impact of enterprise risk management and corporate governance mechanisms on the financial and market performance of all companies registered on the Indonesia Stock Exchange (IDX). This paper achieved almost all its research objectives. The research data analysis demonstrates that implementing enterprise risk management yields significant positive effects on firm performance, both financial and market. Enterprise risk management facilitates comprehensive risk management, reducing risks and improving firm performance. Furthermore, the results of this study also show that implementing corporate governance mechanisms has a positive effect on the company's financial performance.

Implementation of corporate governance mechanisms enhances operational efficiency and fosters stakeholder confidence. When these three corporate governance mechanisms (risk oversight committee, independent commissioner, and external auditor) synergize effectively, the company is better positioned to achieve optimal performance.

Studying financial and market performance is both exciting and essential for further research. Future research may consider other variables related to performance, such as competitive advantage as a mediating variable on performance and financial literacy as a moderating variable. This will broaden the understanding of financial performance and market performance.

AUTHOR CONTRIBUTIONS

Conceptualization: Rita Anugerah, Ria Nelly Sari.

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Formal analysis: Rita Anugerah, Nadila Rizki Ariyanto, Ria Nelly Sari.

Funding acquisition: Rita Anugerah.

Investigation: Rita Anugerah, Nadila Rizki Ariyanto.

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Project administration: Rita Anugerah, Nadila Rizki Ariyanto, Ria Nelly Sari.

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