

## Efficiency or Innovation? Competitive Strategies and Bankruptcy Risk in Indonesia's Textile Industry

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### HISTORY

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### ABSTRACT

**Purpose:** This study examines the effectiveness of cost leadership and product differentiation strategies in reducing bankruptcy risk among labor-intensive textile and textile product firms in Indonesia. It also analyzes the moderating role of firm size in these relationships.

**Method:** This study adopts a quantitative approach using secondary data derived from the financial reports of textile companies listed on the Indonesia Stock Exchange during the 2014–2024 observation period.

**Result:** The findings indicate that both cost leadership and product differentiation strategies significantly reduce bankruptcy risk, suggesting that efficiency-based and innovation-oriented strategies enhance firms' financial stability. Firm size strengthens the effect of cost leadership on the reduction of bankruptcy risk, implying that larger firms benefit from scale advantages. However, firm size does not significantly moderate the relationship between product differentiation and bankruptcy risk.

**Practical Implications for Economic Growth and Development:** This study provides valuable insights for managers and policymakers in formulating competitive strategies that enhance firm survival and financial resilience in the labor-intensive textile industry. By reducing bankruptcy risk, effective strategic choices may contribute to employment stability, industrial sustainability, and long-term economic growth in developing economies such as Indonesia.

**Originality/Value:** This study offers new empirical evidence by comparing the effects of cost leadership and product differentiation strategies on bankruptcy risk and by examining the moderating role of firm size in Indonesia's labor-intensive textile industry, an area that has received limited attention in previous research.

**Keywords:** *Cost Leadership, Product Differentiation, Firm Size, Bankruptcy Risk, Textile Industry*

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**INTRODUCTION**

The global business landscape between 2014 and 2024 was characterized by intensifying competition and increasing economic volatility. Although the period from 2014 to 2018 was marked by relatively consistent growth, the outbreak of the COVID-19 pandemic in 2020–2021 severely disrupted global logistics, restricted mobility, and weakened both domestic and international demand (Lee et al., 2025; Sjoberg, 2020). Despite the beginning of economic recovery in 2022, the lingering effects of the pandemic have continued to shape industrial performance. As a result, financial vulnerability has increased across various sectors, with labor-intensive manufacturing facing particularly high risk due to its dependence on uninterrupted production and stable market conditions. Indonesia’s textile and textile products (TTP) subsector has emerged as one of the industries most severely affected. Even before the pandemic, firms in this sector had been confronted with intense price competition, fluctuating raw material costs, and growing pressure to improve operational efficiency (Darji & Dahiya, 2023; Dasman et al., 2021). The post-pandemic environment further intensified these challenges, driven by declining export volumes, rising production costs, and an influx of lower-priced imported products (Zahra et al., 2025). These pressures have reduced profit margins and increased the risk of insolvency, particularly given the industry’s substantial fixed costs and dependence on high production volumes (Deb & Sreekumar, 2021; Permana & Fadjar, 2025).

**Table 1. Trends in the Textile and Textile Products (TTP) Industry during 2014 to 2024**

Period	Condition Status	Key Indicators
2014–2019	Stable Growth	Contribution of the TTP sector to GDP remained stable; exports increased by 4.9% during 2017–2019
2020–2021	Pandemic Contraction	Industrial production declined sharply to its lowest point of -19.74% (Q2 2020) due to global mobility restrictions
2022–2023	Sluggish Recovery	Number of firms decreased to 2,027 units; annual exports fell by 17% in 2022
2024	Import Crisis & Layoffs	Approximately 30 factories closed, with more than 11,200 workers laid off by mid-year (Emeria, 2024)

Source: Data processed from BPS (2021, 2023) and Kemenperin (2020)

As presented in Table 1, the TTP sector underwent a notable structural shift over the 2014–2024 period. The industry transitioned from a phase of stable growth (2014–2019) to a sharp contraction during the pandemic period (2020–2021), followed by a sluggish recovery in 2022–2023 and renewed pressure in 2024, as reflected in factory closures and large-scale layoffs. This pattern suggests persistent structural vulnerability rather than a temporary disruption. The continued decline in the number of firms, export performance, and employment indicates increasing financial fragility within the sector, thereby intensifying bankruptcy risk (Baghdadi et al., 2020; Beaver et al., 2005). These developments underscore the urgency of examining how competitive strategies can strengthen firms’ financial resilience under prolonged uncertainty.

To address these challenges, firms adopt competitive strategies aimed at ensuring long-term viability. The two primary strategic approaches identified in the literature are cost leadership and product differentiation (Porter, 1985; Roy, 2022; Sahoo, 2021). The cost leadership strategy emphasizes operational efficiency and cost reduction, enabling firms to remain competitive in markets where price is the primary basis of competition (Ilyas & Nisar Khan, 2018; Kharub et al., 2019). In contrast, product differentiation focuses on creating distinctiveness through superior quality, design, innovation, or value-added features. This strategy allows firms to reduce their dependence on price-based competition and potentially achieve higher profit margins (Beal & Lockamy, 1999; Sahoo, 2021). However, the effectiveness of these strategies in reducing bankruptcy risk may depend on internal firm characteristics, particularly firm size. Larger firms generally possess better access to

financing, greater economies of scale, and a stronger capacity to absorb risk, which may enhance the strategic benefits of both cost leadership and product differentiation (Beaver et al., 2005; Le et al., 2024; Porter, 1985).

Previous empirical studies examining the relationship between competitive strategy and bankruptcy risk have produced mixed findings. Several studies indicate that cost leadership reduces bankruptcy risk by improving cost efficiency and promoting more stable financial performance (Agustia et al., 2020; Tuswajati & Atiningsih, 2025). By optimizing cost structures, firms can strengthen liquidity stability and enhance their capacity to withstand economic volatility. In contrast, empirical evidence regarding product differentiation remains inconclusive. Although this strategy may improve market position and profitability, it may also increase financial risk due to substantial investments in research and development, innovation, and promotional activities (Dwika Ameralya & Pramesti, 2024). These contrasting effects suggest that product differentiation does not necessarily reduce the likelihood of bankruptcy and, under certain conditions, may even intensify financial pressure. Moreover, the existing literature has largely focused on the direct relationship between strategy and insolvency while paying limited attention to internal factors that may moderate this relationship. In particular, firm size, which affects access to financing, economies of scale, and organizational flexibility, is often treated merely as a control variable rather than as a key moderating factor (Agustia et al., 2020; Le et al., 2024). As a result, empirical evidence remains limited regarding the extent to which firm size moderates the effectiveness of cost leadership and product differentiation strategies in reducing bankruptcy risk, especially in labor-intensive industries within developing economies.

This study contributes to the existing literature in five important ways. First, it simultaneously examines cost leadership and product differentiation within a single model to evaluate their effects on bankruptcy risk. Second, it positions firm size as a moderating variable rather than merely a control variable, thereby offering a deeper understanding of how organizational scale shapes strategic effectiveness. Third, the study focuses on labor-intensive firms in Indonesia's textile and textile products sector, an industry characterized by high cost sensitivity and vulnerability to external shocks. Fourth, the analysis covers the 2014–2024 period, encompassing the pre-crisis, pandemic, and recovery phases, thus providing a more dynamic perspective on changing economic conditions. Fifth, the inclusion of GPM and ROA as control variables strengthens the analytical robustness of the study (Beaver, 1966; Le et al., 2024; Porter, 1985).

Based on the foregoing discussion, this study aims to examine the effects of cost leadership and product differentiation on bankruptcy risk among labor-intensive textile manufacturing firms in Indonesia's textile and textile products subsector during the 2014–2024 period. In addition, this study seeks to investigate whether firm size moderates the relationship between these competitive strategies and bankruptcy risk. By integrating strategic and structural perspectives, this research is expected to make an empirical contribution to the literature on business strategy and bankruptcy risk, while also providing practical insights for corporate managers and policymakers in designing sustainable strategies to mitigate bankruptcy risk.

## **Hypotheses Development**

### ***Cost Leadership and Bankruptcy Risk***

Bankruptcy theory explains the conditions under which a firm experiences financial distress and becomes unable to meet its financial obligations on a sustainable basis, or when its economic value falls below its liquidation value (Altman, 1968; Beaver, 1966; Ross et al., 2019). According to Outecheva (2007), there are two main approaches to understanding bankruptcy risk: the event-oriented approach and the process-oriented approach. The event-oriented approach treats bankruptcy as a discrete event, such as a formal bankruptcy filing or payment default (Beaver, 1966). In contrast, the process-oriented approach views bankruptcy as a gradual process that begins with declining cash flows and eventually

culminates in bankruptcy filing (Turetsky & McEwen, 2001). Both perspectives are closely related to the concept of bankruptcy risk.

Cost leadership is defined as a strategic orientation that emphasizes cost efficiency through streamlined production processes, economies of scale, and strict cost control, thereby enabling firms to offer products at lower prices than their competitors (Leitner & Güldenbergh, 2010; Porter, 1985). In this study, cost leadership is operationalized as the proportion of cost of goods sold to sales, which serves as an indicator of efficiency in managing production costs (Banker et al., 2014). A lower ratio reflects a stronger cost leadership position. From the perspective of bankruptcy theory, firms with more efficient cost structures are better able to maintain stable revenues and profitability, thereby strengthening financial stability and reducing bankruptcy risk. Based on this reasoning, the following hypothesis is proposed:

H1: Cost leadership is negatively associated with bankruptcy risk.

### ***Product Differentiation and Bankruptcy Risk***

Product differentiation is measured using the gross profit margin (GPM), which reflects a firm's ability to generate value added and set selling prices above production costs. A higher ratio indicates a stronger degree of product differentiation (Banker et al., 2014; Mohammadi et al., 2019). Product differentiation refers to a business strategy that emphasizes the creation of unique products or services through innovation, quality enhancement, design, customer service, and brand reputation (Chen & Keung, 2019; Porter, 1985). Firms adopting this strategy seek to distinguish their offerings from those of competitors by providing unique value-added features that are difficult to imitate. This distinctiveness enables firms to build stronger customer loyalty and maintain greater pricing power in the market, thereby reinforcing their competitive advantage (Porter, 1985).

From the perspective of bankruptcy theory, firms that successfully implement differentiation strategies are more likely to achieve higher profit margins and more stable revenue streams. The ability to offer value-added products allows firms to charge premium prices and sustain profitability despite intense market competition. Such financial stability and stronger revenue generation can improve financial flexibility and cash flow consistency, thereby reducing bankruptcy risk (Altman, 1968; Ross et al., 2019). Based on this reasoning, the following hypothesis is proposed:

H2: Product differentiation is negatively associated with bankruptcy risk.

### ***Moderating Role of Firm Size: Cost Leadership and Bankruptcy Risk***

According to bankruptcy theory, bankruptcy occurs when a firm is unable to meet its financial obligations due to an imbalance among assets, liabilities, and cash flows (Beaver et al., 2005). This theory emphasizes that bankruptcy risk is shaped by a firm's ability to maintain financial health, liquidity, and operational efficiency. In this context, firm size plays an important role, as larger firms generally possess more liquid assets, more stable capital structures, and broader access to external sources of financing (Jay, 1991). Theoretically, larger firms enjoy structural advantages, including greater access to capital, the ability to exploit economies of scale, and stronger bargaining power with suppliers and markets (Le et al., 2024). These advantages enable them to implement cost leadership strategies more consistently and sustainably than smaller firms (Agustia et al., 2020).

In the context of cost leadership, larger firms typically have greater production capacity, more effective cost control systems, and more efficient supply chain management capabilities (Diab et al., 2025; Habib, 2023). These conditions enhance the effectiveness of cost leadership in improving financial stability and reducing bankruptcy risk. Therefore, firm size may function as a moderating factor that strengthens the negative relationship between cost leadership and bankruptcy risk. Based on this reasoning, the following hypothesis is proposed:

H3: Firm size strengthens the negative effect of cost leadership on bankruptcy risk.

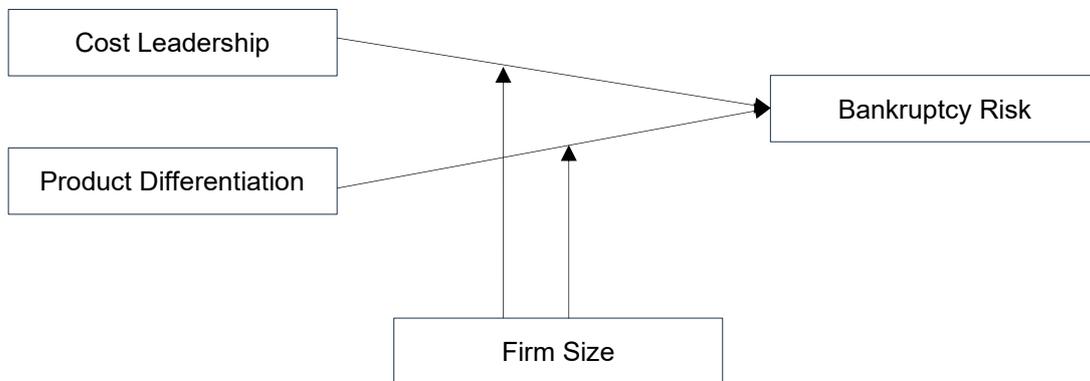
**Moderating Role of Firm Size: Product Differentiation and Bankruptcy Risk**

According to bankruptcy theory, bankruptcy risk arises when a firm is unable to meet its financial obligations due to declining profitability, high leverage, or an inability to sustain operating cash flows (Altman, 1968). Appropriate business strategies may serve as mechanisms for mitigating such risk. One strategy considered effective is product differentiation, as it enables firms to create product uniqueness, enhance value added, and strengthen customer loyalty. These advantages can make firms more resilient to market pressures and revenue declines that might otherwise increase bankruptcy risk (Diab et al., 2025; Janna & Hadiprajitno, 2025).

However, the effectiveness of product differentiation in reducing bankruptcy risk is highly contingent upon firm size. From the perspective of bankruptcy theory, larger firms occupy a stronger financial and operational position than smaller firms. They generally have broader access to external financing, lower capital costs, and greater capacity for risk diversification (Le et al., 2024). These conditions enable larger firms to absorb the substantial costs associated with investments in innovation, research and development (R&D), and promotion, which are inherent in product differentiation strategies (Ferguson, 2011; Matraves & Rondi, 2007). With stronger financial resources, larger firms are better able to sustain differentiation initiatives and absorb related expenses without creating excessive financial strain. Therefore, firm size may strengthen the ability of product differentiation to reduce bankruptcy risk. Based on this reasoning, the following hypothesis is proposed:

H4: Firm size strengthens the negative effect of product differentiation on bankruptcy risk.

**Figure 1. Research Model**



Source: Developed by the authors (2025)

**METHOD**

This study adopts a quantitative research approach to examine the causal relationships among variables and to test the proposed hypotheses. The data used in this study consist of numerical secondary data obtained from the OSIRIS database, annual reports, and corporate financial statements published by the Indonesia Stock Exchange (IDX). The population comprises labor-intensive textile manufacturing firms in the textile and textile products subsector listed on the Indonesia Stock Exchange. This subsector was selected because of its industrial characteristics, including high labor cost structures, intense price competition, and relatively high vulnerability to bankruptcy risk, particularly during periods of economic uncertainty.

The sampling technique employed is purposive sampling. Sample firms were required to be continuously listed during the observation period and to have complete financial data in accordance with the measurement requirements of the research variables. The observation period spans eleven years, from 2014 to 2024. This period was chosen to capture the dynamics of firms' financial performance and business strategies across different phases of the economic cycle, including the pre-COVID-19 period (2014–2019), the pandemic period (2020–2021), and the post-pandemic economic recovery phase (2022–2024). The detailed sampling criteria are presented in Table 2. The extended observation period is expected to provide a more comprehensive understanding of bankruptcy risk patterns and the sustainability of firms' business strategies.

**Table 2. Research Sample Selection**

Description	Number
Labor-intensive manufacturing firms in the Textile and Textile Products (TTP) subsector listed on the Indonesia Stock Exchange (IDX)	23
Textiles	14
Apparel, Accessories, and Luxury Goods	7
Footwear	2
Observation period	2014–2024
Number of years	11
Total firm-year observations	209

Sources: Compiled by the authors (2025)

This study employs unbalanced panel data, as not all firms have complete data for every year of observation. The use of unbalanced panel data allows the inclusion of relatively newer or smaller firms without excluding them from the overall sample, thereby improving the representativeness of the analysis in reflecting the conditions of Indonesia's textile and textile products industry. Data analysis is conducted using panel data regression to examine the effects of cost leadership and product differentiation on bankruptcy risk, as well as to test the moderating role of firm size.

In this study, variable operationalization is intended to explain how each variable is defined, measured, and applied in the empirical analysis. All variables are measured using quantitative data obtained from the OSIRIS database, thereby enabling objective and measurable hypothesis testing. A detailed explanation of the operationalization of variables is presented in Table 3.

**Table 3. Operational Variables**

Variable	Definition & Indicators	Measurement Approach	Source
Cost leadership	A business strategy where a company focuses on becoming the lowest-cost leader in its industry or market. The lower this ratio, the stronger the implementation of the cost leadership strategy.	The cost leadership strategy is proxied by the ratio of cost of goods sold (COGS) to sales.	(Banker et al., 2014)
Product Differentiation	Product differentiation strategy refers to a business strategy that emphasizes the creation	The product differentiation strategy is measured using the gross profit margin	(Mohammadi et al., 2019)

Variable	Definition & Indicators	Measurement Approach	Source
	of unique products or services to differentiate a firm from its competitors, reflecting the firm's capability to generate added value and charge prices above production costs.	(GPM), which reflects the firm's ability to create added value and set selling prices above production costs.	
Bankruptcy Risk	Bankruptcy risk is the probability that an entity, such as a company, individual, or country, will fail to pay off its debts and be forced to file for bankruptcy.	Bankruptcy risk is measured using the Altman Z-Score.	(Agustia et al., 2020)
Firm Size	Firm size refers to the operational and financial scale of a company, often used as a control variable or predictor in financial analysis, such as bankruptcy risk models (Altman Z-Score).	Firm size is measured using the natural logarithm of total assets (LN(total assets)).	(Podobnik et al., 2010)

Source: Compiled by the authors (2025)

## RESULT AND DISCUSSION

### Model Selection Test

The selection of the appropriate panel data estimation model began with the Chow test to determine whether the Common Effect Model (CEM) or the Fixed Effect Model (FEM) was more suitable. The Chow test results show that the probability values of both the Cross-section F and Cross-section Chi-square statistics are 0.0000, which are below the 5 percent significance level. Thus, the null hypothesis is rejected, indicating that the Fixed Effect Model is preferable to the Common Effect Model. This finding suggests the existence of firm-specific characteristics that influence bankruptcy risk. Furthermore, the Hausman test was employed to determine the appropriate model between the Fixed Effect Model and the Random Effect Model (REM). The test produced a probability value of 0.0000, which is lower than 0.05. Therefore, the null hypothesis is rejected, confirming that the Fixed Effect Model is the most appropriate model for this study. This result indicates that individual firm effects are correlated with the independent variables, implying that the Random Effect Model may produce biased estimates.

**Table 4. Chow Test Result**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	15.716121	(21.18)	0.0000
Cross-section Chi-square	216.188183	21	0.0000

Source: Processed data (2025)

**Table 5. Hausman Test Result**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	70.149106	5	0.0000

Source: Processed data (2025)

### Hypotheses Testing

The regression results indicate that cost leadership has a negative and statistically significant effect on bankruptcy risk ( $\beta = -0.293925$ ,  $p < 0.01$ ). This means that firms with stronger cost leadership tend to face lower bankruptcy risk. Statistically, the very large absolute t-value (-17.242730) indicates strong evidence against the null hypothesis, suggesting that cost efficiency is an important factor in improving firms' financial resilience. The results also show that product differentiation has a negative and statistically significant effect on bankruptcy risk ( $\beta = -0.002869$ ,  $p < 0.01$ ). This finding suggests that greater product differentiation is associated with a reduction in bankruptcy risk. Although the coefficient is smaller in magnitude than that of cost leadership, this does not necessarily imply a weaker practical effect, because the variables may be measured on different scales. What is clear statistically is that the relationship is negative and significant.

Furthermore, the interaction term between cost leadership and firm size is negative and statistically significant ( $\beta = -0.053997$ ,  $p < 0.01$ ). This indicates that firm size strengthens the negative effect of cost leadership on bankruptcy risk. In other words, the bankruptcy-risk-reducing effect of cost leadership becomes stronger as firm size increases. This supports the argument that larger firms are better able to benefit from cost leadership due to scale advantages, stronger cost control systems, and greater operational capacity. By contrast, the interaction term between product differentiation and firm size is not statistically significant ( $\beta = -0.013130$ ,  $p = 0.3122$ ). This means that firm size does not significantly moderate the relationship between product differentiation and bankruptcy risk. Although the coefficient is negative, the p-value is well above conventional significance levels, so there is insufficient statistical evidence to conclude that the effectiveness of product differentiation depends on firm size.

**Table 6. Fixed Effects Model Regression Result**

Hypothesis	Relationship	Coefficient	Std. Error	t-Statistic	p-Value	Result
H1	CL → BR	-0.293925	0.017046	-17.24273	0.0000	Accepted
H2	PD → BR	-0.002869	0.000520	-5.520423	0.0000	Accepted
H3	CL*FS → BR	-0.053997	0.008603	-6.276123	0.0000	Accepted
H4	PD*FS → BR	-0.013130	0.012950	-1.013900	0.3122	Rejected

Source: Processed data (2025)

### Discussion

The first hypothesis (H1) posits that cost leadership has a negative effect on bankruptcy risk. The empirical findings support this hypothesis, indicating that labor-intensive textile manufacturers in Indonesia are less likely to face bankruptcy risk when cost leadership strategies are implemented more effectively. These findings imply that cost efficiency and asset optimization play an important role in enhancing firms' financial resilience. Firms that are able to reduce production and operating costs have greater flexibility to withstand external pressures, such as fluctuations in raw material prices and declining market demand. In the textile industry, which is characterized by high fixed costs, operational efficiency becomes a key determinant in preventing bankruptcy risk. The results of this study are consistent with prior empirical evidence. Agustia et al. (2020) found that firms implementing cost leadership strategies were significantly better able to reduce bankruptcy risk. Similarly, Diab et al. (2025) demonstrated that cost leadership and a low-cost structure improve firms' ability to survive under unstable market conditions. These findings suggest that labor-intensive textile manufacturers, particularly those in the textile and textile products subsector, should prioritize cost leadership as a core component of their long-term business strategy. Efforts such as optimizing production capacity, controlling labor costs, improving energy efficiency, and adopting digital manufacturing processes may strengthen firms' competitive position,

enhance financial stability, and ultimately reduce bankruptcy risk in the face of economic uncertainty.

The second hypothesis (H2) posits that product differentiation has a negative effect on bankruptcy risk. The empirical analysis supports this hypothesis, indicating that a greater emphasis on product differentiation is associated with lower bankruptcy risk among labor-intensive textile manufacturers in Indonesia. These findings suggest that firms capable of creating unique and value-added products tend to possess stronger competitive advantages and greater resilience to market pressures. For example, PT Pan Brothers Tbk has implemented a product differentiation strategy through the development of eco-friendly fashion product lines aimed at environmentally conscious global markets. Product differentiation helps firms build customer loyalty and expand market share, thereby enhancing revenue stability and improving their ability to meet financial obligations. This result is consistent with Porter's (1985) competitive strategy framework, which emphasizes that differentiation can create a sustainable competitive advantage. Empirically, this study is also consistent with the findings of Diab et al. (2025) and Janna and Hadiprajitno (2025), who showed that product differentiation strategies significantly reduce bankruptcy risk. From a practical perspective, labor-intensive textile manufacturers, particularly those in the textile and textile products subsector, should strengthen their product differentiation strategies through design innovation, improvements in material quality, and the development of sustainable products. These efforts not only enhance product value and competitiveness but also support firms in achieving sustainable financial performance, maintaining financial stability, and mitigating bankruptcy risk under dynamic global market conditions.

The third hypothesis (H3) states that firm size strengthens the effect of cost leadership on bankruptcy risk. The hypothesis testing results support H3, indicating that firm size strengthens the negative relationship between cost leadership and bankruptcy risk. These findings suggest that larger firms are better able to implement cost leadership strategies due to economies of scale, stronger financial structures, and greater bargaining power with suppliers. Large firms typically benefit from lower average production costs, more efficient asset utilization, and more stable cash flows, all of which enhance the effectiveness of cost leadership in reducing bankruptcy risk. This result is consistent with Le et al. (2024), who found that firms with larger total assets tend to face lower bankruptcy risk because of greater financial flexibility. In addition, the findings are in line with Podobnik et al. (2010), who emphasized the role of firm size in strengthening resilience to financial pressure. From a practical standpoint, labor-intensive textile manufacturers should carefully consider operational scale when designing cost leadership strategies. Large firms can maximize the benefits of economies of scale and technological investment to maintain financial stability, whereas smaller firms need to focus on process efficiency and operational innovation in order to remain competitive and mitigate bankruptcy risk in highly dynamic market conditions.

The fourth hypothesis (H4) proposes that firm size strengthens the negative effect of product differentiation on bankruptcy risk. However, the hypothesis testing results do not support H4, indicating that firm size does not significantly moderate the effect of product differentiation on bankruptcy risk. This finding suggests that firm size alone does not determine the effectiveness of product differentiation strategies in reducing bankruptcy risk. In the context of Indonesia's textile and textile products industry, investments in product differentiation, such as design innovation or improvements in material quality, often require substantial financial resources that are not always accompanied by proportional increases in profitability, regardless of whether the firm is large or small. For example, PT Sri Rejeki Isman Tbk (Sritex), despite implementing an export-oriented product differentiation strategy, continued to face bankruptcy risk because it was unable to sustain operating cash flows amid fluctuations in global demand. These results differ from those of Diab et al. (2025), who found that product differentiation reduces bankruptcy risk, particularly for firms with high financial flexibility. However, the findings are consistent with the argument of Beaver et al. (2005), which suggests that innovation-based strategies are not always effective in mitigating financial risk unless they are accompanied by sound cost management and liquidity control. From the perspective of bankruptcy theory, this condition illustrates that although firms may seek to

achieve competitive advantage through differentiation, financial pressure can still increase when cash flows are insufficient to finance such strategies. From a practical standpoint, labor-intensive textile manufacturers should not rely solely on product differentiation strategies, but should instead balance them with cost leadership and effective working capital management. Large firms, in particular, must exercise caution in allocating resources to innovation activities to ensure that such investments do not create excessive financial burdens that could ultimately increase bankruptcy risk.

## CONCLUSION

This study analyzes the effects of cost leadership and product differentiation strategies on the bankruptcy risk of labor-intensive textile manufacturing firms listed on the Indonesia Stock Exchange. In addition, this study examines whether firm size moderates the relationship between these strategies and bankruptcy risk. The findings indicate that both cost leadership and product differentiation significantly reduce bankruptcy risk. This suggests that the pursuit of cost efficiency and the development of distinctive offerings can strengthen firms' competitive positions and enhance financial stability. Furthermore, firm size strengthens the risk-reducing effect of cost leadership, implying that larger firms are better able to leverage economies of scale. In contrast, firm size does not significantly affect the relationship between product differentiation and bankruptcy risk, indicating that the effectiveness of differentiation depends more on strategic execution and innovation capability than on organizational scale.

This study suggests that labor-intensive manufacturing firms, particularly those in the textile and textile products subsector, should prioritize cost leadership strategies to maintain financial stability and reduce bankruptcy risk. At the same time, firms should pursue product differentiation through innovation, design, and quality improvement in order to strengthen their market position. For larger firms, the effective use of economies of scale combined with technological investment can further enhance the benefits of cost leadership and improve financial resilience. This study has several limitations. First, the sample is limited to labor-intensive textile manufacturing firms in the textile and textile products subsector listed on the Indonesia Stock Exchange during the 2014–2024 period, which may limit the generalizability of the findings to other industries. Second, the research model includes a limited set of variables and does not account for certain external factors, such as macroeconomic stability. Therefore, future research is encouraged to incorporate additional variables, such as financial flexibility, market competition, and corporate governance, as well as to examine potential moderating or mediating mechanisms in order to develop a more comprehensive analytical framework.

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