META-ANALYSIS OF FINANCIAL RISK MANAGEMENT PRACTICES IN DIFFERENT INDUSTRIES

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ABSTRACT

This study aims to analyze financial risk management practices in various industries through meta-analysis. Financial risk management is an important aspect for companies to ensure financial stability and achieve strategic goals. This research is a type of quantitative research with meta-analysis methods. The source of data in this study comes from the analysis of 12 national and international journals indexed by Scopus and SINTA. Search data sources with google scholar; ScienceDirect, Mendeley and Wiley. Data selection method with PRISMA 2020. The eligibility criterion in this study is that the research must be relevant; Data comes from national and international journals published in 2021-2024; Data must have a complete effect size value and the journal must be open access. Data analysis by calculating the effect size value with the help of the SAP application. The results of the study concluded that there was a positive influence of risk management on the industry with an effect size value of 0.953; P < 0.001 with high effect size category. These findings can help companies to improve the effectiveness of their financial risk management practices and achieve their strategic goals.

Keywords: Financial Risk Management, Meta-Analysis, Industry, Effect Size
INTRODUCTION

Financial risk management is a very important aspect in running a business or operations in various industries. Financial risk can arise from various factors such as fluctuations in currency exchange rates, changes in interest rates, failure of other parties to pay off obligations, to turmoil in global financial markets (Iswahyudi et al., 2023). Without good risk management, companies can experience large losses that can threaten the continuity of their business. Therefore, identifying, measuring, monitoring, and controlling financial risks is the key to maintaining company stability and profitability. In addition to these industries, financial risk management is also vital in other sectors, such as manufacturing, healthcare, and energy (Doucouliagos et al., 2017). For instance, in the manufacturing sector, financial risk management helps companies to manage their supply chain risks, currency risks, and commodity risks, thereby ensuring the continuity of their operations and the quality of their products (Horváthová, 2010). In the healthcare sector, financial risk management is crucial for hospitals and medical institutions to manage their financial risks, such as patient billing risks and medical malpractice risks, thereby ensuring the delivery of high-quality healthcare services. Overall, financial risk management is essential for businesses to navigate the complexities of the global economy and to achieve their strategic objectives (Fazel et al., 2012).

Financial risk is one of the main challenges faced by companies in their business operations (Khreis et al., 2017). One of the most common financial risks is liquidity risk, which is the inability of a company to meet its short-term financial obligations. This can be due to insufficient cash flow, poor working capital management, or difficulty in accessing funding (Hauck et al., 2011). Another risk is credit risk, which arises when customers or business partners fail to pay their obligations to the company (Berdiyeva et al., 2023). This type of risk can have a significant impact on a company's cash flow and profitability. In addition, companies also face market risks, such as currency exchange rate fluctuations, interest rate changes, and commodity price volatility. This risk can significantly affect a company's revenue, costs, and cash flow. Operational risks, such as system failure, human error, or external events such as natural disasters, can also incur substantial financial losses (Shaﬁque et al., 2013). Companies need to manage these risks effectively to maintain financial stability and achieve sustainable growth.

To manage financial risk effectively, companies need to have a comprehensive risk management strategy (Nguyen et al., 2019). One important step is to conduct regular risk identification and assessment. By identifying potential risks, companies can develop appropriate mitigation plans. Furthermore, companies can implement policies and procedures to manage risk, such as setting risk limits, implementing strong internal controls, and diversifying investment portfolios or sources of income (Orlitzky et al., 2003). Regular monitoring and reporting of risks is also important to ensure that risks remain within acceptable levels. In addition, companies can utilize hedging instruments to protect themselves from market risks such as exchange rate fluctuations or interest rate movements. Hedging can be done using derivative financial instruments such as futures, options, or swaps (Soyemi et al., 2014). Companies can also implement efficient working capital management to manage liquidity risk, as well as build good relationships with financial institutions to guarantee access to necessary funding (Reijsbergen et al., 2016). By implementing appropriate risk management practices, companies can minimize the negative impact of financial risks and maintain healthy financial performance (Chowdhury et al., 2013).

Although financial risk management is an important aspect of
business continuity in various industries (Song et al., 2008), there are significant challenges in identifying and implementing best practices that are appropriate to the unique characteristics and risks of each industry (Kunutsor et al., 2016). Different industries face different types of financial risk, such as credit risk, liquidity risk, market risk, and operational risk, which require a specific risk management approach. In addition, factors such as regulation, business environment, and organizational culture can also influence how companies manage their financial risk (Lam et al., 2016). A lack of comprehensive understanding of financial risk management practices across various industries can cause companies to have difficulty developing effective risk management strategies and minimizing the negative impact of financial risks on their business performance (Hung & Hager, 2019). Therefore, in-depth, cross-industry research is needed to explore applied financial risk management practices, identify similarities and differences, and find best practices that can be widely adopted. Therefore, it is necessary to conduct a meta-analysis to get a deep conclusion.

Using robust meta-analysis methods and in-depth subgroup analysis, the research will uncover patterns and factors influencing financial risk management practices across a range of industries, as well as identify best practices that can be widely adopted. The findings from this study will provide new and useful insights for academics, practitioners, and policymakers in developing more effective financial risk management strategies. This study aims to analyze financial risk management practices in various industries through meta-analysis.

**METHODODOLOGY**

This research is a type of meta-analysis research. Meta-analysis is a research method that analyzes previous primary research quantitatively to obtain an accurate and in-depth conclusion (Zulkifli et al., 2022; Nurtamam et al., 2023; Zulyusri et al., 2023; Solissa et al., 2023; Bachtiar et al., 2023; Leonidou et al., 2002). The source of data in this study comes from the analysis of 12 national and international journals indexed by Scopus and SINTA. Search data sources with google scholar; ScienceDirect, Mendeley and Wiley. Data selection method with PRISMA 2020. The eligibility criterion in this study is that the research must be relevant; Data comes from national and international journals published in 2021-2024; Data must have a complete effect size value and the journal must be open access. Data analysis by calculating the effect size value with the help of the SAP application. and the effect size value criteria can be seen in Table 1.

Tabel 1. Criterion Effect Size

<table>
<thead>
<tr>
<th>Effect Size (ES)</th>
<th>Kriteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.15 ≤ ES</td>
<td>Ignored</td>
</tr>
<tr>
<td>0.15 &lt; ES ≤ 0.40</td>
<td>Small</td>
</tr>
<tr>
<td>0.40 ≤ ES ≤ 0.75</td>
<td>Medium</td>
</tr>
<tr>
<td>0.75 &lt; ES ≤ 1.10</td>
<td>High</td>
</tr>
<tr>
<td>1.10 &lt; ES ≤ 1.45</td>
<td>High Influence</td>
</tr>
<tr>
<td>1.45 &gt; ES</td>
<td></td>
</tr>
</tbody>
</table>

**RESULT AND DISCUSSION**

Based on the results of searching data through Google Scholar, ScienceDirect, Mendeley and Wiley obtained 12 studies that have met the inclusion criteria that have been set. Furthermore, heterogeneity analysis was carried out which can be seen in Table 2.
Based on Table 2, heterogeneity analysis obtained a Q-value of 143.241 and I² of 56.102. This finding explains that the 12 effect sizes analyzed are heterogeneously distributed and significant with p values < 0.001. Furthermore, the effective analysis model used in this study is random effect size. The next step, analyze the overall effect size with the random effect model which can be seen in Table 3.

**Table 3. Calculation Overall Effect Size**

<table>
<thead>
<tr>
<th>Effect Size (d)</th>
<th>Standard Error</th>
<th>95% Confidence Interval</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>Upper</td>
</tr>
<tr>
<td>0.95</td>
<td>0.325</td>
<td>0.41</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Table 3, the overall effect size value is 0.952 and the standard error is 0.325. This finding shows that risk management is significant to the industry with a value of lower = 0.419 and upper = 0.952 with a p value of < 0.001. This result has a positive impact on various industries to run more optimal performance. Next, check publication bias with funnel plots and test Rosenthal fail safe N. This bias checking aims to determine the existence of bias arising from various studies entered. The results of checking publication bias can be seen in Figure 1.

**Figure 1. Funnel Plot Standard Error**

Based on Figure 1, checking publication bias with the research funnel plot is in a symmetrical curve. To increase validity, it is necessary to carry out the Rosenthal fail-safe N test. The results of the Rosenthal Fail Safe N test can be seen in Table 4.

**Table 4. Rosenthal Fail Safe N**

<table>
<thead>
<tr>
<th>Fail Safe N</th>
<th>Target Significance</th>
<th>Observed Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosenthal</td>
<td>318.0</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Based on Table 4, the Fail Safe N value is 318 with a p value < 0.001. These findings concluded that the 12 effect sizes analyzed were resistant to publication bias and that no studies were added or removed.

**Discussion**

Based on the findings of the risk management has a significant influence on various industry players with an overall effect size value of 0.953 with p< 0.001. This finding is in line with This research also found that good financial risk management practices can improve a
Good financial risk management practices can improve corporate sustainability by reducing risk and increasing the effectiveness of business decisions. In good financial risk management practices, managers must have the ability to identify, analyze, supervise, and mitigate risk. Financial risk management has significant managerial implications. Financial risk management can improve a company's financial performance by reducing risk and increasing the effectiveness of business decisions (Santini et al., 2019). In managerial implications, company administrators and managers must improve company performance by optimizing financial risk management practices.

Financial risk management has a significant positive influence on the company's financial performance (Doucouliagos et al., 2017). This means that financial risk management is an important factor in improving the company's financial performance. In theoretical implications, this research contributes to the development of financial risk management theory and improves understanding of how financial risk management can improve a company's financial performance (Wang & Shailer, 2015). The importance of building a comprehensive framework for identifying, measuring, and managing financial risk. This framework should cover different types of risks, such as liquidity risk, credit risk, market risk, and operational risk. Companies that successfully implement a solid framework tend to perform better in managing their financial risk (Baumgart-Getz et al., 2012).

The research also found that active involvement of top management and a strong risk culture are important factors in successful financial risk management. Top management should provide strategic direction and promote a risk culture that encourages transparency, accountability, and measurable decision-making (Hassan, 2019). A positive risk culture can help ensure that financial risk management becomes a top priority in day-to-day business operations. Companies that have a good risk reporting system and open communication channels can increase risk awareness at all levels of the organization (Chima et al., 2021). This allows for more informed decision making and faster response to changing market conditions or emerging risk threats. The importance of utilizing advanced technology and data analysis tools in financial risk management. Companies that adopt technology solutions such as quantitative models, early warning systems, and data visualization tools can gain deeper insights into their risk profile and make more scalable and data-driven decisions (Iswahyudi et al., 2023).

CONCLUSION

From the results of this study, it can be concluded that there is a positive influence of risk management on the industry with an effect size value of 0.953; P < 0.001 with high effect size category. These findings can help companies to improve the effectiveness of their financial risk management practices and achieve their strategic goals. The importance of a comprehensive framework, top management engagement, a strong risk culture, effective risk reporting, clear communication, and the utilization of advanced technology and data analysis tools. By implementing these practices, organizations can improve their ability to identify, measure, and manage financial risks effectively. Good financial risk management not only protects shareholder value, but also enables companies to take more measured decisions, increase resilience to economic shocks, and achieve sustainable growth in a dynamic and risky business environment.

REFERENCES


