PENGARUH FINANCIAL DISTRESS TERHADAP EARNINGS MANAGEMENT: PERAN BANKRUPTCY RISK SEBAGAI VARIABEL MEDIASI DAN BOARD FINANCIAL EXPERTISE SEBAGAI VARIABEL MODERASI

TESIS

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SEKOLAH TINGGI ILMU EKONOMI
YAYASAN KELUARGA PAHLAWAN NEGARA
YOGYAKARTA
2026

UJIAN TESIS

Tesis berjudul:

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Telah diuji pada tanggal: 31 Juli 2026

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Financial distress and earnings management: The mediating role of bankruptcy risk and the moderating role of commissioners' financial expertise

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JEL Classification: G32, G33, M41

Keywords: bankruptcy risk; board financial expertise; earnings management; financial distress; textile and garment firms

ABSTRACT

This study examines whether bankruptcy risk mediates the effect of financial distress on earnings management and whether commissioners' financial expertise moderates the effects of financial distress and bankruptcy risk on earnings management. The sample comprises 30 textile, garment, and related firms listed on the Indonesia Stock Exchange during 2020-2024, yielding 150 balanced firm-year observations. Financial distress is measured using a directionally transformed interest coverage ratio, bankruptcy risk using a directionally transformed Altman Z-score, earnings management using discretionary accruals from the Modified Jones Model, and board financial expertise using the proportion of commissioners with relevant accounting or finance education or professional experience. Random-effects panel regression, the Baron and Kenny mediation procedure, and moderated regression analysis are employed. Financial distress increases earnings management and bankruptcy risk, while bankruptcy risk increases earnings management and partially mediates the financial distress-earnings management relationship. Both interaction terms are significant but positive, contrary to the hypothesized weakening effects; therefore, H5 and H6 are not supported. The findings imply that financial expertise alone is insufficient to constrain earnings management under severe financial pressure without effective independence, authority, information access, and internal controls.

ABSTRAK

Penelitian ini menguji apakah risiko kebangkrutan memediasi pengaruh financial distress terhadap earnings management serta apakah keahlian keuangan dewan komisaris memoderasi pengaruh financial distress dan risiko kebangkrutan terhadap earnings management. Sampel terdiri atas 30 perusahaan tekstil, garmen, dan industri terkait yang terdaftar di Bursa Efek Indonesia selama 2020-2024, menghasilkan 150 observasi perusahaan-tahun yang seimbang. Financial distress diukur menggunakan interest coverage ratio yang ditransformasi secara arah, risiko kebangkrutan menggunakan Altman Z-score yang ditransformasi secara arah, earnings management menggunakan discretionary accruals berdasarkan Modified Jones Model, dan board financial expertise menggunakan proporsi komisaris yang memiliki pendidikan atau pengalaman profesional di bidang akuntansi atau keuangan. Pengujian menggunakan regresi data panel random effects, prosedur mediasi Baron dan Kenny, dan moderated regression analysis. Financial distress meningkatkan earnings management dan risiko kebangkrutan, sedangkan risiko kebangkrutan meningkatkan earnings management dan memediasi secara parsial hubungan financial distress-earnings management. Kedua koefisien interaksi signifikan tetapi positif, berlawanan dengan hipotesis pelemahan; karena itu, H5 dan H6 tidak terdukung. Temuan menunjukkan bahwa keahlian keuangan perlu didukung independensi, kewenangan, akses informasi, dan pengendalian internal yang efektif.

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1. INTRODUCTION

Reported earnings remain one of the most closely watched outputs of corporate reporting because they influence valuation, lending decisions, covenant monitoring, performance assessment, and managerial compensation. Yet reported earnings are not generated mechanically. Accounting standards require judgment in estimates, recognition, and policy choices, creating discretion that can improve faithful representation but can also be used opportunistically (Healy & Wahlen, 1999; Dechow et al., 2010). Research therefore distinguishes normal accounting judgment from earnings management, in which managers alter accruals or real activities to influence reported performance (Roychowdhury, 2006; Zang, 2012). This issue becomes particularly important when firms experience declining operating performance and constrained financing capacity.

Financial distress intensifies the economic and contractual pressures surrounding financial reporting. Weak cash generation, low interest-payment capacity, increasing leverage, and limited access to external finance can expose managers to closer scrutiny while simultaneously increasing the costs of reporting poor performance. Agency theory suggests that these conditions can strengthen incentives to use accounting discretion to preserve stakeholder confidence, avoid covenant breaches, or delay intervention. Empirical evidence, however, is mixed. Charitou et al. (2007) document earnings adjustments around financial failure, whereas Alhadab and Nguyen (2018) show that external scrutiny can constrain discretion in distressed firms. More recent evidence indicates that the relationship

between distress and earnings management varies across reporting strategies and crisis periods (Fajriati et al., 2023; Aljughaiman et al., 2023). This inconsistency suggests that the direct distress-earnings management link may not capture the full mechanism.

One mechanism that may connect financial distress with reporting behavior is bankruptcy risk. Financial distress describes the deterioration of a firm's ability to meet its financial obligations, while bankruptcy risk reflects the probability that this deterioration will culminate in failure. Although related, the two concepts represent different stages of financial deterioration. As the probability of failure rises, management faces additional pressure to preserve financing access, protect organizational continuity, and reduce negative stakeholder reactions. Bankruptcy risk may therefore transmit part of the effect of financial distress to earnings management. Bankruptcy prediction has a long empirical tradition (Altman, 1968; Ohlson, 1980; Tinoco & Wilson, 2013; Altman et al., 2017), but the role of bankruptcy risk as an explicit mediator of the financial distress-earnings management relationship remains less developed, particularly in an emerging-market setting.

Governance arrangements may further determine whether financial pressure translates into opportunistic reporting. Indonesia uses a two-tier governance system in which the board of commissioners performs an oversight role separate from management. In this study, Board Financial Expertise (BFE) is operationalized specifically as commissioners' financial expertise. Commissioners with accounting or finance competence should be better able to interpret complex financial information, question aggressive estimates, and monitor reporting choices. Prior studies generally associate financial expertise on boards or audit committees with stronger monitoring (Xie et al., 2003; Bédard et al., 2004; Badolato et al., 2014; Cheung & Adelopo, 2022; Xia et al., 2024). Indonesian evidence, however, suggests that the effectiveness of board expertise depends on the governance context. Wijayanti (2022) finds that accounting expertise of commissioners does not necessarily reduce earnings management, while Mardianto et al. (2024) show that board of commissioners characteristics can influence real earnings management in Indonesian manufacturing firms. These findings indicate that expertise should not be treated as an automatic constraint on managerial discretion.

The textile and garment sector provides a relevant setting for examining these relationships. Firms in this sector typically require substantial working capital and fixed investment and are exposed to imported inputs, exchange-rate movements, strong price competition, and shifts in domestic and international demand. The 2020-2024 period also spans the disruption and recovery associated with the COVID-19 pandemic, creating substantial variation in profitability, liquidity, debt-service capacity, and financing conditions. These characteristics make the sector particularly suitable for examining how financial pressure, failure risk, and supervisory expertise jointly shape reporting behavior.

This study addresses four gaps. First, prior findings on financial distress and earnings management remain mixed. Second, bankruptcy risk has rarely been positioned as the mechanism that carries financial pressure into reporting choices. Third, evidence on financial expertise is dominated by one-tier boards and audit committees, while the supervisory role of commissioners in Indonesia remains less well understood. Fourth, direct, mediating, and moderating relationships are rarely examined within one integrated model. The study therefore contributes by testing bankruptcy risk as a partial transmission mechanism and by evaluating whether commissioners' financial expertise changes the effects of financial distress and bankruptcy risk on earnings management. It also distinguishes statistical moderation from directional hypothesis support: a significant interaction does not support a weakening hypothesis when its coefficient has the opposite sign.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Agency theory and upper echelons perspective

Agency theory explains why financial pressure can alter reporting incentives. The separation of ownership and control creates information asymmetry and divergent interests between principals and agents (Jensen & Meckling, 1976). Managers possess more detailed information about operating prospects and financial risks than outside shareholders and creditors. When performance deteriorates, this information advantage can become more consequential because managers may face reputational costs, compensation effects, dismissal risk, covenant violations, or restricted financing. Earnings management can then be used to influence how outsiders perceive current performance. Monitoring mechanisms are intended to reduce this agency problem by limiting the scope for opportunistic discretion (Fama & Jensen, 1983; Eisenhardt, 1989).

Upper echelons theory complements agency theory by emphasizing that organizational outcomes reflect the knowledge, experience, education, and cognitive orientation of senior decision makers and overseers (Hambrick & Mason, 1984; Hambrick, 2007). In a two-tier governance system, commissioners do not manage daily operations but are expected to supervise management and evaluate strategic and reporting risks. Financial expertise can improve their ability to understand accounting estimates, debt conditions, going-concern risks, and the economic consequences of alternative reporting choices. Nevertheless, expertise is not synonymous with effective oversight. Its influence may depend on commissioner independence, status, authority, information access, meeting effectiveness, audit committee support, and internal control quality (Badolato et al., 2014; Cheung & Adelopo, 2022). This conditional view is central to the moderating hypotheses in this study.

Financial distress and earnings management

Financial distress reduces a firm's capacity to meet financial obligations and can trigger scrutiny from creditors, investors, auditors, and regulators. From an agency perspective, this pressure creates competing incentives. On the one hand, managers may have stronger incentives to report a more favorable performance in order to preserve financing access, avoid covenant violations, and reduce negative market reactions. On the other hand, heightened external monitoring may restrict the room available for opportunistic reporting. The empirical literature therefore contains both positive and constraining effects.

Charitou et al. (2007) show that financially distressed firms adjust reported earnings around failure, consistent with the view that severe financial pressure changes reporting incentives. Habib et al. (2020) likewise conclude that distress affects financial reporting incentives and governance responses. More recent evidence strengthens this argument. Fajriati et al. (2023) show that the association between distress and accrual or real earnings management is sensitive to reporting strategy and the COVID-19 period, while Aljughaiman et al. (2023) document stronger earnings-management activity among financially distressed firms during the pandemic. Alhadab and Nguyen (2018), however, indicate that stronger external scrutiny can constrain earnings management in distressed settings. In the textile and garment context examined here, the pressure to maintain creditor and investor confidence is expected to dominate the constraining effect of monitoring. Accordingly, greater financial distress should be associated with greater earnings management.

H1: Financial distress positively affects earnings management.

Financial distress and bankruptcy risk

Financial distress and bankruptcy risk represent linked but distinct stages of corporate deterioration. Financial distress appears when a firm's operating performance and debt-service capacity weaken, whereas bankruptcy risk represents the probability that this deterioration will progress to failure. Persistent liquidity problems, declining operating income, and an inability to cover interest payments reduce financial flexibility and make default or failure more likely. The corporate-failure literature therefore treats deteriorating financial ratios as important early-warning signals (Altman, 1968; Ohlson, 1980).

Altman et al. (2017) show that accounting-based distress models remain useful across international settings, while Tinoco and Wilson (2013) demonstrate that financial, market, and macroeconomic variables jointly provide information about failure risk. In Indonesia, Kinanthi and Sukamulja (2025) similarly emphasize the usefulness of financial ratios as early-warning indicators. Because the transformed financial-distress measure used in this study is constructed so that a higher value represents more severe pressure, a positive coefficient is expected: as debt-service capacity deteriorates, bankruptcy risk should increase.

H2: Financial distress positively affects bankruptcy risk.

Bankruptcy risk and earnings management

A rising probability of failure can intensify the agency conflict surrounding financial reporting. Managers of firms approaching failure face threats to organizational continuity, financing access, managerial reputation, and employment. These costs may create incentives to use discretionary accruals to present a less adverse picture of performance. In this sense, bankruptcy risk is not merely an outcome of financial deterioration; it can also become a source of reporting pressure.

Evidence around financial failure indicates that managers change reporting choices when stakeholder confidence and access to finance are threatened (Charitou et al., 2007; Healy & Wahlen,

1999). The distinction is important because a firm may be financially distressed without facing an immediate probability of failure, while a high bankruptcy-risk state reflects a more severe stage of deterioration. This study therefore expects the threat of failure itself to be associated with greater earnings management.

H3: Bankruptcy risk positively affects earnings management.

The mediating role of bankruptcy risk

The influence of financial distress on earnings management may operate through both a direct and an indirect route. The direct route arises because weakened debt-service capacity creates immediate pressure to preserve reported performance. The indirect route arises when that deterioration increases the probability of failure. Once bankruptcy risk becomes more salient, the consequences of poor reported performance become more severe because creditors may tighten conditions, investors may reassess firm value, and management may face stronger threats to organizational continuity.

This sequence is consistent with a mediation mechanism: financial distress increases bankruptcy risk, and bankruptcy risk in turn increases earnings-management incentives. A partial mediation pattern is expected rather than full mediation because distress can also affect reporting through other channels, including debt covenants, target earnings, financing negotiations, stakeholder pressure, and governance mechanisms. The mediation hypothesis therefore focuses on bankruptcy risk as one important transmission mechanism rather than the only explanation for the distress-earnings management relationship.

H4: Bankruptcy risk mediates the relationship between financial distress and earnings management.

Commissioners' financial expertise and the financial distress-earnings management relationship

The ability of a supervisory board to constrain earnings management depends partly on its capacity to understand financial reporting and risk. Commissioners with accounting or finance expertise should be more able to identify unusual accruals, question aggressive estimates, interpret debt-service problems, and demand explanations for accounting choices. Agency theory therefore predicts that financial expertise strengthens monitoring, while upper echelons theory suggests that commissioners' knowledge and professional background shape the way they interpret financial information and perform oversight.

Research on boards and audit committees generally supports a monitoring role for financial expertise. Xie et al. (2003), Bédard et al. (2004), Zalata et al. (2018), and Cheung and Adelopo (2022) associate financial expertise with lower earnings management or stronger monitoring. More recent evidence by Xia et al. (2024) shows that audit committee financial expertise can reduce several earnings-management tactics, although managers may shift toward alternative reporting strategies. Expertise may also be ineffective without sufficient authority and status (Badolato et al., 2014), and Indonesian evidence does not consistently show a constraining effect (Wijayanti, 2022; Mardianto et al., 2024). The directional hypothesis nevertheless follows the monitoring argument: where commissioners possess greater financial expertise, they are expected to reduce the extent to which financial distress translates into earnings management.

H5: Board financial expertise weakens the positive effect of financial distress on earnings management.

Commissioners' financial expertise and the bankruptcy risk-earnings management relationship

The same monitoring logic applies when the probability of failure increases. High bankruptcy risk can create particularly strong incentives for managers to influence reported performance because the consequences of adverse information include refinancing difficulties, covenant renegotiation, loss of investor confidence, and threats to going concern. Financially knowledgeable commissioners should be better able to distinguish temporary accounting effects from underlying financial deterioration and to challenge reporting choices that conceal risk.

Upper echelons theory implies that such expertise changes how the supervisory board processes complex risk information. However, the effectiveness of expertise is conditional on governance arrangements. Under severe pressure, commissioners may also focus on short-term survival, refinancing, and operational continuity, which can reduce the priority given to strict constraints on accounting discretion. Although this possibility is considered in the interpretation of the results, the ex ante monitoring argument predicts a weakening effect.

H6: Board financial expertise weakens the positive effect of bankruptcy risk on earnings management.

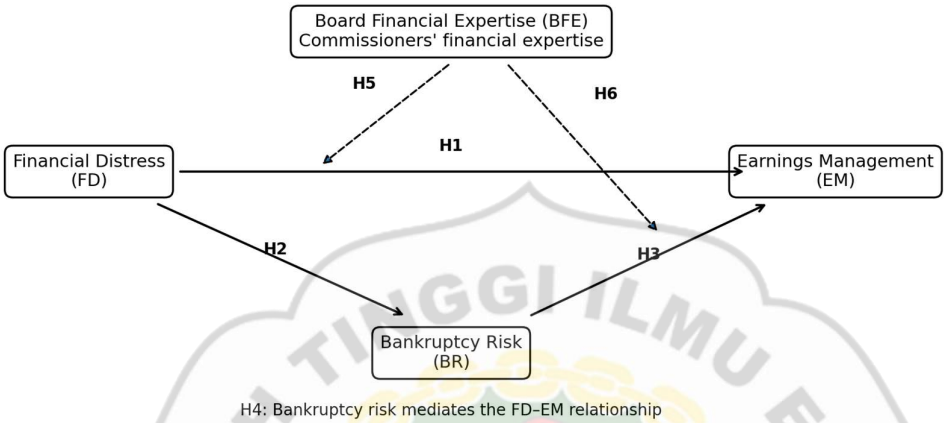

Figure 1. Conceptual framework
Source: Developed by the author.

3. RESEARCH METHOD

Sample and data

This study uses a quantitative explanatory design and balanced panel data from textile, garment, and related firms listed on the Indonesia Stock Exchange during 2020-2024. The period captures the COVID-19 disruption and the subsequent recovery, when firms experienced substantial changes in liquidity, profitability, debt-service capacity, and financing conditions. Annual reports and audited financial statements are used as the primary data sources.

Purposive sampling requires firms to remain listed throughout the observation period, publish complete annual reports and financial statements, and provide all information required to construct the research variables. Thirty firms satisfy these criteria. With five years of observations, the final balanced panel contains 150 firm-year observations. The use of panel data enables the analysis to exploit both cross-sectional differences among firms and changes within firms over time.

Variable measurement

Financial distress (FD) is proxied by the interest coverage ratio (ICR), which captures the firm's ability to meet interest obligations from operating earnings. In its raw form, a higher ICR indicates stronger interest-payment capacity and therefore lower financial distress. For regression interpretation, the measure is directionally transformed so that a higher analysis-scale value represents greater financial distress. Bankruptcy risk (BR) is measured using the Altman Z-score. Because a higher raw Z-score indicates a safer financial condition, the indicator is also directionally transformed so that a higher analysis-scale value represents greater bankruptcy risk. The transformations alter the direction of interpretation while preserving the economic meaning of the underlying indicators.

Earnings management (EM) is measured using discretionary accruals estimated from the Modified Jones Model (Dechow et al., 1995). Total accruals are derived from net income minus operating cash flow, non-discretionary accruals are estimated using changes in revenue adjusted for receivables and property, plant and equipment, and the residual discretionary component is used as the earnings-management proxy. Board Financial Expertise (BFE), defined in this study as commissioners' financial expertise, is measured as the proportion of commissioners with formal education in accounting, finance, or economics, or relevant professional experience in accounting, finance, auditing, banking, or comparable financial functions. The BFE measure is standardized before constructing the interaction terms.

Table 1. Operational definitions and variable measurements

Variable	Proxy	Measurement
Earnings management	Discretionary accruals	Modified Jones Model
Financial distress	Interest coverage ratio	Directionally transformed ICR; higher analysis-scale values indicate greater distress
Bankruptcy risk	Altman Z-score	Directionally transformed Z-score; higher analysis-scale values indicate greater bankruptcy risk
Board financial expertise	Commissioners' financial expertise	Relevant commissioners / total commissioners; standardized for interaction analysis

Source: Developed by the author.

Data analysis

Panel regressions are estimated in EViews. Model selection follows three tests. The Chow test compares the Common Effects Model (CEM) and Fixed Effects Model (FEM), the Hausman test compares FEM and the Random Effects Model (REM), and the Breusch-Pagan Lagrange Multiplier test compares CEM and REM. The combined results select REM for hypothesis testing.

Mediation is examined using the causal-step procedure of Baron and Kenny (1986). The first model tests FD on EM; the second tests FD on BR; and the third includes FD and BR jointly in the EM equation. Partial mediation is inferred when FD significantly predicts BR, BR predicts EM in the joint model, and the direct FD coefficient remains significant but becomes smaller after BR enters the equation. Moderation is examined using interaction terms FD×BFE and BR×BFE. A statistically significant interaction indicates moderation, while support for H5 or H6 also requires the interaction coefficient to have the hypothesized negative sign. This distinction prevents a significant coefficient in the opposite direction from being incorrectly interpreted as support for a directional hypothesis.

4. DATA ANALYSIS AND DISCUSSION

Descriptive statistics and model selection

The final sample contains 150 observations from 30 firms over five years. Table 2 summarizes the main variables. Financial distress and bankruptcy risk are expressed on the transformed analysis-scale, while BFE is standardized for the interaction analysis. The distributions show meaningful cross-firm and time variation, which is necessary for panel estimation. The negative mean of earnings management reflects the direction of discretionary accruals in the sample; the analysis focuses on the estimated association among variables rather than interpreting the mean as a normative measure of reporting quality.

Table 2. Descriptive statistics

Variable	Mean	Std. dev.	Minimum	Maximum
FD	0.048	0.981	-2.620	3.853
BR	-0.022	1.054	-2.452	2.770
EM	-0.118	1.062	-3.241	3.328
BFE	0.017	0.934	-3.241	2.315

Source: Author's calculations using EViews.

Table 3 reports the model-selection tests. The Chow test rejects the common-effects specification in favor of fixed effects. The Hausman test does not reject the null hypothesis that the random-effects estimator is consistent ($p = 0.3206$), while the Lagrange Multiplier test favors random effects over common effects. Taken together, these tests support the use of the Random Effects Model for hypothesis testing.

Table 3. Panel model selection results

Test	Probability	Selected model
Chow test	< 0.001	FEM
Hausman test	0.3206	REM

Test	Probability	Selected model
Lagrange Multiplier test	< 0.001	REM

Source: Author's calculations using EViews.

Hypothesis testing

Table 4 presents the direct and moderation results, while Table 5 provides the detailed mediation paths. Results are reported in a compact form so that the section is not dominated by statistical output; the substantive interpretation is developed in the discussion that follows.

Table 4. Summary of hypothesis-testing results

Hypothesis / relationship	Coefficient / result	Decision
H1: FD → EM	β = 0.521; p < 0.001	Supported
H2: FD → BR	β = 0.753; p < 0.001	Supported
H3: BR → EM	β = 0.649; p < 0.001	Supported
H4: BR as mediator	Partial mediation (see Table 5)	Supported
H5: FD × BFE	β = 0.470; p < 0.001; positive	Not supported
H6: BR × BFE	β = 0.362; p < 0.001; positive	Not supported

Source: Author's calculations using EViews.

Table 5. Mediation test results

Path	Coefficient	Significance	Interpretation
FD → EM before mediator	0.521127	p < 0.001	Significant direct effect
FD → BR	0.752863	p < 0.001	Path a is significant
BR → EM in mediation model	0.568328	p < 0.001	Path b is significant
FD → EM after mediator	0.095600	p < 0.05	Direct effect remains significant
Mediation decision	-	-	Partial mediation; H4 supported

Source: Author's calculations using EViews.

Financial distress and earnings management

The first hypothesis is supported. Financial distress has a positive and statistically significant effect on earnings management (β = 0.521, p < 0.001). Because the financial-distress measure is directionally transformed, a larger analysis-scale value indicates more severe financial pressure. The positive coefficient therefore means that firms facing weaker debt-service capacity exhibit greater discretionary accrual behavior. This result is economically plausible in a sector that depends heavily on working capital and external financing, because a deterioration in operating income can quickly increase pressure from lenders and investors.

Agency theory provides the primary explanation for this finding. When financial conditions deteriorate, the gap between the information held by managers and outsiders becomes more consequential. Managers know more about short-term liquidity, financing negotiations, customer orders, and the probability that weak performance is temporary or persistent. At the same time, the personal and organizational costs of poor reported performance become more severe. Earnings management can therefore be used to reduce the visible extent of deterioration, preserve legitimacy, or support financing negotiations. The result is consistent with Charitou et al. (2007) and the broader evidence summarized by Habib et al. (2020). It also complements Fajriati et al. (2023), who show that financial distress is associated with changes in earnings-management behavior around the COVID-19 period, although the specific reporting strategy can vary.

The finding does not imply that all distressed firms manage earnings in the same way. Alhadab and Nguyen (2018) show that stronger external scrutiny can constrain opportunistic reporting, while Fajriati et al. (2023) and Aljughaiman et al. (2023) demonstrate that crisis conditions and reporting strategies

matter for how distress is reflected in earnings-management behavior. The positive coefficient in this study should therefore be interpreted as an average association in the textile and garment sample. It suggests that, during 2020-2024, the pressure to sustain stakeholder confidence was sufficiently strong to outweigh the constraining effect of monitoring for many firms. For creditors and investors, the result indicates that reported earnings deserve closer scrutiny when interest-payment capacity deteriorates.

Financial distress and bankruptcy risk

H2 is also supported. Financial distress has a positive and significant effect on bankruptcy risk ($\beta = 0.753$, $p < 0.001$). The size of the coefficient indicates a strong link between weakened debt-service capacity and the probability of financial failure. Because both variables are transformed so that higher analysis-scale values indicate more severe conditions, the positive coefficient has a straightforward interpretation: as financial distress worsens, bankruptcy risk rises.

This result is consistent with the logic of corporate-failure models. Financial distress is an earlier stage of deterioration, while bankruptcy risk summarizes the probability that continued weakness will become failure. A firm that struggles to cover interest payments has less financial flexibility, a narrower buffer against revenue shocks, and a greater likelihood of facing covenant renegotiation or refinancing problems. Altman (1968), Ohlson (1980), and Tinoco and Wilson (2013) establish the importance of accounting-based indicators for failure prediction, while Altman et al. (2017) show that such measures retain predictive value across international settings. Kinanthi and Sukamulja (2025) similarly highlight the role of financial ratios as early-warning indicators in Indonesia.

For the textile and garment sector, this relationship is particularly relevant because operating margins can be exposed to exchange-rate movements, imported input costs, inventory cycles, and competitive pricing pressure. These conditions can quickly reduce the ability to service debt even before a firm reaches a formal failure state. The evidence therefore supports treating financial distress and bankruptcy risk as sequential but distinct constructs rather than interchangeable labels.

Bankruptcy risk and earnings management

H3 receives empirical support. Bankruptcy risk has a positive and statistically significant effect on earnings management ($\beta = 0.649$, $p < 0.001$). This coefficient is obtained from the standalone direct-effect model. In the mediation model, where financial distress and bankruptcy risk are entered jointly, the bankruptcy-risk coefficient is 0.568328 ($p < 0.001$). The difference between the two coefficients reflects the different model specifications rather than an inconsistency in the results.

The positive relationship shows that the probability of failure itself is associated with greater reporting discretion, beyond the broader condition of financial distress. This distinction matters. Financial distress may reflect temporary pressure, while bankruptcy risk represents a more acute threat to continuity. As failure becomes more likely, managers may face refinancing difficulties, loss of supplier confidence, negative investor reactions, and reputational consequences. Agency theory predicts stronger incentives to influence financial reporting when these costs rise. The evidence around distressed and failing firms documented by Charitou et al. (2007) is consistent with this interpretation.

The finding also extends the interpretation of bankruptcy measures. An Altman-based risk score is often treated only as a prediction tool for creditors or investors. The results here suggest that bankruptcy risk can also be relevant for understanding managerial behavior. A high probability of failure may change not only the expected economic outcome of the firm but also the reporting choices made before that outcome is realized. This behavioral role of bankruptcy risk helps explain why it is an appropriate mediator in the next test.

The mediating role of bankruptcy risk

The mediation analysis supports H4 and indicates partial mediation. Before bankruptcy risk is included, financial distress has a positive and significant effect on earnings management ($\beta = 0.521127$, $p < 0.001$). Financial distress also increases bankruptcy risk ($\beta = 0.752863$, $p < 0.001$). When both variables are included in the earnings-management model, bankruptcy risk remains significant ($\beta = 0.568328$, $p < 0.001$), while the direct financial-distress coefficient falls to 0.095600 but remains significant at the 5% level. The reduction from 0.521127 to 0.095600 satisfies the causal-step pattern for partial mediation under the Baron and Kenny (1986) procedure.

Substantively, the result means that financial pressure influences reporting behavior through two routes. The first is direct: weakened debt-service capacity can immediately increase pressure to manage reported earnings. The second is indirect: financial distress raises the probability of failure, and the

stronger threat of bankruptcy creates additional incentives to influence financial reporting. The continued significance of the direct coefficient confirms that bankruptcy risk is not the only mechanism. Debt covenants, earnings targets, refinancing negotiations, investor pressure, and other governance conditions can also transmit the effect of distress to reporting choices.

This partial-mediation result is important for both theory and practice. From an agency perspective, it clarifies how the costs associated with deteriorating financial conditions become progressively more severe as failure risk rises. From a risk-management perspective, it suggests that creditors and boards should not examine financial distress and earnings quality separately. When distress is accompanied by rising bankruptcy risk, the incentives surrounding reported earnings become more complex. Future studies can strengthen this inference using bootstrap-based indirect-effect tests, but the current evidence provides a clear mechanism consistent with the staged deterioration observed in corporate-failure research.

The moderating role of commissioners' financial expertise in the financial distress-earnings management relationship

The interaction between financial distress and BFE is positive and statistically significant ($\beta = 0.470$, $p < 0.001$). Statistically, BFE changes the strength of the relationship between financial distress and earnings management. Directionally, however, the result is the opposite of H5. The hypothesis predicts that commissioners' financial expertise weakens the positive relationship, which would require a negative interaction coefficient. Because the estimated coefficient is positive, H5 is not supported even though moderation exists in a statistical sense.

This result challenges the simple assumption that greater financial expertise automatically produces tighter reporting discipline. Prior research often documents a constraining role for financially sophisticated oversight bodies (Xie et al., 2003; Bédard et al., 2004; Zalata et al., 2018; Cheung & Adelopo, 2022). Xia et al. (2024) similarly find that audit committee financial expertise can curb several earnings-management tactics, while also showing that managers may substitute toward alternative reporting choices. Badolato et al. (2014) further show that expertise is more effective when supported by sufficient status and authority. Indonesian evidence also points to contextual limitations: Wijayanti (2022) finds that commissioners' accounting expertise does not necessarily reduce earnings management, while Mardianto et al. (2024) show that the influence of board characteristics differs across governance mechanisms and earnings-management strategies.

A plausible interpretation is that severe financial pressure changes the priorities of supervision. Commissioners with strong financial knowledge may be more capable of understanding the immediate consequences of covenant breaches, liquidity shortages, and refinancing constraints. Under these conditions, their expertise can be directed toward short-term survival, debt negotiations, or stabilization strategies rather than toward restricting every use of accounting discretion. This does not mean that financial expertise causes opportunistic reporting. Rather, the positive interaction indicates that expertise alone is insufficient to deliver the weakening effect predicted by H5. Independence, access to timely information, authority, audit committee effectiveness, and internal control quality may determine whether expertise becomes a genuine monitoring constraint.

The moderating role of commissioners' financial expertise in the bankruptcy risk-earnings management relationship

The interaction between bankruptcy risk and BFE is also positive and statistically significant ($\beta = 0.362$, $p < 0.001$). As with H5, this coefficient demonstrates statistical moderation but contradicts the hypothesized weakening direction. H6 is therefore not supported. In firms with higher commissioners' financial expertise, the positive association between bankruptcy risk and earnings management is stronger rather than weaker on the estimated analysis-scale.

The finding can be understood by considering the governance environment surrounding near-failure conditions. When bankruptcy risk is high, commissioners face a difficult trade-off between strict reporting discipline and actions intended to preserve continuity. Financially knowledgeable commissioners may understand the seriousness of the firm's financing position and may devote greater attention to restructuring, creditor communication, and survival. If their independence, information access, or authority is insufficient, expertise may not translate into effective constraints on managerial discretion. This interpretation is consistent with the broader argument that expertise must be accompanied by status and effective governance arrangements (Badolato et al., 2014).

The result also provides a useful refinement of upper echelons theory. The theory suggests that knowledge and experience shape how decision makers interpret strategic problems, but it does not imply that expertise always produces the same behavioral outcome. Under severe financial pressure, the same expertise that improves the understanding of risk can lead to different oversight priorities. The evidence therefore supports a contingent view of commissioners' financial expertise: its effect depends on the institutional and organizational conditions in which it is exercised. For regulators and firms, the practical implication is that appointing financially knowledgeable commissioners should be accompanied by strong independence, reliable information flows, effective audit committees, and robust internal controls.

Taken together, the results reveal a coherent pattern. Financial distress increases earnings management and bankruptcy risk; bankruptcy risk increases earnings management and transmits part of the effect of distress; and commissioners' financial expertise changes the strength of both pressure-reporting relationships, but not in the hypothesized constraining direction. The evidence therefore supports H1-H4 and rejects the directional predictions in H5-H6.

The study contributes in three ways. First, it moves beyond a direct-effect explanation by identifying bankruptcy risk as a partial pathway through which financial distress affects earnings management. Second, it provides evidence from Indonesia's two-tier governance system that commissioners' financial expertise should not be treated as an automatic substitute for effective governance. Third, it demonstrates the importance of distinguishing statistical significance from directional hypothesis support in moderation analysis. These contributions connect financial-reporting incentives, corporate-failure risk, and supervisory expertise within one empirical framework.

5. CONCLUSION, IMPLICATIONS, SUGGESTIONS, AND LIMITATIONS

This study examines how financial distress affects earnings management through bankruptcy risk and how commissioners' financial expertise changes the effects of financial distress and bankruptcy risk on earnings management. Using 150 balanced firm-year observations from Indonesian textile, garment, and related firms during 2020-2024, the results show that financial distress positively affects earnings management and bankruptcy risk, while bankruptcy risk positively affects earnings management. Bankruptcy risk partially mediates the financial distress-earnings management relationship: the direct coefficient declines from 0.521127 to 0.095600 after the mediator is introduced but remains statistically significant. H1-H4 are therefore supported.

The moderation results require a more cautious conclusion. Both interaction coefficients are statistically significant, but they are positive. Because H5 and H6 predict weakening effects, neither hypothesis is supported. The evidence does not imply that financial expertise is harmful; rather, it indicates that expertise alone does not guarantee effective restraint of earnings management when firms face severe financial pressure. Its monitoring value is likely to depend on commissioner independence, status, authority, access to reliable information, audit committee effectiveness, and internal control quality.

The findings have implications for investors, creditors, firms, and regulators. Financial distress and bankruptcy risk should be evaluated jointly when assessing earnings quality because pressure can influence reporting through both direct and indirect channels. Governance quality should also not be judged solely by whether commissioners possess financial qualifications. Firms should ensure that knowledgeable commissioners have sufficient independence and authority to challenge management and access timely, high-quality financial information. Regulators and investors may therefore benefit from focusing on the effectiveness of the governance architecture surrounding expertise rather than on expertise as a stand-alone characteristic.

The study has several limitations. The sample is restricted to listed textile, garment, and related firms in Indonesia, so the results may not generalize to other sectors or institutional settings. The directionally transformed financial ratios and the education- and experience-based BFE measure may not capture every dimension of financial pressure or actual monitoring quality. The mediation analysis relies on the Baron and Kenny causal-step procedure, which does not test the indirect effect as directly as bootstrap-based methods. Future research can broaden the sample, employ alternative distress and bankruptcy measures, use bootstrap or structural-equation approaches for mediation, and incorporate commissioner independence, tenure, meeting frequency, ownership structure, audit quality, and internal control effectiveness.

REFERENCES

Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. Auditing: A Journal of Practice & Theory, 23(1), 69-87.

Alhadab, M., & Nguyen, T. (2018). Corporate governance and earnings management in distressed firms. Journal of Applied Accounting Research, 19(2), 222-242.

Aljughaiman, A. A., Nguyen, T. H., Trinh, V. Q., & Du, A. (2023). The COVID-19 outbreak, corporate financial distress and earnings management. International Review of Financial Analysis, 88, 102675. https://doi.org/10.1016/j.irfa.2023.102675

Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. The Journal of Finance, 23(4), 589-609.

Altman, E. I., Iwanicz-Drozdowska, M., Laitinen, E. K., & Suvas, A. (2017). Financial distress prediction in an international context: A review and empirical analysis of Altman's Z-score model. Journal of International Financial Management & Accounting, 28(2), 131-171.

Badolato, P. G., Donelson, D. C., & Ege, M. (2014). Audit committee financial expertise and earnings management: The role of status. Journal of Accounting and Economics, 58(2-3), 208-230. https://doi.org/10.1016/j.jacceco.2014.08.006

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173-1182.

Bédard, J., Chtourou, S. M., & Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. Auditing: A Journal of Practice & Theory, 23(2), 13-35.

Charitou, A., Lambertides, N., & Trigeorgis, L. (2007). Earnings behaviour of financially distressed firms: The role of institutional ownership. Abacus, 43(3), 271-296.

Cheung, K. Y., & Adelopo, I. (2022). Audit committee financial expertise, accrual, and real earnings management. Journal of Corporate Accounting & Finance, 33, 102-118. https://doi.org/10.1002/jcaf.22552

Dechow, P. M., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. Journal of Accounting and Economics, 50(2-3), 344-401.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. The Accounting Review, 70(2), 193-225.

DeFond, M. L., Hann, R. N., & Hu, X. (2005). Does the market value financial expertise on audit committees of boards of directors? Journal of Accounting Research, 43(2), 153-193.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. Academy of Management Review, 14(1), 57-74.

Fajriati, N., Wahyuni, E. T., & Rosdini, D. (2023). Financial distress and earnings management before and during the COVID-19 pandemic. Jurnal Akuntansi dan Auditing Indonesia, 27(1), 82-92. https://doi.org/10.20885/jaai.vol27.iss1.art8

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. Journal of Law and Economics, 26(2), 301-325.

Habib, A., Costa, M. D., Huang, H. J., Bhuiyan, M. B. U., & Sun, L. (2020). Determinants and consequences of financial distress: Review of the empirical literature. Accounting & Finance, 60(S1), 1023-1075.

Hambrick, D. C. (2007). Upper echelons theory: An update. Academy of Management Review, 32(2), 334-343.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. Academy of Management Review, 9(2), 193-206.

Harianto, S. (2022). Political connection, auditor quality, family ownership, and earnings management: Real and accrual. Journal of Economics, Business, and Accountancy Ventura, 25(2), 204-216. https://doi.org/10.14414/jebav.v25i2.3012

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. Accounting Horizons, 13(4), 365-383.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305-360.

Kinanthi, E. S., & Sukamulja, S. (2025). Investor protection in Indonesia: Financial ratios as early warning indicators. Journal of Economics, Business, and Accountancy Ventura, 27(3), 445-460. https://doi.org/10.14414/jebav.v27i3.4851

Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance-matched discretionary accrual measures. Journal of Accounting and Economics, 39(1), 163-197.

Krishnan, G. V., & Visvanathan, G. (2008). Does the SOX definition of an accounting expert matter? The association between audit committee directors' accounting expertise and accounting conservatism. Contemporary Accounting Research, 25(3), 827-858.

Mardianto, Karina, R., & Edi, E. (2024). Differences in the influence of the board of directors and the board of commissioners on real earnings management: Empirical evidence from Indonesia. Jurnal Siasat Bisnis, 28(2), 130-148. https://doi.org/10.20885/jsb.vol28.iss2.art1

Ohlson, J. A. (1980). Financial ratios and the probabilistic prediction of bankruptcy. Journal of Accounting Research, 18(1), 109-131.

Park, Y. W., & Shin, H. H. (2004). Board composition and earnings management in Canada. Journal of Corporate Finance, 10(3), 431-457.

Roychowdhury, S. (2006). Earnings management through real activities manipulation. Journal of Accounting and Economics, 42(3), 335-370.

Tinoco, M. H., & Wilson, N. (2013). Financial distress and bankruptcy prediction among listed companies using accounting, market and macroeconomic variables. International Review of Financial Analysis, 30, 394-419.

Wijayanti, D. M. (2022). The effect of profitability, financial leverage, and accounting expertise of the board of commissioners on earnings management. Journal of Accounting Inquiry, 1(1), 44-52. https://doi.org/10.14421/jai.2022.1.1.044-052

Xia, H., Lin, S., Li, S., & Bardhan, I. (2024). The effect of audit committee financial expertise on earnings management tactics in the post-SOX era. Advances in Accounting, 64, 100725. https://doi.org/10.1016/j.adiac.2023.100725

Xie, B., Davidson, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. Journal of Corporate Finance, 9(3), 295-316.

Zalata, A. M., Tauringana, V., & Tingbani, I. (2018). Audit committee financial expertise, gender, and earnings management. International Review of Financial Analysis, 55, 170-183.

Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. The Accounting Review, 87(2), 675-703.