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THE EFFECT OF MANAGERIAL ABILITY ON RISK REPORTING IN INDONESIA: EVIDENCE FOR ENERGY AND PALM OIL COMPANIES

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Abstract:

Risk reporting is a critical aspect of risk management for energy and palm oil companies as they address complex industry challenges. This article examines the influence of management ability on risk reporting in both industries. The results show that managerial ability has an impact on credit risk assessment, risk behavior, financial reporting, timeliness, stock price crash risk, and tax results. Management's discretionary disclosure behavior allows it to exercise subjectivity in determining both the content and manner of disclosure. This research identifies a risk reporting factor associated with competent managers that indicates their desire to disclose risk-related information in annual reports in highly competitive markets. This work complements previous research on competent managers in competitive markets and provides valuable insights into the risk reporting practices of highly skilled managers in such environments.

Keywords: *Managerial Ability, Risk Disclosure, Risk Reporting, Voluntary Disclosure, Risk Behavior*

1. Introduction

As businesses operate in a complex and dynamic environment, the ability to effectively manage risks becomes crucial for their success and sustainability (Gonidakis et al., 2020). Managers play a vital role in identifying, evaluating, and reporting risks to stakeholders. Risk reporting is a crucial aspect of risk management for energy and palm oil companies, as they navigate complex challenges in the industry (Leopoulos et al., 2006). The absence of adoption of methods to prevent losses in the form of financial and non-financial hazards demonstrates Indonesia's poor degree of risk management knowledge (Bulutoding, 2021). The sophistication of organizations' risk management practices determines their risk management maturity level and their ability to effectively handle risks in projects (Salawu, 2015). Energy and palm oil companies are under pressure to manage risks effectively, particularly as they transition to cleaner energy sources and face regulatory pressure.

According to the 2022 Global Risk Survey by PwC, energy companies are expressing positivity towards revenue growth. The survey reveals that 82% of oil and gas respondents anticipate their organization's revenues to increase in the coming year. Many companies are projecting revenue growth between 6% and 15% (PwC, 2022). It is important for energy companies to be mindful of geopolitical risks, especially in the upstream sector, as supply chain uncertainties and geopolitical issues like the war in Ukraine and sanctions against Russia have underscored the need for resilient supplies.

Exiger (2022) highlights the critical importance of sourcing components and services ethically, especially from countries that adhere to human rights and environmental regulations. This is particularly relevant for energy companies, where non-compliance with ESG standards and cybersecurity risks pose significant threats. The repercussions of such non-compliance can range from reputational damage to substantial financial losses. Deloitte underscores the significance of enterprise risk management (ERM) in the energy industry, where the complexity of emerging risks necessitates a comprehensive and integrated approach. However, a notable challenge is the lack of standardized ERM frameworks specific to this sector, leading to inconsistencies in risk assessment and management (Deloitte, 2022)Deloitte's benchmark survey on ERM, which garnered responses from over 100 energy and resource companies worldwide, provides valuable insights into the maturity levels of companies' ERM activities and emerging trends. Key findings suggest a diverse range of practices and readiness levels, reflecting the evolving nature of risk management in this sector, especially in the post-COVID-19 landscape.

Hindsight Consultancy's recent report, titled "Identifying Nature-Related Financial Risks and Opportunities in Palm Oil Supply Chains" (Global Canopy, 2022), serves as a pivotal study in understanding the financial implications of environmental practices within the palm oil industry. This report delves into the transition pathways for managing nature-related financial risks and opportunities, using the palm oil sector as a critical case study. Its findings underscore the urgency of addressing these financial risks, highlighting their potential impact not only on the palm oil industry but also on the broader financial markets. This research is particularly timely, given the increasing global focus on sustainable and eco-friendly business operations.

Commissioned by Global Canopy, a leader in advocating for transparent and sustainable practices in supply chains, these independent reports are instrumental in supporting the Taskforce on Nature-related Financial Disclosures (TNFD). They align with and augment the pilot testing of the TNFD beta framework, offering actionable recommendations for mitigating nature-related financial risks. Significantly, the funding from the UK government for these reports underscores a growing recognition among global stakeholders of the need to address environmental risks in sectors like palm oil. This backing reflects a commitment to integrating sustainable practices into financial decision-making, a crucial step towards achieving broader environmental and economic objectives.

Risk reporting in energy and palm oil companies is essential to effectively manage the complex challenges they face in the industry. From revenue growth expectations to regulatory pressures, cybersecurity risks, and geopolitical threats, companies in both sectors must adopt comprehensive risk management approaches and leverage technology solutions to ensure accurate and reliable risk reporting.

The purpose of this paper is to examine the impact of managerial abilities on risk reporting in energy and palm oil companies. Risk reporting plays a crucial role in both industries as they navigate complex challenges and strive for transparency and accountability. By analyzing the managerial abilities required for accurate and effective risk reporting, this paper will highlight the importance of skills such as analytical thinking, problem solving, strategic thinking, financial literacy, communication, and time management. By understanding the role of these abilities in risk reporting, energy, and palm oil companies can enhance their risk management practices and make informed decisions to mitigate risks.

This research contributes significantly to the existing literature. As mentioned above, the accounting literature on risk disclosure is still relatively underdeveloped, particularly in the context of Indonesia. Therefore, this study takes an innovative approach by investigating the connection between managerial competence and the willingness to disclose risk-related information. The findings reveal that managers make strategic decisions about whether to disclose risk reporting, considering the competitive landscape of the industry. In addition, competent managers show a greater understanding of both the firm's environmental impact and the landscape of the industry. This increased awareness enables them to make well-informed decisions about whether to disclose carbon emissions data. Our study complements the findings of (Lee et al., 2023) who report identified a significant link involving competent managers in a competitive market but focused on disclosing carbon emissions information. Our research identifies a risk reporting factor related to competent managers, indicating their inclination to disclose information in annual reports in highly competitive markets.

This study addresses the gap in the accounting literature on risk disclosure in the Indonesian context. Introduces a fresh perspective by exploring the relationship between managerial competence and the decision to disclose risk-related information. Research demonstrates that competent managers strategically consider the competitive industry landscape when making decisions about risk reporting. Moreover, they have a deep understanding of the firm's environmental profile and the industry's conditions, enabling more tailored and strategic decisions about disclosing carbon emissions data. This work complements previous research on competent managers in competitive markets and provides valuable insight into risk reporting practices among high-ability managers in such environments.

2. Literature Review and Hypothesis Development

2.1 Managerial Ability

Managerial ability is a critical factor in the decision-making process and overall performance of a company.(S. Chen et al., 2023) that is, mean managerial ability plays a vital role in coordinating and leading various departments, ensuring effective communication, and optimizing resources to achieve organizational goals. Competent managers can inspire and motivate employees, fostering a positive work culture, and enhancing productivity. On the other hand, inadequate management ability can lead to poor decision-making, poor resource management, and diminished performance.

Managerial ability is closely related and measurable through financial reports, as explained by (Xing et al., 2023) the research stated that managerial ability is significantly and positively correlated with the complexity of financial reports. After controlling for various characteristics of the firm, such as financial and operating complexity, it was observed that managers with higher abilities tend to increase the complexity of financial reports strategically. This effect is particularly stronger in companies that have a significant interest in safeguarding proprietary information. In a few studies by Ting et al. (2021), the findings indicated that management ability has a beneficial impact on business performance, while capital structure acts as a buffer between management ability and firm performance. It has been found that management ability measurement methods play a significant role in understanding the impact of managerial ability on enterprise development. A study exploring the relationship between management skills and business performance used data from Chinese A-share listed companies from 2007 to 2019. Xing et al. (2023) discovered that managerial skill has a substantial positive link with the performance of publicly traded enterprises. In addition, higher compensation incentives for management were found to improve the positive correlation between managerial ability and firm performance. This research highlights the importance of managerial ability in influencing the performance of listed companies in the Chinese A-share market.

In investigating the impact of the CEO's managerial ability on the overall sustainability practices, Khan et al. (2022) indicate that the CEO's managerial ability positively influences the environmental, social, and economic sustainability practices of the firms. The study supports the link between management skills and sustainability, highlighting the impact on each sustainability pillar individually. The control, configuration, and reconfiguration of firm resources are under the control of a manager who can use them in a way that generates a competitive advantage. This argument is also supported by (García-Sánchez et al., 2019) that the control, configuration, and reconfiguration of company resources are under the control of a manager who can use them to gain a competitive advantage.

There are various theoretical possibilities regarding the relationship between managerial ability and firm risk taking, which motivated the empirical investigation conducted by (Yung & Chen, 2018). The study delves into the impact of managerial ability on corporate decisions and firm value. Given the significant role of managerial ability in shaping corporate outcomes, comprehending its effect on firm value is paramount. The investigation aims to shed light on the intricate interplay between managerial ability and its implications for firm performance and decision-making processes.

Upon a brief examination of the definitions adopted in the reviewed articles, it became evident that managerial ability had varied interpretations before 2012. However, since 2012, as observed in the work of (Anggraini & Sholihin, 2021), these interpretations have become more uniform. (Demerjian et al., 2012) conducted a study that uncovered evidence indicating that more capable managers utilize the proceeds of equity financing more effectively, thereby mitigating previously recorded negative future abnormal returns. This finding underscores the essential nature of understanding the impact of managerial ability on firm value. The investigation seeks to illuminate the intricate interplay between managerial ability and its consequences on firm performance and decision-making processes.

Companies that possess enhanced managerial skills are expected to effectively match their resources with the operational context, leading to increased internal profitability (Vito et al., 2022). This becomes especially crucial when growth prospects are present, as it allows a seamless flow of investments, particularly if these enterprises encounter challenges in securing external funding (Andreou et al., 2017). The extent of managerial competence held by an acquiring company (namely, the strategic expertise, abilities, and background of the senior management team) significantly contributes to attaining greater synergy advantages through acquisitions (Cui & Leung, 2020). Due to less knowledge asymmetry about business value between insiders and external markets, more managerial skill can act as a guarantee, reaffirming a company's credibility to external markets and lowering capital costs (Chemmanur & Paeglis, 2005). This implies that organizations with strong management experience are prone to effectively coordinate resources, resulting in increased internal profitability.

2.2 Disclosure of risks in annual report

Several accounting standard-setters and regulatory agencies have put in place procedures to improve risk reporting. The International Accounting Standards Board (IASB), for example, has issued three standards focussing on the presentation and measurement of financial instruments, including IAS 32, 39, and IFRS 7. Similarly, the Financial Accounting Standards Board (FASB) has taken a similar position. In addition, the Securities and Exchange Commission (SEC) implemented disclosure rules for market risk related to derivative products in 1997. The research conducted by (2013) recommended that publicly traded companies provide meaningful information about the numerous risks they may face. The goal is to help users identify the corporate risk profiles of these organizations. Similarly, the CICA issued an interpretive statement on risk disclosures in management discussion and analysis (MD&A) in May 2006. (Diamond et al., 2022) According to the article, organizations should consider upgrading their risk factor disclosure to reflect changes in global economic conditions, such as volatile equity capital markets, which can harm a company's business, revenues, and profitability. Additionally, the impact of COVID-19 on risk disclosure cannot be ignored. While the pandemic is still ongoing, companies are urged to review their existing COVID-19 risk factor disclosure and update it based on current risks (WhiteCase, 2022). Companies must take into account risks associated with the appearance of new virus strains, the availability of effective treatment, and possible regulatory and macroeconomic implications. Companies must assess how these risks specifically affect their operations and future prospects.

The economic consequences of risk disclosure are both informational and risk aspects (Li et al., 2019). A crucial finding is that organizations prioritize the disclosure of information about past and present dangers over future threats. Directors are hesitant to declare whether future risks will have a positive or negative impact when presented. Furthermore, when reporting on risk, directors have a proclivity for self-justification; that is, they feel forced to assign risks with poor results to external occurrences (Linsley & Shrives, 2006). Therefore, risk disclosure has significant economic consequences, encompassing both informational and risk-related aspects. The findings reveal that companies prioritize the disclosure of information on past and present risks over future risks. Additionally, when revealing future risks, directors are reluctant to specify whether the impact is likely to be positive or negative. Another notable observation is that directors tend to justify risks with negative outcomes by attributing them to external events. This highlights the complexity and strategic considerations involved in risk reporting by companies.

(Petrenko et al., 2016) have explored the psychological qualities and experiences of top executives to understand organizational behavior and outcomes, while an organization's social responsibility projects and overall external perceptions often attract attention in the form of praise or criticism, not only directed towards the company but also frequently more directly towards its management. (Mutlu et al., 2021) expressed the viewpoint that CEO positions held in external boards could lead to a potential reduction in the managerial efficiency of the board, although the extent of this outcome could vary based on the traits of the hosting board. (Dhaliwal et al., 2011) assert that standalone annual reports have the potential to gradually provide valuable information for investors to assess the long-term sustainability of the company. The importance of the psychological qualities of top executives, CEO positions in external boards, and standalone annual reports in understanding organisational behaviour, managerial efficiency, and long-term evaluation by investors. Social responsibility and external perceptions also strongly impact views and responses toward the company and its management.

Numerous investigations confirm that both company size ((Amran et al., 2008) and industry (Abraham & Cox, 2007) play significant roles in determining the extent of risk disclosure. However, (Rajab & Schachler, 2009) (Beretta & Bozzolan, 2004) presented contrasting findings. Previous research yields inconclusive results on the relationship between leverage and risk reporting. (Elzahar & Hussainey, 2012) discover no discernible influence of board size, role duality, board composition, and audit committee size on risk disclosure in interim reports of UK companies. In the final, (Dobler et al., 2011) present mixed results regarding the correlation between company risk and risk disclosure.

2.3 Hypothesis development

The management ability and its impact on risk reporting have been studied in the literature. These studies have examined various aspects of managerial ability and its relationship with risk reporting, including credit risk assessment, timeliness of financial reporting, risk of stock price crash, and tax results. (Bonsall et al., 2017) investigates the impact of managerial skill on credit risk assessment and discovers a relationship between management ability and credit risk by finding that higher management ability is related to decreased variability in future earnings and stock returns. Evidently, higher managerial skills are related to higher credit ratings and lower credit risk assessments, thus, suggesting that managers' ability to identify default risk is valued by debt market players.

Based on empirical evidence from Saudi enterprises, (Alzugaiby, 2022) shows firms managed by competent executives take less risk, as shown by the negative connections between managerial ability and risk-taking indicators. This adds to the limited evidence on the direct impact of management skill on business risk taking. Examining the correlation between managerial skill and financial reporting timeliness, Abernathy et al. (2018) claims higher managerial ability is associated with a shorter delay in the earnings announcement, a shorter delay in audit reports, and a lower probability of late SEC filing, indicating that managerial ability has a positive influence on financial reporting timeliness. Accordingly, competent managers are better able to maintain the systems and procedures that underpin the company's financial information.

The impact of managerial ability on the risk of a stock price crash is examined in a study by (Park & Jung, 2017). The authors discover a negative relationship between managerial ability and the likelihood of a stock price collapse, implying that managers with greater ability disclose more voluntary disclosure to indicate their competence, lessening the future danger of a stock price crash. However, the authors discover that when there is a material deficiency in business internal controls, strong investor belief heterogeneity, and high information asymmetry, the joint effect of management overconfidence and managerial ability on firms' crash risk is more pronounced.

The role of managerial ability in corporate tax outcomes is investigated in a study by (Saragih & Ali, 2023a). The study finds that firms with higher managerial ability have relatively greater tax avoidance practises and lower tax risk after the adoption of XBRL. Another study by (Saragih & Ali, 2023b) reports a negative and statistically significant association between managerial ability and company tax risk, demonstrating that managerial ability has a negative influence on tax risk. These findings imply that managerial aptitude influences company tax outcomes. Overall, the literature on managing ability and risk reporting shows that managing ability has an impact on credit risk assessment, risk taking behaviour, financial reporting timeliness, stock price crash risk, and tax results. These studies emphasise the need to take managerial competence into account when analysing and evaluating various aspects of risk reporting.

When managers need to convey confidential information to external investors, they face a crucial choice regarding its dissemination. This research centres on risk disclosure, which plays a key role in explaining management's discretionary disclosure behaviour, as it allows them to exercise subjectivity in determining both the content and method of disclosure.

Hypothesis: Highly skilled managers are more likely to disclose risk information in the management report

3. Research design and sample description

3.1 Research Model

3.1.1 Measurement of managerial ability

The primary focus of this study centres around managerial competence, which has been derived from Lee et al. (2023) suggestions. The specific methodology employed is outlined below. Initially, we evaluate a firm's efficiency by analysing resource input and output using Data Envelopment Analysis (DEA). Among the key contributing resources to profit generation are the cost of goods sold (Cogs), sales, general, and administrative expenses (Sga), tangible assets (Ppe), and intangible assets (Intan). Meanwhile, the output is quantified through sales (Sales). The assessment of firms' relative efficiency is captured using the DEA formula as follows.

$$Max\theta = \frac{Sales}{v1Cogs + v2Sga + v3Ppe + v4Intan}$$

$Where, Sales = Firm; s\ sales; Cogs = Cost\ of\ Goods\ Sold;\ Sga = Sales, general,$
$and\ administrative;\ Ppe = Property, Plant, and\ Equipment;\ Inta = Intangible\ Assets$

The DEA estimate offers an efficiency measure that applies to both the company and its management. Skilled managers can predict trends regardless of company size, and capable managers in larger firms are better at negotiating with suppliers and stakeholders.

Companies that have a score less than 1 need to improve their sales performance or reduce costs in order to achieve greater efficiency. In cases where a company's score is lower than 1, it indicates that there is room for improvement in its operational efficiency. This can be achieved by increasing revenue generated through sales activities or by optimising cost management strategies. By implementing measures to enhance sales growth or streamline cost structures, such companies can work toward achieving a more favourable operational position, aligning their performance more closely with industry standards and best practises. It is important for such companies to address this efficiency gap in order to enhance their overall competitiveness and potentially achieve higher profitability in the market.

The measurement of managerial ability has been adjusted in accordance with the control variables, where the control variables that we alter are as follows.

Table 1. Definition of Control Variable

$Size_t$	$LN(total\ asset)$
$Loss_t$	$Equals\ 1\ if\ the\ firm\ reports\ losses, o\ otherwise$
$Leverage_t$	$Total\ liabilities/total\ assets$
$Growth_t$	$\frac{Sales\ in\ current\ year - sales\ in\ the\ prior\ year}{sales\ in\ the\ prior\ year}$
Roa_t	$Net\ income/total\ assets$
Da_t	$Discretionary\ accruals\ measured\ by\ the\ model\ in$ (Kothari et al., 2005)

The variables under control encompass Size, Loss, Lev, Growth, Roa, and Da. Size refers to the magnitude of a company, which has influence over environmental data (Matsumura et al., 2014). Loss is an indicator of companies grappling with challenging financial circumstances. Businesses facing financial adversity tend to withhold sensitive information as they are more susceptible to legal entanglements. Leverage gauges the proportion of debt within the corporate structure. Research by (Kalantonis et al., 2021) explores the manner in which investors utilise leverage indicators, like the debt-to-equity ratio and interest coverage ratio, to detect companies burdened with unfavourable debt levels. This implies that a correlation exists between leverage (quantified through these ratios) and a company's debt ratio. Firms possessing significant levels of debt ratios show a favorable connection with Lev due to their motivation to reveal enhanced information in order to reduce costs associated with their debts. (Lee et al., 2023). Growth is included within the model and is gauged by changes in sales. This is driven by the notion that proactive managers often invest in enterprises with expansion potential (고대영 & 안미강, 2017) This underscores that companies with adept management are more inclined to reveal profit projections. ROA serves as a measure of a company's profitability, illustrating the quantum of generated profit. As posited by (Akerlof, 1970), proficient actors are discerned from less competent ones. As a result, corporations that have impressive Returns on Assets (ROA) disclose environmental information to distinguish themselves from others. The calculation of Da is based on the discretionary accruals methodology as described by (Kothari et al., 2005). Differences arise between the perspectives of management and stakeholders on available information. Managers have access to personal data, which can be channeled towards managing earnings. highlights the substantial impact of both management and peers on manipulating corporate earnings, emphasizing the pivotal role played by peer companies' distinctive performance in shaping decisions about earnings management (Du & Shen, 2018). Companies can use environmental data disclosure to enhance their reputation. Hence, profit-management firms are anticipated to be negatively influenced by voluntary disclosure of environmental data. We adopt the Da framework following (Kothari et al., 2005). The following equations are used to gauge Da, are applied for each industry year within the target dataset,

$$\frac{Ta_t}{A_t} = \alpha_0 + \beta_1 \frac{1}{A_t} + \beta_2 \left(\frac{\Delta Sales - \Delta Ar_t}{\Delta Ar_t}\right) + \beta_3 \frac{Ppe_t}{A_t} + \beta_4 Roa_1 + \epsilon_t$$

$where, Ta = Net\ income - cash\ flow\ from\ operations;\ A = Total\ assets;\ Sale = Sales\ revenue;\ Ar = Accounts\ receivable;\ Ppe = Plant, property, and\ equipment;\ Roa = Return\ on\ assets;\ Net\ income/total\ assets.$

3.1.2 Reporting of Risk Disclosure

We employed a content analysis method to gather risk disclosure data following the study conducted by (Abdullah et al., 2015). Data collection was carried out through three narrative sections in the Annual Report, namely the Chairman's Statement (CS), Operational Review (OR), and Management Discussion and Analysis (MD&A). The rationale behind choosing these three sections aligns with the findings of the research by (Amran et al., 2008), where Malaysian companies typically disclose voluntary or nonfinancial risk management information in these sections. Additionally, the findings of (Amran et al., 2008) also indicated that investors seek more meaningful risk management reporting, connecting risk management disclosures with discussions on strategy and business models. Typically, such discussions occur within the aforementioned three sections (CS, OR, and MD&A) as highlighted by other studies such as (Beattie et al., 2004). (Abdullah et al., 2015) put forth the viewpoint that if there are additional components disclosed within these three sections, these components would be more related to financial risk management information, rather than non-financial aspects. Therefore, this study focuses on these three main sections to gather information relevant to risk disclosure, following the theoretical framework established by previous research studies.

In this research, the measurement unit for encoding text is based on the count of "sentences." This approach finds resonance in prior investigations, as demonstrated by studies such as those conducted by (Abraham & Cox, 2007), (Linsley & Shrives, 2006), and (Amran et al., 2008), which also employed "sentences" as coding units. The methodology employed in this study follows the encoding procedure laid out by (Linsley & Shrives, 2006). Their framework categorizes risk management information into five distinct types: "operations risk," "strategic risk," "empowerment risk", "integrity risk" and "information processing and technology risk." Of particular note is that risk management information suggesting a feasible solution to address a prevailing issue holds more value than mere information about the issue itself. Given this consideration, a rating will also be assigned to a "sentence" that outlines future actions aimed at mitigating the challenges faced by companies in their risk management. Consequently, the assessment unit encompasses a "sentence" that outlines the existing risk conditions encountered by the company, along with another "sentence" delineating the actions taken to alleviate the issue, with differentiation based on the predefined risk categories. This approach allows for a comprehensive evaluation of both risk identification and mitigation strategies within the context of the study.

Step 1 involves the identification of sentences containing risk disclosure.

1) Sentences should be classified as risk disclosure under the following conditions: As suggested by (Linsley & Shrives, 2006), sentences qualify as risk disclosure when they impart insight into any ongoing or potential opportunities, prospects, hazards, dangers, harms, threats, or exposures that have affected or could affect the company, along with the management of such circumstances.

2) For tables presenting risk management data, regardless of quantitative or qualitative nature, each line is treated as one sentence, following the approach of (Linsley & Shrives, 2006)
3) If a disclosure is reiterated, it should be recorded independently as a Risk Disclosure sentence each time it is discussed, and in cases where risk references in disclosure are too vague, they shall not be regarded as risk disclosures, as per (Linsley & Shrives, 2006)

Step 2 revolves around categorizing each Risk Disclosure-coded sentence into five risk categories.

1) The categorization of disclosure sentences should adhere to the divisions specified in Table 2.
2) If a sentence could potentially be classified under multiple categories, its placement should prioritize the category most prominently highlighted within the sentence, in line with (Linsley & Shrives, 2006)

Step 3 involves evaluating whether each Risk Disclosure coded sentence conveys "beneficial" or "damaging" information:

1) Disclosures related to risk management are classified as "beneficial" if they address opportunities, prospects, or the mitigation of key risks that positively impact the company, in accordance with (Linsley & Shrives, 2006). Information about risk mitigation is considered beneficial, as the purpose of risk management is to safeguard and augment investor value, as per (Beasley et al., 2005).
2) On the other hand, disclosures regarding risk management are categorised as "damaging" if they discuss threats, hazards, or vulnerabilities that could negatively affect the company, aligning with (Linsley & Shrives, 2006)

Table 2. Classification of Risk Disclosure

Risk Factor	Risk Category
Financial Risk	Interest Rate Exchange rate Commodity Liquidity Credits Going Concern Cost of Capital
Operation Risk	Customer Satisfaction Product Development Efficiency and Performance Sourcing Stock osmescence

Risk Factor	Risk Category
	Product and Service Failure Environmental Health and Safety Brand — name erosion Mangement Process
Empowerment Risk	Leadership and Management Outsourcing Performance Incentives Change readiness Communication
IT Risk	Integrity Access Availability Infrastructure
Integrity Risk	Integrity Access Availability Reputation
Strategic Risk	Environmental scan Industry Business portfolio Competitors Pricing Valuation Planning Life Cycle Performance Measurement Regulatory Sovereign and Political

3.2 Data Selection

Table 3 illustrates the data selection process used in this study. Initially, the sample comprised 104 companies listed in the energy sector and palm oil companies listed on the Indonesian Stock Exchange (IDX) in 2022. Subsequently, we eliminated companies for which risk disclosure measurement was infeasible due to unpublished financial reports. Thus, the final number of observations amounted to 85 companies after the exclusion of those that did not have relevant financial data.

Table 3. The Data Selection Process

Number of energy sector and palm oil companies listed on the Indonesian Stock Exchange (IDX) in 2022	104
Minus : Companies without financial data Companies' number of observations	 19 85

In terms of measuring managerial ability, we refer to the calculation methodology used in previous research, specifically the study conducted by (Lee et al., 2023). Meanwhile, the risk measurement was based on an approach outlined in previous research by (Abdullah et al., 2015). This approach categorizes risk into several classifications, further elaborated upon in various relevant factors.

To ensure data validity and mitigate the impact of outliers, we organized the highest and lowest values of the control variables. This step was taken to minimize the influence of extreme data points that could distort analytical results.

Consequently, through this series of stages, the study ensures that the data sample utilized has undergone meticulous selection and appropriate measurement methodologies. This process facilitates a more accurate and representative analysis of the relationship between managerial ability, risk disclosure, and other control variables within the framework of this research.

4. Findings and Discussion

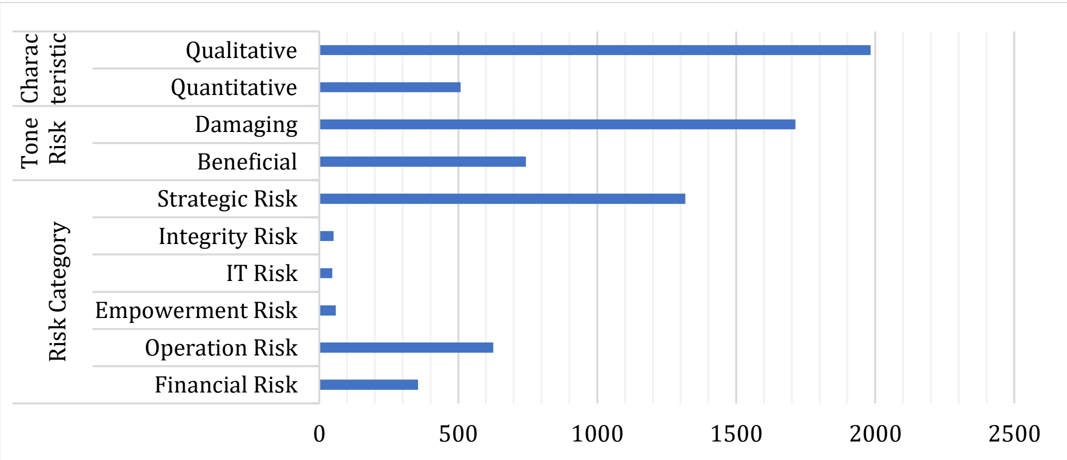

Figure 1. Risk Level for the Sample

Figure 1 illustrates the levels of risk categorized for our sample of 85 listed companies. The data reveal that the highest level of disclosure occurs in the "strategic risk" category, followed by the "operational risk" category. In general, there are about 2,457 sentences related to risk disclosure from the 85 companies that make up our research sample. The elevated level of disclosure concerning "strategic risk" likely has several reasons behind it. Generally, decisions regarding the type of information to be disclosed in annual reports are typically made by the company's management team. In 2022, companies in the energy and palm oil sectors faced significant strategic risks. There also appears to be a notable difference between qualitative and quantitative disclosures. The study by (Dobler et al., 2011) discovered that the trend of qualitative risk disclosure with a focus on past events is not unique to specific countries like the US, Canada, the UK, and Germany. Instead, this approach to reporting risks is not confined to advanced nations and has also become prevalent in emerging countries such as Indonesia.

Furthermore, as shown in Figure 1, the difference between disclosing damaging and beneficial impacts within companies is not particularly large. This suggests that the companies in the sample tend to disclose information that has the potential to provide benefits rather than information that could be detrimental. Simultaneously, managers may also have a desire to showcase their abilities in managing the company, including safeguarding the company's reputation. Moreover, managers might also want to ensure that their future compensation or rewards remain secure.

Table 4. Number of risk reporting sentences

	Risk Sentence	*%*	*Mean*	*Median*	*Min.*	*Max.*	*STD*
Qualitative	1983	79.575	23.329	23	10	57	7.881
Quantitative	509	20.425	5.988	4	0	30	6.679
Beneficial	744	30.281	8.753	6	0	37	8.295
Damaging	1713	69.719	20.153	19	7	40	7.114
Financial Risk	355	14.449	4.176	2	0	32	5.628
Operation Risk	626	25.478	7.365	6	0	26	6.008
Empowerment Risk	60	2.442	0.706	0	0	8	1.280
IT Risk	47	1.913	0.553	0	0	6	1.249
Integrity Risk	52	2.116	0.612	0	0	7	1.254
Strategic Risk	1317	53.602	15.494	15	3	29	5.826
TOTAL	2457	100	28.906	23	3	108	21.245

Explanations:

Qualitative: Involves assessing risk based on non-numerical factors or attributes, such as the quality of a product or the reputation of a company.

Quantitative: Involves measuring risk using numerical data and calculations, such as financial metrics or statistical models.

Beneficial: Refers to risks that may lead to positive outcomes or advantages, such as investing in a potentially lucrative opportunity.

Damaging: Relates to risks that can result in negative consequences, such as financial losses or damage to reputation.

Financial Risk: Pertains to the possibility of losing money or assets due to market fluctuations, investment decisions, or economic factors.

Operational Risk: Compasses risks associated with daily business operations, including process failures, technology issues, or human errors.

Empowerment Risk: Involves the potential for empowering individuals or groups, which can have both positive and negative implications, such as increased innovation but also increased responsibility.

	Risk Sentence	%	Mean	Median	Min.	Max.	STD
IT Risk: Focusses on risks related to information technology, such as data breaches, system failures, or cyberattacks. **Integrity Risk:** Addresses the risk of unethical behavior or loss of trust in an organization, typically related to fraud, corruption, or dishonesty. **Strategic Risk:** Relates to risks associated with long-term goals and decisions of an organization, such as market competition, changing customer preferences, or changes in the business environment.							

Table 4 shows the number of risk reporting sentences categorized by risk types. Further analysis reveals that the "Strategic Risk" category contributes the most, reflecting a high emphasis on strategic risks. There is also a notable difference between qualitative and quantitative risk disclosures. These findings can be linked to the tendency of companies to place emphasis on strategic risks and reflect a trend not confined to advanced nations, as indicated by Dobler et al. (2011). Analyzing the distribution of risk reporting sentences in more depth can provide additional insights into the focus and preferences of risk disclosure among companies in the sample.

Table 4 presented above provides descriptive statistics for various variables including disclosure, ability, firm size, leverage, loss, growth, Roa, and Da. The average ability score is recorded as 0.713. In terms of firm size, the sampled companies, on average, have total assets of 29.1. The mean level of loss indicates that nearly all companies exhibited a profit in 2022, as denoted by a value of 0, in contrast to their performance in 2021. The average level of leverage is 0.912, signaling a significant financial risk for these companies. The data table reveals an average growth rate of 2.239, suggesting that, on average, companies achieved improved sales in 2022 compared to the preceding year (2021).

Table 5 is accompanied by further interpretation. The average growth of 2.239 indicates that, overall, the companies in the sample experienced an increase in sales in 2022 compared to the previous year (2021). This can be interpreted as an indication of positive financial performance. Additionally, the average leverage level of 0.912 suggests significant financial risk for the companies in the sample. Further analysis of the implications of these descriptive statistics can provide a deeper understanding for readers regarding the conditions and performance of the companies in the context of size and leverage.

Table 5. Descriptive Statistics

Variables	Mean	STD	Q1	Median	Q3	Skewness	Kurtosis
Disclosure	28.906	10.404	21	27	37	0.605	0.026
Ability	0.713	0.876	0.362	0.500	0.879	6.615	53.258
Size	29.100	1.747	27.895	29.031	30.363	-0.100	-0.506
Loss	0.141	0.350	0.000	0.000	0.000	2.098	2.460
Lev	0.912	1.315	0.129	0.466	0.000	2.671	8.453
Growth	2.239	13.144	0.110	0.396	0.745	8.946	81.462
Roa	0.103	0.164	0.039	0.074	0.138	0.825	3.403
Da	0.000	0.108	-0.050	0.005	0.043	0.085	9.540

Explanations:
Disclosure of Risks: It is calculated sentence by sentence from the statements found in the partial annual report. **Managerial Ability:** Calculated based on the formula for managerial ability, *Maxθ*. **Firm size:** The size of the company is measured by the total scale of assets. **Loss:** It is valued at 1 if the company incurs losses reported in the most recent period. **Leverage:** Calculated by comparing the total debt to the company's equity. **Growth:** Calculated by comparing the change in sales with the previous year. **Return on assets (ROA):** Calculated by dividing net income by total assets. **Discretionary accruals (DA):** Calculated based on the formula provided in the previous section.

Table 6. Pearson's correlation

	Disclosure	*Ability*	*Size*	*Loss*	*Lev*	*Growth*	*Roa*	*Da*
Disclosure	1							
Ability	.407**	1						
Size	.286**	-0.012	1					
Loss	-0.117	-0.164	-.309**	1				
Lev	.255*	-0.079	0.195	.229*	1			
Growth	-0.066	0.073	-.222*	-0.048	-0.065	1		
Roa	0.113	0.186	.371**	-.535**	-0.133	0.017	1	
Da	0.131	0.118	-0.025	-0.160	0.053	-0.092	0.000	1

Explanations:
Disclosure (Risk Disclosure): The level of risk disclosure measures the extent to which a company provides information to stakeholders about potential risks they face. It is calculated sentence by sentence from the statements found in the partial annual report. **Ability (Managerial Ability):** Managerial ability reflects the expertise and capability of the management team in effectively managing the company to achieve its business objectives. **Size;** The size of the company is measured by the total scale of assets. **Loss:** It is valued at 1 when the company incurs losses reported within the latest period. **Lev (Leverage):** Leverage measures how much a company uses debt or loans in its financial structure, calculated by comparing total debt to company equity. Growth: Growth measures how much a company experiences an increase in terms of revenue, customers, or assets compared to the previous year. **ROA (Return on Assets):** ROA measures how efficiently a company uses its assets to generate profits, calculated by dividing net income by total assets. **DA (Discretionary Accruals):** The calculation of DA is based on the discretionary accruals as defined by (Kothari et al., 2005). **Correlation is significant at the 0.01 level. *Correlation is significant at the 0.05 level.

Table 6 displays the correlations among the main variables in our study. We found a significant positive correlation between managerial ability and risk disclosure. Firm size also showed a significant positive correlation with disclosure. Additionally, the correlation between disclosure and variables such as leverage, ROA, and DA indicates a notably positive relationship. On the other hand, loss reporting and growth variables had a negative relationship with disclosure. It is important to note that this correlation solely demonstrates the link between managerial ability and risk disclosure without controlling for the influence of control variables. However, the results of the correlation analysis validate the association between management ability and risk disclosure. Given that a simple correlation is insufficient to confirm our hypothesis, we performed a multivariate analysis considering the impact of other variables in the analysis.

Table 6 shows the correlation between the main variables in this study. Significant positive correlations were found between managerial ability and risk disclosure, as well as firm size and the level of risk disclosure. Conversely, negative relationships were observed between loss reporting and risk disclosure, as well as company growth and the level of risk disclosure. Company leverage showed a positive correlation with risk disclosure, while better financial performance, measured by return on assets, also correlated positively with the level of risk disclosure. Similarly, discretionary accruals, as an indicator of earnings management, also had a positive relationship with the level of risk disclosure.

Table 7. Hypothesis Test Table

H1: Highly skilled managers are more likely to disclose risk information in the management report				
Variables	**Sign Predictions**	**Coefficients**	**Prob.**	**Sig**
C		-18.596	.338	
Ability	(+)	5.042	.000	**
Size	(+)	1.468	.031	**
Loss	(+)	-1.267	.723	
Lev	(-)	1.889	.022	*
Growth	(+)	-.017	.826	
Roa	(-)	-3.078	.682	
Da	(-)	6.289	.507	
Number of observations = 85	**Prob < F = 5.033540**		**R-squared = 0.313938**	

Explanations:
Disclosure: The level of risk disclosure measures the extent to which a company provides information to stakeholders about potential risks they face. **Ability;** Managerial ability reflects the expertise and capability of the management team to effectively manage the company to achieve its business objectives. **Size (Firm Size):** The size of the company is measured by the total scale of assets. **Loss:** It is valued at 1 when the company incurs losses reported within the latest period. **Leverage:** Leverage measures how much a company uses debt or loans in its financial structure, calculated by comparing total debt to company equity. **Growth:** Growth measures how much a company experiences an increase in terms of revenue, customers, or assets compared to the previous year. **Return on Assets:** ROA measures how efficiently a company uses its assets to generate profits, calculated by dividing net income by total assets. **Discretionary Accruals:** The calculation of DA is based on the discretionary accruals as defined by (Kothari et al., 2005). ** Significant at the 0.01 level. *Significant at the 0.05 level.

Table 7 illustrates the regression results for the dependent variable, Risk Disclosure. The coefficient of ability is statistically significant while controlling for potential variables that might influence risk disclosure. The findings suggest that highly capable managers are inclined to disclose information regarding risk disclosure in their annual reports, which supports Hypothesis 1 (H1). This reaffirms that highly capable managers comprehend the limitations of the company's resources and utilize them efficiently and strategically. At the same time, these results align with the hypothesis of managerial talent, which posits that high-ability managers opt to disclose favorable information in ways that cannot be mimicked by their lower-ability counterparts.

The results in this study are also supported by several previous studies. Managerial ability significantly influences risk and other types of company disclosures. Low-ability managers tend to inflate the tone of their disclosures to positively influence labor market perceptions (Yan et al., 2021). However, high-ability managers are more capable of making accurate projections, particularly in environmentally sensitive industries (J. Chen & Chen, 2019). Corporate governance attributes, such as board size and independent directors, also play a role in risk disclosure (Alkurdi et al., 2019). The quality of a firm's information environment is positively related to managerial ability (Baik et al., 2017).

Firm size in this study also has a significant positive effect on risk disclosure in the company. has a significant positive effect on risk management disclosure (Zadeh & Eskandari, 2012; Larasati & Asrori, 2020; Pangestuti et al., 2019; Madhani, 2016; Rujiin & Sukirman, 2020; Sari et al., 2022). Larger companies tend to disclose more risk information, which is consistent with the investment concept of high risk-high return (Sari et al., 2022). However, the relationship between firm size and risk disclosure is influenced by various factors such as legal and institutional systems, uncertainty avoidance, and industry types (Khlif & Hussainey, 2014). This suggests that while firm size is a key factor in risk disclosure, it is not the only determinant.

Leverage, a key component of a company's capital structure, has been found to have a mixed impact on risk disclosure and financial risk. While some studies have found no significant association between leverage and risk disclosure 06/01/2025 19:38:00, others have identified a positive relationship between the two (Alkurdi et al., 2019; Khlif & Hussainey, 2014). This study also found that the higher the leverage ratio of the company the higher the risk disclosure. The impact of leverage on financial risk has also been explored, with evidence suggesting a positive correlation (Hussan, 2016; Gunarathna, 2016). These findings highlight the complex and multifaceted nature of the relationship between leverage, risk disclosure, and financial risk.

Furthermore, these results imply that, despite the risks associated with disclosing risk disclosure data, highly capable managers continue to provide this information to the public. This underscores their awareness that the benefits of publishing such information outweigh the costs involved.

5. Conclusions

This research was conducted to empirically examine how managerial ability impacts risk reporting in the annual reports audit of 85 companies in the energy sector in the year 2022. We also considered control factors in the portfolio of financial performance assessment through controlled variables.

Overall, our analysis of risk disclosure practices among 85 listed companies in the energy sector for the year 2022 has provided valuable insights into the dynamics of managerial ability and its impact on risk reporting. The findings indicate that strategic risks are the most disclosed, particularly in qualitative terms, highlighting a focus on long-term goals and decisions. Correlation analysis shows a significant positive relationship between managerial ability, company size, and the level of risk disclosure. This is further supported by regression analysis, confirming that highly capable managers are more likely to disclose risk information. The research results underscore the importance of considering both substance and format in financial reporting, especially in the context of developing countries like Indonesia, where uniform IFRS application may not guarantee compliance.

Furthermore, the study emphasizes the need for more detailed guidelines and illustrative examples to enhance the quality of risk reporting. The emphasis on strategic risks aligns with the challenges faced by companies in the energy and palm oil sectors in 2022. While our research contributes to understanding risk reporting practices in Indonesia, we acknowledge limitations due to the subjective nature of the assessment process.

Looking ahead, this research encourages regulators to focus on the substance of information conveyed in financial reports and provide comprehensive guidance for risk disclosure. These findings may serve as a foundation for companies to voluntarily disclose more information about risk management, thereby improving their managerial abilities. Several strategies regulators can adopt to promote voluntary risk disclosure include engaging actively with relevant stakeholders, providing recognitions and incentives, investing in capacity building, creating conducive regulatory framework, and facilitating the development of standardized reporting platforms.

It is essential to note that our study is based on one year of data, and generalizing to different periods may require additional evidence. We recommend further research, particularly investigating how corporate governance factors such as board composition and audit committees influence risk disclosure in Indonesian companies. Longitudinal studies and data collection across various economic conditions will provide a more comprehensive understanding of evolving risk reporting practices.

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